



COMMONWEALTH *of* VIRGINIA

Department of General Services

Christopher L. Beschler
Director

Joseph F. Damico
Deputy Director

1100 Bank Street
Suite 420
Richmond, Virginia 23219
Phone (804) 786-3311
FAX (804) 371-8305

November 8, 2017

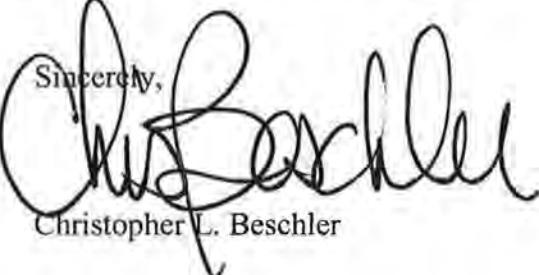
Laura Wilborn
Division of Legislative Automated Systems
Pocahontas Building, Suite W528
900 E. Main Street
Richmond, VA 23219

Dear Ms. Wilburn:

As required by *Item 78.E. of chapter 836 of the Acts of Assembly (2017 Appropriation Act)* the Department of General Services was directed to conduct an environmental site assessment of the real property at the Department of Behavioral Health and Developmental Services' Central Virginia Training Center site.

The Executive Summary of the Phase II study findings is attached to this letter. The Environmental Site Assessment Reports, Site Specific Environmental Conditions Assessment (dated July 2017) and the Phase II Environmental Site Assessment Report (dated October 2017), were prepared by EEE Consulting, Inc. and due to the file sizes can be found here on the vendor's site [HERE](#).

If you have any questions or need additional information please do not hesitate to contact me.

Sincerely,

Christopher L. Beschler

/Attachment

c: The Honorable Nancy Rodrigues, Secretary of Administration

Phase II Environmental Site Assessment Report

**Central Virginia Training Center
521 Colony Road
Madison Heights, Virginia 24572
Amherst County Tax Map Parcel 160 A 69**

Prepared for
Debbie Wake
Senior Vice President
Divaris Real Estate, Inc.
200 South 10th Street, Suite 1010
Richmond, VA 23219

Prepared by
EEE Consulting, Inc.
201 Church Street, Suite C
Blacksburg, Virginia 24060

October 2017

Prepared by: Jeffrey A. Fisher, QEP, Project Scientist

Reviewed by: Chris J. Lalli, Vice President



Executive Summary

This report presents the methods and findings of a Phase II Environmental Site Assessment (ESA) performed at the Central Virginia Training Center (CVTC), currently owned by the Commonwealth of Virginia under the Department of General Services. The Virginia Department of Behavioral Health and Developmental Services (DBHDS) is studying the feasibility of placing CVTC in a surplus property status.

This Phase II ESA was prepared to assess the presence or absence of contaminants in soil and groundwater from the high and medium priority findings presented in the Site Specific Environmental Conditions Assessment (ECA) that was performed by EEE Consulting, Inc. (3e) in July 2017.

A total of 19 separate areas (or *Findings*) were assessed, with the following results:

- ❖ *ECA Finding #10 (former Physical Plant and Laundry)*: No impacts from the former Physical Plant were found in soil or groundwater (current location of Building 47).
- ❖ *ECA Finding #11 (former Coal Powered Incinerator - Building 13)*: no impacts warranting additional assessment.
- ❖ *ECA Finding #12 (former Medical Waste Incinerator in New Scrap Yard)*: no impacts warranting additional assessment.
- ❖ *ECA Finding #13 (Closed Sanitary Landfill)*: recommend eligibility determination and enrollment into the Virginia Department of Environmental Quality's (DEQ) Voluntary Remediation Program (VRP) because this area of CVTC was utilized for historical landfilling operations. Installation of additional monitoring well(s) on adjoining property and other work as may be required to obtain a Certificate of Completion.
- ❖ *ECA Finding #14 (New Scrap Yard)*: recommend eligibility determination and enrollment into the VRP because of site conditions indicative of landfilling operations.
- ❖ *ECA Finding #15 (Coal Ash and Debris Dump)*: recommend eligibility determination and enrollment into the VRP because of site conditions indicative of landfilling operations. Remove discarded debris and dispose in accordance with applicable regulations.
- ❖ *ECA Finding #16 (Old Scrap Yard)*: recommend eligibility determination and enrollment into the VRP because of site conditions indicative of landfilling operations.
- ❖ *ECA Findings #20 and #27 (Bulk Pesticide and Oil Storage in Building 39)*: recommend demolition of the building in a manner to minimize impacted soil disturbance. Subsequent excavation of impacted soil from grade to two (2)-ft. BGS. Eligibility determination and enrollment to complete these activities under the VRP because of the confirmed impacts to soil from detectable hexavalent chromium, lead, banned pesticide, and petroleum concentrations.
- ❖ *ECA Finding #21 (former Transformer Storage)*: no polychlorinated biphenyl (PCB) impacts detected, nor any other impacts warranting additional assessment.

- ❖ *ECA Finding #28 (Suspect Fuel Oil Storage at Building 53):* encountered fill material and low levels of residual-phase petroleum that are likely associated with a former underground storage tank (UST). Recommend reporting a petroleum release to the DEQ-Blue Ridge Regional Office (DEQ-BRRO), who will likely recommend site closure without additional assessment activities.
- ❖ *ECA Finding #29 (Diesel Fuel UST at Building 46):* no petroleum impacts found, perform UST closure and reporting in accordance with 9VAC 25-580 (i.e. Virginia UST Regulation) when no longer in use.
- ❖ *ECA Finding #30 (Gasoline UST and Diesel AST at Building 36):* Trace concentrations of gasoline indicator compounds were detected in groundwater. It is recommended that groundwater be resampled to confirm the presence of petroleum indicator compounds. If present, a petroleum release should be reported to the DEQ-BRRO.
- ❖ *ECA Finding #31 (Diesel Fuel UST at Building 65):* no petroleum impacts detected, perform UST closure and reporting in accordance with the Virginia UST Regulation when no longer in use.
- ❖ *ECA Finding #32 (Diesel Fuel UST at Building 47):* no petroleum impacts detected, perform UST closure and reporting in accordance with the Virginia UST Regulation when no longer in use.
- ❖ *ECA Finding #33 (Diesel Fuel UST at Building 31):* no petroleum impacts detected, perform UST closure and reporting in accordance with the Virginia UST Regulation when no longer in use
- ❖ *ECA Finding #35 (Former Gasoline UST at Building 49):* no petroleum impacts detected, no additional assessment warranted.
- ❖ *ECA Finding #36 (Unknown Drum and Spilled Material at Building 45-5A):* drum was removed and disposed by facility personnel prior to the implementation of Phase II assessment activities. Spilled material and soil was excavated and drummed for disposal. Toxicity sampling indicated the drum of excavated material was hazardous for lead, and the drum was subsequently disposed as hazardous waste.
- ❖ *ECA Finding #38 (Drum of Compressor Oil at Building 30):* drum was removed and disposed by facility personnel prior to the implementation of Phase II assessment activities. Spent oil dry on the floor was sampled and did not contain PCBs. No additional assessment warranted.

The following cost estimates for additional assessment, characterization, and/or remediation work are provided for DGS fiscal planning and appropriation of funding sources. These range of costs are based on recommended activities, our experience with the VRP, and typical industry standard rates. They are not intended to be used as a proposal cost to complete the work.

- ❖ *ECA Finding #13 (Closed Sanitary Landfill):* The range of costs to manage this Finding through the VRP is estimated at \$100,000 to \$150,000 for all tasks except removal/disposal of surface wastes and any required improvements to the existing landfill cap.
-

- ❖ *ECA Finding #14 (New Scrap Yard):* The range of costs to manage this finding through the VRP is estimated at \$80,000 to \$100,000 for all tasks except removal/disposal of surface wastes and any required improvements to the existing landfill cap.
- ❖ *ECA Finding #15 (Coal Ash and Debris Dump):* The range of costs to manage this finding through the VRP is estimated at \$25,000 to \$50,000 for all tasks except removal/disposal of wastes.
- ❖ *ECA Finding #16 (Old Scrap Yard):* The range of costs to manage this finding through the VRP is estimated at \$80,000 to \$100,000 for all tasks except removal/disposal of surface wastes and any required improvements to the existing landfill cap.
- ❖ *ECA Findings #20 and #27 (Bulk Pesticide and Oil Storage in Building 39):* The range of costs for excavation, sampling, and disposal of impacted soil is estimated at \$80,000 to \$150,000. This estimated cost range is dependent on the waste characterization to determine the appropriate disposal option(s) for the excavated soil. The provided range of costs includes all tasks except groundwater characterization activities as required by VRP, if any. If required, these activities would likely cost an additional \$12,000 to \$15,000, depending on the depth to groundwater.
- ❖ *ECA Finding #28 (Suspect Fuel Oil Storage at Building 53):* Release reporting and management of a petroleum release, under the assumption that the DEQ-BRRO will not require further assessment activities, is estimated to cost \$1,000.
- ❖ *ECA Finding #30 (Gasoline UST and Diesel AST at Building 36):* Groundwater resampling and follow-up petroleum release reporting, if required, is estimated to cost \$3,000.

Based on the provided estimates, the range of cost to manage these Findings through the VRP is estimated at \$369,000 to \$569,000. This range does not include the removal/disposal of surface debris and emergent or dumped debris within the landfill and scrapyard areas, nor does it include any improvements that may be required to supplement the existing landfill caps.

This Phase II ESA assessed those Findings classified as high and moderate risk to third party (offsite) receptors, human health and the environment. The remaining Findings presented in the July 2017 ECA will require assessment and/or management as part of facility closure; however, many of these Findings are associated with processes currently in use (e.g. the 90,000-gallon heating oil AST at the boiler plant, USTs currently in use, etc.). There will be future environmental management costs associated with these findings, which should be assessed if/when the associated structures are demolished and/or removed from the site.

Phase II Environmental Site Assessment Report

**Central Virginia Training Center
521 Colony Road
Madison Heights, Virginia 24572
Amherst County Tax Map Parcel 160 A 69**

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Acronyms

ACM	Asbestos Containing Material
AMSL	Above Mean Sea Level
ASTM	American Society for Testing and Materials
BGS	Below Ground Surface
BRRO	DEQ's Blue Ridge Regional Office
COC	Chain of Custody
CVTC	Central Virginia Training Center
DEQ	Virginia Department of Environmental Quality
DBHDS	Department of Behavioral Health and Developmental Services
DGS	Department of General Services
3e	EEE Consulting, Inc.
ECA	Environmental Conditions Assessment
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
ESC	Erosion & Sediment Control
IDW	Investigation Derived Waste
IS	Incremental Sample
LOQ	Limit of Quantitation
MCL	Maximum Contaminant Level
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
SSL	Site Screening Level
SVOC	Semi-Volatile Organic Compound
SOP	Standard Operating Procedure
SWPPP	Stormwater Pollution Prevention Plan
TPH-DRO	Total Petroleum Hydrocarbons – Diesel Range Organics
TPH-GRO	Total Petroleum Hydrocarbons – Gasoline Range Organics
TOC	Top of Casing
UCL	Upper Confidence Limit
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds
VRP	Voluntary Remediation Program
VSWMR	Virginia Solid Waste Management Regulations

Executive Summary

This report presents the methods and findings of a Phase II Environmental Site Assessment (ESA) performed at the Central Virginia Training Center (CVTC), currently owned by the Commonwealth of Virginia under the Department of General Services (DGS). The Virginia Department of Behavioral Health and Developmental Services (DBHDS) is studying the feasibility of placing CVTC in a surplus property status.

This Phase II ESA was prepared to assess the presence or absence of contaminants in soil and groundwater from the high and medium priority findings presented in the Site Specific Environmental Conditions Assessment (ECA) that was performed by EEE Consulting, Inc. (3e) in July 2017. A total of 19 separate areas (or *Findings*) were assessed, with the following results and engineering cost estimates for any recommended work:

Table EX-1. Summary of Findings and Results

ECA Finding #	Description	Results	Engineering Cost Estimate for Additional Work
10	Former Physical Plant and Laundry	No impacts from the former Physical Plant were found in soil or groundwater (current location of Building 47)	\$0
11	Former Coal Powered Incinerator - Building 13	No impacts warranting additional assessment	\$0
12	Former Medical Waste Incinerator in New Scrap Yard	No impacts warranting additional assessment	\$0
13	Closed Sanitary Landfill	Recommend eligibility determination and enrollment into the Virginia Department of Environmental Quality's (DEQ) Voluntary Remediation Program (VRP) because this area of CVTC was utilized for historical landfilling operations. Installation of additional monitoring well(s) on adjoining property and other work as may be required to obtain a Certificate of Completion.	\$100,00 to \$150,000
14	New Scrap Yard	Recommend eligibility determination and enrollment into the VRP because of site conditions indicative of landfilling operations. Remove discarded debris and dispose in accordance with applicable regulations.	\$80,000 to \$100,000
15	Coal Ash and Debris Dump	Recommend eligibility determination and enrollment into the VRP because of site conditions indicative of landfilling operations. Remove discarded debris and dispose in accordance with applicable regulations.	\$25,000 to \$50,000
16	Old Scrap Yard	Recommend eligibility determination and enrollment into the VRP because of site conditions indicative of landfilling operations.	\$80,000 to \$100,000
20 & 27	Bulk Pesticide and Oil Storage in Building 39	Recommend demolition of the building in a manner to minimize impacted soil disturbance. Subsequent excavation of impacted soil from grade to two (2)-ft. BGS. Eligibility determination and enrollment to complete these activities under the VRP because of the confirmed impacts to soil from detectable hexavalent chromium, lead, banned pesticide, and petroleum concentrations.	\$80,000 to \$150,000 depending on waste characterization
21	Former Transformer Storage	No polychlorinated biphenyl (PCB) impacts detected, nor any other impacts warranting additional assessment.	\$0

Table EX-1. Summary of Findings and Results, Continued

ECA Finding #	Description	Results	Engineering Cost Estimate for Additional Work
28	Suspect Fuel Oil Storage at Building 53	Encountered fill material and low levels of residual-phase petroleum that are likely associated with a former underground storage tank (UST). Recommend reporting a petroleum release to the DEQ-Blue Ridge Regional Office (DEQ-BRRO), who will likely recommend site closure without additional assessment activities.	\$1,000
29	Diesel Fuel UST at Building 46	Could not safely collect samples due to underground utilities	\$0
30	Gasoline UST and Diesel AST at Building 36	Trace concentrations of gasoline indicator compounds were detected in groundwater. It is recommended that groundwater be resampled to confirm the presence of petroleum indicator compounds. If present, a petroleum release should be reported to the DEQ-BRRO.	\$0
31, 32, 33	Diesel Fuel USTs for Generators at Buildings 65, 31, and 49	No petroleum impacts detected, perform UST closure and reporting in accordance with the Virginia UST Regulation when no longer in use.	\$0
35	Former Gasoline UST at Building 49	No petroleum impacts detected, no additional assessment warranted.	\$3,000
36	Unknown Drum and Spilled Material at Building 45-5A	Drum was removed and disposed by facility personnel prior to the implementation of Phase II assessment activities. Spilled material and soil was excavated and drummed for disposal. Toxicity sampling indicated the drum of excavated material was hazardous for lead, and the drum was subsequently disposed as hazardous waste.	\$0
38	Drum of Compressor Oil at Building 30	Drum was removed and disposed by facility personnel prior to the implementation of Phase II assessment activities. Spent oil dry on the floor was sampled and did not contain PCBs. No additional assessment warranted.	\$0

Based on the provided engineering cost estimates, the range of cost to manage these Findings through the VRP is likely \$369,000 to \$569,000. These estimated costs include additional assessment, characterization, and/or remediation work. This range does not include the removal/disposal of surface debris and emergent or dumped wastes within the landfill and scrapyard areas, nor does it include any improvements that may be required to supplement the existing landfill caps.

The above engineering cost estimates are provided for DGS fiscal planning and appropriation of funding sources. These range of costs are based on recommended activities, our experience with the VRP, and typical industry standard rates. They are not intended to be used as a proposal cost to complete the work.

This Phase II ESA assessed those Findings classified as high and moderate risk to third party (offsite) receptors, human health and the environment. The remaining Findings presented in the July 2017 ECA will require assessment and/or management as part of facility closure; however, many of these Findings are associated with processes currently in use (e.g. the 90,000-gallon

heating oil AST at the boiler plant, USTs currently in use, etc.). There will be future environmental management costs associated with these Findings, which should be assessed if/when the associated structures are demolished and/or removed from the site.

1.0 INTRODUCTION

This report presents the methods and findings of a Phase II Environmental Site Assessment (ESA) performed to collect and analyze soil and groundwater samples at the Central Virginia Training Center (CVTC, aka the Site), a ~380-acre campus located on the northern bank of the James River in Madison Heights, Virginia (**Figure 1**).

1.1. Background

The CVTC property and buildings are currently owned by the Commonwealth of Virginia under the Department of General Services (DGS), and operated by the Virginia Department of Behavioral Health and Developmental Services (DBHDS). Both the DGS and DBHDS are studying the feasibility of placing CVTC in a surplus property status.

To determine the potential environmental liabilities associated with the historic land use of the property, EEE Consulting, Inc. (3e) performed a Site Specific Environmental Conditions Assessment (ECA) in July 2017, which documented a total of 38 Findings within the boundaries of the 380-acre campus as shown on **Figure 2** and supporting ECA **Table 1** (attached to Figure 2 for reference). Each of these Findings were considered *recognized environmental conditions* (RECs) as defined by ASTM E1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process):

Recognized Environmental Conditions – the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

1.2. Description and Rationale of Work Performed

At the request of DBHDS and the DGS, the 38 RECs/Findings identified at CVTC were prioritized with respect to environmental risk, and general estimates of characterization and management cost were presented for each Finding. Due to limitations of available assessment funding, DGS requested that this Phase II ESA be designed to provide preliminary characterization of the high and moderate priority conditions (19 of 38 Findings), with an emphasis of determining the presence or absence of contaminants in groundwater, and potential groundwater migration pathways. Groundwater contamination and migration of contaminants were determined to represent the greatest potential third party risk from the facility.

Therefore, the *objectives* of this Phase II ESA were identified as:

- ❖ ASTM E1903-11 §1.2.1 Objective 1 – “Assess whether there has been a *release of hazardous substances* within the meaning of *CERCLA*, for purposes including *landowner liability protections*.”
- ❖ ASTM E1903-11 §1.2.2 Objective 2 – “Provide information relevant to identifying, defining and implementing landowner *continuing obligations*, or the criteria established under *CERCLA* (e.g., taking *reasonable steps* to prevent or limit exposure to previously released *hazardous substances*) for maintaining the *CERCLA landowner liability protections*.”
- ❖ ASTM E1903-11 §1.2.4 Objective 4 – “Provide information relevant to identifying, defining and evaluating property conditions associated with *target analytes* that may pose risk to human health or the environment, or risk of bodily injury to persons on the property and thereby give rise to potential liability in tort.”
- ❖ ASTM E1903-11 §1.2.5 Objective 5 – “Provide information relevant to evaluating and allocating *business environmental risk* in transactional and contractual contexts, including transferring, financing and insuring properties, and due diligence relating thereto.”
- ❖ ASTM E1903-11 §1.2.6 Objective 6 – “Provide information to support disclosure of liabilities and contingent liabilities in financial statements and securities reporting.”

To meet these objectives, **3e** developed a scope of work that was detailed in the August 3, 2017 proposal (included in **Appendix A** for reference). This proposal included detailed sampling and analysis requirements for each Finding, and as such it served as a project-specific workplan. This Phase II ESA also utilized **3e** Standard Operating Procedures (SOPs) for all field activities (see **Appendix B**).

2.0 PUBLIC CLEARINGS/MARK OUTS

Prior to implementing the soil boring and monitoring well installations, the approximate locations of subsurface public utilities were identified and marked by Miss Utility of Virginia. As most subsurface utilities present on the Site are owned and operated by CVTC, a private utility locator was contracted to clear the proposed boring and monitoring well locations on September 5, 2017. Additional utility marking and clearance was also provided by CVTC staff on September 6, 2017. No damage or disruption to any subsurface utility was reported in response to the work performed under this Phase II ESA.

3.0 INVESTIGATIVE METHODS

All field activities described in this Phase II ESA were performed in accordance with **3e** SOPs (**Appendix B**). Deviations to these SOPs, if any, are detailed in the specific Finding section for which they occurred.

3.1. Soil Sampling Methods

All soil sampling was performed from September 7-12, 2017 utilizing the following established SOPs:

- ❖ Collection from a continuous soil core using a direct-push GeoProbe™ type drill rig (**3e** SOP 2.3).
- ❖ Collected from surface soil, less than 12-inches below ground surface (BGS), using a hand auger and/or shovel (**3e** SOP 2.1). This includes aliquots comprising the Incremental Sampling (IS), which was performed in general accordance with US Army Corps of Engineers Interim Guidance 09-02: *Implementation of Incremental Sampling (IS) of Soil for the Military Munitions Response Program*.
- ❖ Copies of bore logs for all continuous soil core borings are included in **Appendix C**.

3.2. Groundwater Sampling Methods

The groundwater monitoring well installations, liquid level measurements, and groundwater sampling were performed from September 19 to October 3, 2017.

- ❖ Groundwater wells were installed into the first permanent aquifer using air rotary drilling technology, and subsequently developed using a submersible pump in accordance with applicable portions of **3e** SOP 2.4.
- ❖ Copies of the bore logs documenting subsurface conditions during the installations of the monitoring wells are included in **Appendix D**.
- ❖ Monitoring well diagrams depicting construction and elevation detail are included in **Appendix E**.
- ❖ Liquid levels (groundwater elevation measurements) were recorded twice during this Phase II ESA; on September 27 and October 2, 2017 in accordance with **3e** SOP 2.5.
- ❖ Groundwater samples were collected using low flow capable bladder pumps in accordance with **3e** SOP 2.7 and general accordance with both EPA's Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedure (EPA/540/S-95/504) and ASTM D6771-02: *Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Ground-Water Quality Investigations*.
- ❖ All bladder pumps were set within the screened interval, approximately 5-ft from the bottom of each monitoring well.

3.3. Sample Analytical Methods

All media samples collected during this Phase II ESA were handled, transported, and analyzed in accordance with the following protocols:

- ❖ All sample jars/containers were appropriately labeled and placed on ice in a cooler to maintain an appropriate temperature (< 4°C) while in transit to the certified environmental laboratory.

- ❖ Chain of Custody (COC) documentation was completed for all samples submitted for laboratory analysis.
- ❖ All samples were analyzed by Air, Water, & Soil Laboratories, Inc. of Richmond, VA in accordance with the EPA Methods appropriate for each finding.
- ❖ The COC documentation and laboratory analytical data are provided in **Appendix F**. Detailed discussions of the laboratory analytical results are presented in each associated Finding sections.

3.4. Survey

3e contracted Thompson & Litton to survey the location and elevation of all monitoring wells installed during this Phase II ESA. This survey information was used to accurately depict well locations and associated site features on figures, and to determine relative elevations to assist in the calculation of hydrologic parameters such as potential hydraulic gradient.

3.5. Investigation Derived Waste

All investigation derived waste (IDW) was managed in accordance with 3e SOP 1.2. Copies of transportation and disposal documents for IDW are included in **Appendix G**.

4.0 GEOLOGY & HYDROGEOLOGY

4.1. Geology

According to the USGS Geologic map of Virginia, the Site is in the Proterozoic Z aged Ashe Formation - Biotite gneiss. This metamorphic geological unit consists primarily of medium- to light-gray, massive, conglomeratic biotite schist and gneiss, with feldspar, quartz, and granitic clasts. This bedrock formation was encountered between 5-ft and 38-ft BGS during installation of the permanent monitoring wells.

4.2. Hydrogeology

Monitoring wells at CVTC were installed within the biotite gneiss member of the Ashe Formation referred to as the Lynchburg Group, which is a part of the Piedmont and Blue Ridge Crystalline Aquifer System. Groundwater in this formation is primarily stored within fractures that develop within rocks due to physical and chemical weathering. The permanent water table at CVTC was encountered at approximate depths ranging from 30-83-ft below the top of well casings (average depth was approximately 43-ft below top of well casings). Groundwater elevations ranged from approximately 618-700-ft amsl. Pertinent groundwater data is presented in the following **Table 4.2-1**.

Table A Summary of Groundwater Measurements and Elevations

Well ID	TOC Elevation (feet amsl)	PID (ppm)	Depth to Groundwater (feet below TOC)		Groundwater Elevation (feet amsl)		Maximum Fluctuation (feet)
			10/2/2017	9/27/2017	10/2/2017	9/27/2017	
10-1	732.97	1.2	35.73	35.82	697.24	697.15	0.09
10-2	722.70	1.8	39.81	38.86	682.89	683.84	0.95
10-3	715.16	1.4	31.39	30.53	683.77	684.63	0.86
13-1	692.38	20.3	43.54	43.71	648.84	648.67	0.17
13-2	675.49	0.0	37.63	37.88	637.86	637.61	0.25
14-1	711.43	0.6	34.57	34.83	676.86	676.60	0.26
14-2	683.43	1.7	25.46	25.62	657.97	657.81	0.16
14-3	675.19	0.6	25.78	26.00	649.41	649.19	0.22
15-1	682.82	1.0	25.81	25.81	657.01	657.01	0.00
16-1	716.20	0.4	82.72	69.58	633.48	646.62	13.14
16-2	717.77	0.2	36.69	36.88	681.08	680.89	0.19
16-3	707.74	0.3	54.83	43.11	652.91	664.63	11.72
16-4	704.78	2.0	54.40	52.88	650.38	651.90	1.52
16-5	685.25	3.3	66.66	66.71	618.59	618.54	0.05
30-1	738.90	1.8	48.89	39.40	690.01	699.50	9.49
30-2	739.92	1.3	66.90	67.31	673.02	672.61	0.41

Notes: TOC = Top of Casing

amsl = Above Mean Sea Level

5.0 SCREENING LEVELS

All sample results collected during this Phase II investigation were compared against applicable regulatory screening levels to determine if the results indicated anthropogenic impacts, releases, or potential risk to future development. The selection of appropriate screening levels was based on the regulatory programs associated with each Finding type (e.g. petroleum storage, buried waste, etc.), and screening values were selected from one of more of the following:

- ❖ Regional background studies for naturally occurring heavy metal concentrations in native soil, which were sponsored by the Virginia DEQ.
- ❖ EPA Region 3 Screening Levels, updated June 2017. All soil results were compared to Residential Soil Screening Levels, while Maximum Contaminant Levels (MCLs) were utilized to screen groundwater sample results. These levels were chosen because they are commensurate with the DEQ's Voluntary Remediation Program (VRP) Tier II levels for unrestricted (e.g., residential) site use.
- ❖ The Virginia DEQ guidance for petroleum release reporting in the most recent edition of the Storage Tank Program Technical Manual, which is based on 9VAC25-580-190.

6.0 INVESTIGATIVE RESULTS AND RECOMMENDATIONS PER FINDING

6.1. Finding #10: Former Physical Plant and Laundry

6.1.1. Background Summary

ECA Finding #10 is the location of the original Physical Plant, Laundry, and Carpenter Shop, which is now the location of Building 47. These prior structures were apparently razed for the subsequent construction of Building 47 in the mid-1970s. Site observation of activities at the current Physical Plant (Bldg. 51) indicates that historical uses at the former plant location likely included the use, storage, and disposal of petroleum products, paints, solvents, and similar chemicals. Because operations at this location occurred prior to the advent of environmental regulations or currently accepted industry practices, there was potential for historic release of petroleum and/or hazardous substances at this location.

6.1.2. Investigation Summary

The investigation to determine presence or absence of groundwater and soil impacts at Finding #10 included the advancement five (5) soil borings with a GeoProbe direct-push rig and installation of three (3) monitoring wells into the permanent groundwater table using an air rotary rig in accordance with 3e SOPs 2.3 and 2.4, respectively (see **Appendix B**). The location of these borings and monitoring wells are depicted on **Figure 10-1**.

Soil samples were collected from the first and last 5-ft sleeves of each boring, to be representative of soil near the ground surface and directly above the bedrock interface. Additional soil sample intervals were proposed for collection in the event of visual, olfactory, or other field observations indicative of anthropogenic impacts; however, no such impacts were observed during soil sample collection.

Because historic petroleum, paint and solvent use were determined to be the likely contaminants, the following analyses were performed on the representative media samples:

- ❖ Total Petroleum Hydrocarbons – Gasoline Range Organics (TPH-GRO) by EPA Method 8015C: all soil and groundwater samples.
- ❖ Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO) by EPA Method 8015C: all soil and groundwater samples.
- ❖ Volatile Organic Compounds (VOCs) by EPA Method 8260B: soil directly above the bedrock interface near Building 47 and all groundwater samples.
- ❖ Total 8 Resource Conservation and Recovery Act (RCRA) Metals by EPA Methods 6010C and 7470A: all groundwater samples.
- ❖ Hexavalent Chromium by EPA Method 7196A: all groundwater samples.

6.1.3. Results

6.1.3.1. Soil

Analytical results of soil samples collected from the direct push borings indicated that low TPH-DRO concentrations and one VOC constituent (acetone) were detected above the laboratory limits of quantification (LOQ) in all of the soil samples collected at Finding #10. All constituents detected in soil samples are summarized in the following **Table 6.1-1**. The detailed laboratory report in **Appendix F** includes LOQ, quality control, and quantitative results for all samples and analytes.

Table B Summary of Soil Detections at Finding #10

Boring ID			47-1	47-1	47-2	47-2	47-3	EPA Residential Soil Screening Level*
Lab ID			17I0320-01	17I0320-02	17I0320-03	17I0320-04	17I0320-05	
Depth (feet BGS)			0-5	10-15	0-5	16-17	0-5	
Date Collected			9/8/2017	9/8/2017	9/8/2017	9/8/2017	9/8/2017	
Analyte	CAS	Units	Result	Result	Result	Result	Result	(mg/kg)
TPH-DRO	none	mg/kg	22.2	< 10.8	< 10.0	< 10.9	13.6	96**
Acetone	67-64-1	mg/kg	NA	0.0164	NA	0.0165	NA	61,000
Boring ID			47-3	47-OP1	47-OP2	47-OP2	EPA Residential Soil Screening Level*	
Lab ID			17I0320-06	17I0300-12	17I0300-13	17I0300-14		
Depth (feet BGS)			23-24	10-14	10-15	20-22		
Date Collected			9/8/2017	9/7/2017	9/7/2017	9/7/2017		
Analyte	CAS	Units	Result	Result	Result	Result	(mg/kg)	
TPH-DRO	none	mg/kg	< 11.2	< 10.0	< 10.0	< 10.0	96**	
Acetone	67-64-1	mg/kg	0.0314	NA	NA	NA	61,000	

Notes:

Bold = Detection

*EPA Residential Screening Levels, June 2017

**Value for Aliphatic Medium (C9-C18), representative of liquid fuels and appropriate for TPH-DRO

A review of **Table 6.1-1** indicates that:

- ❖ Detected concentrations of TPH-DRO and acetone were both well below their respective residential soil screening levels.
- ❖ Concentrations of TPH-DRO did not exceed the Virginia Solid Waste Management Regulations (VSWMR) TPH limit of 50-mg/kg for fill material (9VAC 20-81-660D.2.d).
- ❖ Low concentrations of acetone are likely due to the chemical reaction that occurs between organic matter in soil and the sodium bisulfate preservative present in containers used for field preservation method of VOC soil samples (EPA Method 5035). Therefore, the detected acetone concentrations are not likely to be representative of an anthropogenic impact to subsurface soils.

6.1.3.2. Groundwater

All three monitoring wells at Finding #10 were purged and sampled using low-flow bladder pumps on October 2, 2017. The following **Table 6.1-2** summarizes groundwater parameters collected during the purge process method.

Table C Groundwater Purge Details at Finding #10

Well ID	Time*	Purge Volume (gallons)	Temperature (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (%)	Oxidation-Reduction Potential (mV)
10-1	1643	0.5	17.86	6.13	0.340	959	68.2	138
	1646	0.8	17.61	5.99	0.338	517	58.1	146
	1649	1.0	17.46	5.90	0.336	323	60.9	151
	1653	1.3	17.49	5.76	0.328	149	64.0	161
	1658	2.0	17.15	5.71	0.325	74.9	60.9	167
	1700	Sample	--	--	--	--	--	--
10-2	1746	0.3	19.58	6.4	0.506	623	162.3	172
	1750	0.5	19.09	6.57	0.494	407	160.6	171
	1753	1.0	18.87	6.58	0.489	346	157.5	171
	1758	1.5	18.67	6.57	0.482	432	159.9	171
	1800	Sample	--	--	--	--	--	--
10-3	1833	0.2	19.71	5.91	0.478	>1000	101.5	176
	1836	0.4	18.92	5.67	0.477	>1000	82.7	186
	1840	0.9	18.63	5.65	0.480	>1000	74.0	189
	1843	1.0	18.49	5.63	0.481	>1000	73.6	191
	1845	Sample	--	--	--	--	--	--

Notes:

* **Bold** indicates time of sample collection

A review of **Table 6.1-2** indicates that:

- ❖ An adequate purge was performed at each well, per **3e SOP 2.7** and low-flow sampling guidance.
- ❖ Turbidity in monitoring well 10-3 did not decrease during the purge. High turbidity (suspended particulates) can contribute to detected concentrations of Total 8 RCRA Metals in the groundwater sample.

Analytical results of groundwater samples collected from these three (3) monitoring wells indicated that no petroleum compounds or VOCs were detected in groundwater. Only low concentrations of barium, chromium, and mercury were detected above the laboratory LOQ at Finding #10, as presented in the following **Table 6.1-3**. The detailed laboratory report in **Appendix F** includes LOQ, quality control, and quantitative results for all samples and analytes.

Table D Summary of Groundwater Detections at Finding #10

		Well ID	10-1	10-2	10-3	EPA MCL*
		Lab ID	17J0112-01	17J0112-02	17J0112-03	
		Date Collected	10/2/2017	10/2/2017	10/2/2017	
Analyte	CAS	Units	Result	Result	Result	(mg/l)
Barium	7440-39-3	mg/l	0.168	0.105	0.385	2.0
Chromium	7440-47-3	mg/l	< 0.0100	< 0.0100	0.0246	0.1
Chromium, Hexavalent	18540-29-9	mg/l	< 0.005	< 0.005	< 0.005	--
Mercury	7439-97-6	mg/l	< 0.00020	< 0.00020	0.00036	0.002

Notes:

Bold = Detection

*EPA Maximum Contaminant Level, June 2017

A review of **Table 6.1-3** indicates that:

- ❖ Barium was detected in all three (3) groundwater samples, at concentrations an order of magnitude less than the EPA Maximum Contaminant Level (MCL) of 2.0 mg/l.
- ❖ Total chromium was detected in groundwater from 10-3; however, hexavalent chromium was not detected above the LOQ.
- ❖ Chromium and mercury were detected in groundwater from 10-3, at concentrations an order of magnitude less than their respective EPA MCLs.
- ❖ The elevated barium concentration and detections of both chromium and mercury in monitoring well 10-3 are likely attributed to turbidity measured at >1,000 NTU during sample collection (**Table 6.1-2**).

6.1.4. Recommendations

The results of soil and groundwater samples indicate no evidence of relic contamination from prior Physical Plant operations at Finding #10. Based on this information, no additional characterization is recommended.

6.2. Finding #11: Former Coal Powered Incinerator

6.2.1. Background Summary

ECA Finding #11 is the coal-powered waste incinerator adjoining the former sanitary landfill, which was used to incinerate sanitary waste and potentially medical waste beginning in 1949 and continuing through at least the 1970s. Resultant coal ash and combustion products were buried in the adjoining landfill (Finding #13). A suspect PCB-containing electric transformer was also observed at the overhead electric pole that formerly served this incinerator building.

6.2.2. Investigation Summary

Due to the potential impacts (above ground incineration and material handling) and associated constituents of concern, it was proposed that presence or absence of contaminants be determined by the advancement of shallow soil borings from 0-5-ft BGS. The resultant soil cores from each

boring were analyzed for dioxins, dibenzofurans, PAHs, PCBs and TAL metals using the following methods:

- ❖ PAHs and dibenzofurans by EPA Method 8270D
- ❖ Dioxins (2,3,7,8-TCDD) by EPA Method 8270D (SIM) – a very sensitive qualitative analysis used to determine presence/absence
- ❖ TAL Metals by EPA Methods 6010C and 7471B (mercury)
- ❖ Hexavalent Chromium by EPA Method 7196A

A total of 10 borings were advanced at Finding #11, as depicted on **Figure 11-1**. Note: all borings were classified as “13” based upon proximity to Building 13 (former incinerator). Because each boring only contained one (1) 5-ft soil sleeve, boring log information was condensed into the following **Table 6.2-1**, which summarizes the physical characteristics of each boring.

Table E Summary of Boring Descriptions at Finding #11

Boring ID	Depth (ft BGS)	Material Description
13-1	0-5	Topsoil, then red clayey SILT
13-2	0-5	1.5-ft gravelly FILL, then red CLAY, moist
13-3	0-5	1-ft gravel and coal FILL, then red CLAY, moist
13-4	0-5	0.5-ft topsoil and debris, then tan clayey SILT
13-5	0-5	0.5-ft topsoil, then red-tan micaceous clayey SILT
13-6	0-5	0.5-ft topsoil, then red-tan micaceous clayey SILT
13-7	0-5	0.5-ft topsoil and gravel, then red-tan clayey SILT
		0.5-ft clay, then misc. FILL including cinders, ash, suspect
13-8	0-5	asbestos fibers, and gravelly silt
13-9	0-5	Loose, micaceous tan clayey SILT
13-10	0-3	Loose, micaceous tan clayey SILT, refusal at 3-ft BGS

6.2.3. Results

The following **Table 6.2-2** presents a summary of the TAL Metals, PAHs, and other constituents detected at Finding #11. This table includes additional analyses as follows:

- ❖ Asbestos was analyzed in sample 13-8, because fibrous material was present in the soil at this sampling point. This sample was found to be positive for chrysotile asbestos.
- ❖ The initial qualitative analysis of dioxins (2,3,7,8-TCDD) indicated their presence in samples 13-3 and 13-8. Therefore, both of these samples were subsequently submitted for quantitative analysis of 2,3,7,8-TCDD by EPA Method 1613B. The quantitative analysis indicated no 2,3,7,8-TCDD above the laboratory LOQ. Please note: quantitative analysis data of 2,3,7,8-TCDD is presented in pg/g, which is equivalent to parts per trillion. The LOQ for both samples was less than 1.0 pg/g, which is less than the EPA Tier II SSL of 4.8 pg/g.

Table F Summary of Soil Detections at Finding #11

Boring ID	13-1	13-2	13-3	13-4	13-5	13-6	13-7	13-8	13-9	13-10	EPA Residential Soil Screening Level*		
Lab ID	17I0322-01	17I0322-02	17I0322-03	17I0322-04	17I0322-05	17I0322-06	17I0322-07	17I0322-08	17I0322-09	17I0322-10			
Depth (feet BGS)	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-3			
Date Collected	9/11/2017	9/11/2017	9/11/2017	9/11/2017	9/11/2017	9/11/2017	9/11/2017	9/11/2017	9/11/2017	9/11/2017			
Analyte	CAS	Units	Result	Result	(mg/kg)								
TAL Metals													
Aluminum	7429-90-5	mg/kg	26400	12800	21200	32700	32500	25800	29100	25400	33200	28900	77,000
Antimony	7440-36-0	mg/kg	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	5.22	< 5.00	31	
Arsenic	7440-38-2	mg/kg	4.26	3.14	5.87	4.67	4.62	6.15	4.86	6.04	5.75	4.94	0.68
Barium	7440-39-3	mg/kg	85.0	115	146	108	96.0	97.1	86.7	242	97.2	94.5	15,000
Beryllium	7440-41-7	mg/kg	< 0.497	< 0.368	< 0.394	< 0.200	< 0.200	< 0.986	< 0.371	0.440	< 0.380	< 0.391	160
Cadmium	7440-43-9	mg/kg	1.60	1.39	1.99	1.86	1.90	3.50	1.97	1.85	2.00	2.08	71
Calcium	7440-70-2	mg/kg	970	91600	9980	1090	1510	6650	3510	9920	3850	1880	--
Chromium	7440-47-3	mg/kg	16.3	9.43	17.2	22.6	22.3	24.7	20.1	21.4	25.6	20.1	--
Chromium, Hexavalent	18540-29-9	mg/kg	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.005	0.3
Cobalt	7440-48-4	mg/kg	9.09	8.79	11.9	14.3	11.9	9.75	11.2	9.86	12.5	10.7	23
Copper	7440-50-8	mg/kg	12.9	22.3	38.8	19.2	17.1	34.4	20.1	33.1	11.9	101	3,100
Iron	7439-89-6	mg/kg	26400	17400	27800	27900	30100	35600	32600	25300	28700	28900	55,000
Lead	7439-92-1	mg/kg	11.0	22.1	34.2	33.0	40.1	116	26.2	26.3	30.8	131	400
Magnesium	7439-95-4	mg/kg	3340	29800	8920	8150	7440	8790	7390	6250	7900	5870	--
Manganese	7439-96-5	mg/kg	233	210	186	328	273	280	258	352	316	272	1,800
Mercury	7439-97-6	mg/kg	0.039	0.081	0.035	0.038	0.029	0.073	0.025	0.057	0.028	0.039	11
Nickel	7440-02-0	mg/kg	9.34	10.7	13.3	14.4	14.7	17.4	13.4	13.6	15.1	13.3	--
Potassium	7440-09-7	mg/kg	4340	4200	3710	9600	8180	5810	7190	5280	9180	7220	--
Selenium	7782-49-2	mg/kg	< 2.50	< 2.50	2.65	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	390
Silver	7440-22-4	mg/kg	< 0.500	0.514	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	390
Sodium	7440-23-5	mg/kg	38.7	221	125	46.0	51.7	73.7	55.0	951	56.7	45.6	--
Thallium	7440-28-0	mg/kg	< 2.50	3.71	2.67	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	3.91	< 2.50	--
Vanadium	7440-62-2	mg/kg	32.1	29.8	46.2	30.0	30.4	33.9	32.3	31.3	33.4	32.4	390
Zinc	7440-66-6	mg/kg	67.2	63.8	69.8	99.5	108	209	87.3	214	93.9	105	23,000
PAHs													
Benzo (a) anthracene	56-55-3	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.257	< 0.0833	< 0.0833	1.1
Benzo (a) pyrene	50-32-8	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.246	< 0.0833	< 0.0833	0.11
Benzo (b) fluoranthene	205-99-2	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.203	< 0.0833	< 0.0833	1.1
Benzo (g,h,i) perylene	191-24-2	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.0974	< 0.0833	< 0.0833	--
Benzo (k) fluoranthene	207-08-9	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.0974	< 0.0833	< 0.0833	11
bis (2-Ethylhexyl) phthalate	117-81-7	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.227	< 0.0833	< 0.0833	39
Chrysene	218-01-9	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.195	< 0.0833	< 0.0833	110
Dibenzo (a,b) anthracene	53-70-3	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.096	< 0.0833	< 0.0833	0.11
Fluoranthene	206-44-0	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.470	< 0.0833	< 0.0833	2,400
Indeno (1,2,3-cd) pyrene	193-39-5	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.133	< 0.0833	< 0.0833	1.1
Naphthalene	91-20-3	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.156	3.8
2-Methylnaphthalene	91-57-6	mg/kg	< 0.0833	< 0.0833	0.139	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	240
Phenanthrene	85-01-8	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.590	< 0.0833	< 0.0833	--
Pyrene	129-00-0	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.688	< 0.0833	< 0.0833	1,800
Other													
2,3,7,8-TCDD (SIM)	1746-01-6	Detect / Non-Detect	Not Detected	Not Detected	Present	Not Detected	Not Detected	Not Detected	Present	Not Detected	Not Detected	--	
2,3,7,8-TCDD (Quantified)		pg/g	Not Analyzed	Not Analyzed	< 0.992	Not Analyzed	Not Analyzed	Not Analyzed	< 0.997	Not Analyzed	Not Analyzed	4.8 (pg/g)	
Asbestos	none	Detect / Non-Detect	Not Analyzed	Chrysotile Detected	Not Analyzed	Not Analyzed	--						

Notes:

Bold = Detection

Highlight = Detection Above Residential SSL

*EPA Residential Screening Levels, June 2017

A review of **Table 6.2-2** indicates that:

- ❖ Arsenic was the only metal detected at total concentrations exceeding the EPA Tier II Site Screening Level (SSL) for unrestricted use. None of the detected concentrations exceeded the 12.41 mg/kg threshold for naturally occurring arsenic in the Piedmont physiographic province (explained in detail at **Section 8.1**).
- ❖ PAHs were elevated in sample 13-8, and benzo (a) pyrene exceeded the Tier II SSL. Because sample 13-8 contained apparent waste products (see **Table 6.2-1**), this sample appears to be representative of buried wastes within the landfill adjoining the former incinerator, and likely includes former combustion products from the incinerator.

- ❖ The friable, fibrous material within sample 13-8 was positively identified as chrysotile asbestos.

6.2.4. Recommendations

The former incinerator (Finding #11) has been determined to not warrant additional characterization because:

- ❖ While 2,3,7,8-TCDD (a dioxin) was present, it was found to be below both the Tier II SSL and laboratory LOQ at the parts per trillion level.
- ❖ With the exceptions of arsenic in all soil, and PAHs detected in sample 13-8, no other constituents exceeded their respective Tier II SSLs.
- ❖ Concentrations of arsenic were determined to be within the naturally occurring range for soil of the Piedmont physiographic province.
- ❖ Soil from sample 13-8 contained friable asbestos and elevated concentrations of PAHs. However, this sample appears to be representative of waste buried in the former sanitary landfill (see Finding #13). Prior to the collection of sample 13-8, wastes from this former landfill were not anticipated to encroach upon the location of the former incinerator.

Should demolition of the former incinerator (Building 13) occur, it must be performed in compliance with all applicable state and local codes, including identification and removal of asbestos containing materials within the structure. Additional information on demolition and asbestos requirements are included in **Sections 7.1 and 7.2**.

6.3. Finding #12: Former Medical Waste Incinerator

6.3.1. Background Summary

ECA Finding #12 is the former natural gas-powered medical waste incinerator, located in the northern portion of the “New Scrap Yard” (Finding #14) and south of Building 31.

6.3.2. Investigation Summary

Due to the potential types of impacts (above ground incineration and material handling) and associated constituents of concern, it was proposed that presence or absence of impacts be determined by the advancement of shallow soil borings from 0-5-ft BGS. The resultant soil cores from each boring were analyzed for contaminants associated with combustion of medical and waste products, including dioxins, dibenzofurans, PAHs, PCBs and TAL metals using the following methods:

- ❖ PAHs and dibenzofurans by EPA Method 8270D
- ❖ Dioxins (2,3,7,8-TCDD) by EPA Method 8270D (SIM) – a very sensitive qualitative analysis used to determine presence/absence
- ❖ TAL Metals by EPA Methods 6010C and 7471B (mercury)

❖ Hexavalent Chromium by EPA Method 7196A

A total of six (6) borings were advanced at Finding #12, as depicted on **Figure 12-1**. Because each boring only contained one (1) 5-ft soil sleeve, boring log information was condensed into the following **Table 6.3-1**, which summarizes the physical characteristics of each boring. All borings were observed to contain similar surface cover and soil characteristics.

Table G Summary of Boring Descriptions at Finding #12

Boring ID	Depth (ft BGS)	Material Description
12-1	0-5	0.5-ft topsoil, then red-tan micaceous clayey SILT
12-2	0-5	0.5-ft topsoil, then red-tan micaceous clayey SILT
12-3	0-5	0.5-ft topsoil, then red-tan micaceous clayey SILT
12-4	0-5	0.5-ft topsoil, then red-tan micaceous clayey SILT
12-5	0-5	0.5-ft topsoil, then red-tan micaceous clayey SILT
12-6	0-3	0.5-ft topsoil, then red-tan micaceous clayey SILT

6.3.3. Results

The following **Table 6.3-2** presents a summary of the TAL Metals detected at Finding #12. No other constituents (dioxins, dibenzofurans, PAHs, or PCBs) were detected in the samples.

Table H Summary of Soil Detections at Finding #12

Boring ID	12-1	12-2	12-3	12-4	12-5	12-6	EPA Residential Soil Screening Level*
Lab ID	17I0319-01	17I0319-02	17I0319-03	17I0319-04	17I0319-05	17I0319-06	
Depth (feet BGS)	0-5	0-5	0-5	0-5	0-5	0-5	
Date Collected	9/8/2017	9/8/2017	9/8/2017	9/8/2017	9/8/2017	9/8/2017	
Analyte	CAS	Units	Result	Result	Result	Result	(mg/kg)
TAL Metals							
Aluminum	7429-90-5	mg/kg	22500	18100	26800	32400	26300
Antimony	7440-36-0	mg/kg	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Arsenic	7440-38-2	mg/kg	4.09	4.28	4.74	5.26	4.10
Barium	7440-39-3	mg/kg	100	97.0	99.1	100	76.3
Beryllium	7440-41-7	mg/kg	< 0.200	< 0.200	< 0.200	< 0.200	< 0.365
Cadmium	7440-43-9	mg/kg	1.56	1.64	1.53	1.48	1.63
Calcium	7440-70-2	mg/kg	1250	922	12900	1580	721
Chromium	7440-47-3	mg/kg	14.0	12.6	19.1	14.8	27.4
Chromium, Hexavalent	18540-29-9	mg/kg	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Cobalt	7440-48-4	mg/kg	12.3	11.5	9.35	15.8	10.3
Copper	7440-50-8	mg/kg	9.54	2.79	9.87	25.0	6.91
Iron	7439-89-6	mg/kg	25700	28700	28800	34700	26800
Lead	7439-92-1	mg/kg	5.85	4.25	4.51	10.8	11.3
Magnesium	7439-95-4	mg/kg	8000	7240	7900	5640	5660
Manganese	7439-96-5	mg/kg	275	231	249	658	193
Mercury	7439-97-6	mg/kg	0.010	0.009	0.009	0.010	< 0.008
Nickel	7440-02-0	mg/kg	13.3	15.0	10.1	9.02	12.3
Potassium	7440-09-7	mg/kg	6800	7400	7380	5250	5450
Selenium	7782-49-2	mg/kg	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50
Silver	7440-22-4	mg/kg	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Sodium	7440-23-5	mg/kg	42.7	29.7	46.1	42.9	50.7
Thallium	7440-28-0	mg/kg	< 2.50	< 2.50	3.53	< 2.50	< 2.50
Vanadium	7440-62-2	mg/kg	19.5	17.7	26.5	27.3	23.2
Zinc	7440-66-6	mg/kg	65.1	66.6	59.4	42.7	58.6
							23,000

Notes:

Bold = Detection

Highlight = Detection Above Residential SSL

*EPA Residential Screening Levels, June 2017

A review of **Table 6.3-2** indicates that:

- ❖ Arsenic was the only metal detected at total concentrations exceeding the EPA Tier II Site Screening Level (SSL) for unrestricted use. None of the detected concentrations exceeded the 12.41 mg/kg threshold for naturally occurring arsenic in the Piedmont physiographic province (explained in detail at **Section 8.1**)

6.3.4. Recommendations

The former medical waste incinerator (Finding #12) has been determined to not warrant additional characterization because:

- ❖ With the exception of the arsenic detections in the representative soil samples, no other constituents were detected at concentrations that exceeded their respective Tier II SSLs.
- ❖ The detected arsenic concentrations are within the naturally occurring range for soil of the Piedmont physiographic province.

Remains of the former medical waste incinerator stack should be sampled for asbestos and then disposed in compliance with all state and local code. The chain link fence and concrete slab could also be removed at the discretion of DGS.

6.4. Finding #13: Closed Sanitary Landfill

6.4.1. Background Summary

ECA Finding #13 was the ~4-acre sanitary landfill that operated from approximately 1950 through the 1970s. This landfill was sited in an existing low spot and adjoining ravine, which was subsequently filled over the span of several decades. It is likely that all waste generated by CVTC operation during this time-period were landfilled at this location, and/or burned in the adjoining incinerator (Finding #11), with burial of the resultant combustion products at this location. According to facility staff, friable asbestos pipe insulation may also have been buried in this closed landfill.

6.4.2. Investigation Summary

The investigation to determine presence or absence of groundwater impacts at Finding #13 included the installation of two (2) monitoring wells into the permanent groundwater table using an air rotary rig in accordance with **3e** SOPs 2.3 and 2.4, respectively (**Appendix B**). A third monitoring well was initially proposed for installation immediately downgradient of the landfill in the wooded ravine; however, this location was subsequently determined to likely be on the adjoining property. Additionally, the steep slope entering this ravine would have required significant land disturbance to cut an appropriate access road for drill rig access. This area of disturbance would have required preparation of an Erosion & Sediment Control Plan requiring DEQ review, and there was not sufficient time in the Phase II ESA schedule to account for the DEQ review period of up to 60-calendar days.

3e also sampled the nearby stream (Williams Run) at three (3) points representing upstream, cross-gradient, and downstream locations relative to this landfill. Williams Run was sampled because it is located directly downgradient from the closed landfill, and was identified as the closest sensitive receptor for potential migration of groundwater. The monitoring well and stream sample locations are depicted on **Figure 13-1**.

Because of historic landfill activity, the groundwater and surface water samples were analyzed for constituents listed on Appendix II to 40 CFR Part 258—List of Hazardous Inorganic and Organic Constituents (Criteria for Municipal Solid Waste Landfills).

6.4.3. Results

Both monitoring wells at Finding #13 were purged and sampled using low-flow bladder pumps on October 4, 2017. The following **Table 6.4-1** summarizes groundwater parameters collected during the purge process method.

Table I Groundwater Purge Details at Finding #13

Well ID	Time*	Purge Volume (gallons)	Temperature (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (%)	Oxidation-Reduction Potential (mV)
13-1	1451	0.0	19.42	6.04	0.108	60.2	68.9	171
	1453	0.2	16.57	5.65	0.108	79.7	50.6	183
	1500	1.0	15.28	5.53	0.110	40.8	41.9	195
	1506	2.0	15.17	5.50	0.110	22.8	40.4	201
	1510	2.5	15.08	5.50	0.110	13.9	40.1	203
	1515	Sample	--	--	--	--	--	--
13-2	1546	0.0	20.06	5.78	0.328	419	127.2	206
	1550	0.3	16.34	5.98	0.341	163	113.9	206
	1555	1.0	15.98	5.92	0.341	41.5	106.5	208
	1600	1.5	15.92	5.87	0.339	16.3	101.6	211
	1602	1.7	15.87	5.85	0.337	11.3	99.5	212
	1605	Sample	--	--	--	--	--	--

Notes:

* **Bold** indicates time of sample collection

A review of **Table 6.4-1** indicates that:

- ❖ An adequate purge was performed at each well, per **3e SOP 2.7** and low-flow sampling guidance.
- ❖ Turbidity was very low in both wells, indicating that any total metals in groundwater samples would likely be dissolved in the aquifer.

Analytical results of the representative groundwater and surface water samples indicate that herbicides, pesticides, VOCs, or SVOCs were not present at detectable concentrations. Low total concentrations of arsenic, barium, and mercury were detected above the laboratory LOQ at Finding #13, as presented in the following **Table 6.4-2**. The detailed laboratory report in **Appendix F** includes LOQ, quality control, and quantitative results for all samples and analytes.

Table J Summary of Groundwater and Surface Water Detections at Finding #13

Well ID		13-1	13-2	S1 (midpoint)	S2 (upstream)	S3 (downstream)	EPA MCL*
Lab ID		17J0155-05	17J0155-06	17J0515-01	17J0515-02	17J0515-03	
Date Collected		10/2/2017	10/2/2017	10/16/2017	10/16/2017	10/16/2017	
Analyte	CAS	Units	Result	Result	Result	Result	(mg/l)
Arsenic	7440-38-2	mg/l	< 0.001	< 0.001	0.0012	0.0011	0.0011 0.01
Barium	7440-39-3	mg/l	0.0548	0.0895	0.0406	0.0378	0.0402 2.0
Mercury	7439-97-6	mg/l	< 0.00020	0.00032	< 0.00020	< 0.00020	< 0.00020 0.002

Notes:

Bold = Detection

*EPA Maximum Contaminant Level, June 2017

A review of **Table 6.4-2** indicates that:

- ❖ Barium was detected in all groundwater and surface water samples, at concentrations two orders of magnitude less than the MCL of 2.0 mg/l.

- ❖ Total arsenic was detected in all surface water samples from Williams Run, at concentrations an order of magnitude less than the MCL of 0.01 mg/l.
- ❖ Mercury was detected in groundwater from 13-1 at an order of magnitude less than the MCL of 0.002 mg/l. Because turbidity was very low in this monitoring well (**Table 6.2-1**), the mercury detection is likely indicative of dissolved mercury in the groundwater.
- ❖ All three stream samples exhibited no significant variation in the detected concentrations, indicating no quantifiable impacts from the former landfill.

6.4.4. Recommendations

While no detected groundwater constituents exceeded their respective MCLs, the groundwater monitoring well network is incomplete at this time, as the downgradient monitoring well could not be installed during this Phase II ESA.

Because this Finding #13 is a former sanitary landfill predating modern permitting requirements, it has had no prior assessment, boundary survey, or other protections afforded by commensurate landfills that have operated under a permit. Therefore, it should be enrolled into the Virginia DEQ's Voluntary Remediation Program (VRP) to obtain a Certification of Satisfactory Completion of Remediation. Additional information on the process and protections afforded by the VRP is included in **Section 8.2**.

The VRP process for this former sanitary landfill would likely include the following general activities:

- ❖ Determine site eligibility and apply for enrollment into the VRP.
- ❖ Delineate the extent of buried waste using non-intrusive geophysical testing (terrain conductivity) and ground penetrating radar (GPR).
- ❖ Confirm the waste limits with a direct-push GeoProbe drill rig.
- ❖ Collect soil samples and determine the thickness of the existing landfill cap.
- ❖ Apply additional cap material (clay), if warranted.
- ❖ Remove and properly dispose of all debris exposed and/or dispersed at the ground surface.
- ❖ Survey locate the bounds of waste and the limits of the VRP Site.
- ❖ Enter an access agreement with neighboring property owner(s) to install at least one (1) downgradient monitoring well.
- ❖ Cut an access road north of landfill to allow both drill rig and future monitoring well access.
- ❖ Collect deep soil gas samples within and adjoining the delineated limits of waste.
- ❖ Perform at least two (2) complete rounds of groundwater sampling.
- ❖ Subdivide the landfill from the larger CVTC parcel, and record land use restrictions into the deed for this VRP Site.

The range of costs associated with this work would likely be from \$100,000 to \$150,000 for all tasks except removal of surface wastes and any required improvements to the existing landfill cap.

6.5. Finding #14: New Scrap Yard

6.5.1. Background Summary

ECA Finding #14 was the area identified as the “New Scrap Yard” by an undated facility map. This area contained evidence of fill piles and large ground disturbances, while historic aerial photographs and interviews indicate that the southern portion was used to landfill debris.

6.5.2. Investigation Summary

The investigation to determine presence or absence of groundwater impacts at Finding #14 included the installation of three (3) monitoring wells into the permanent groundwater table using an air rotary rig in accordance with **3e** SOPs 2.3 and 2.4, respectively (**Appendix B**). Thick vegetation and minor slopes required use of a bulldozer to facilitate drill rig access. The total area disturbed by this activity at Finding #14 was significantly less than the 10,000-ft² limit requiring an Erosion & Sediment Control Plan. The locations of these monitoring wells are depicted on **Figure 14-1**.

Because of historic landfill activity, the groundwater samples were analyzed for constituents listed on Appendix II to 40 CFR Part 258—List of Hazardous Inorganic and Organic Constituents (Criteria for Municipal Solid Waste Landfills).

6.5.3. Results

Some shallow buried concrete was encountered during installation of monitoring well 14-1; however, no other indications of buried wastes were noted during the well installations at Finding #14. All three (3) monitoring wells at Finding #14 were purged and sampled using low-flow bladder pumps on October 3, 2017. The following **Table 6.5-1** summarizes groundwater parameters collected during the purge process method.

Table K Groundwater Purge Details at Finding #14

Well ID	Time*	Purge Volume (gallons)	Temperature (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (%)	Oxidation-Reduction Potential (mV)
14-1	0900	0.5	14.34	7.70	0.222	>1000	100.5	-229
	0905	1.0	14.45	7.81	0.220	>1000	76.4	-240
	0910	1.5	14.49	7.85	0.219	>1000	69.7	-233
	0915	2.0	14.55	7.86	0.218	>1000	58.2	-235
	0918	Sample	--	--	--	--	--	--
14-2	1016	0.5	15.37	7.46	0.268	>1000	113	44
	1022	1.0	15.27	7.21	0.246	>1000	83.1	75
	1027	2.0	15.25	7.14	0.246	955	80.9	85
	1032	2.7	15.22	7.10	0.245	1000	79.3	90
	1032	Sample	--	--	--	--	--	--
14-3	1140	0.5	15.81	6.91	0.188	628	88.10	117
	1144	1.0	15.57	6.70	0.186	273	56.80	124
	1148	1.5	15.78	6.58	0.182	145	51.40	127
	1152	2.0	15.80	6.54	0.182	130	49.30	128
	1156	2.5	15.86	6.52	0.183	149	46.80	129
	1159	Sample	--	--	--	--	--	--

Notes:

* **Bold** indicates time of sample collection

A review of **Table 6.5-1** indicates that:

- ❖ An adequate purge was performed at each well, per **3e SOP 2.7** and low-flow sampling guidance.
- ❖ Turbidity in monitoring wells 14-1 and 14-2 did not decrease during the purge. High turbidity (suspended particulates) can contribute to elevated concentrations of metals in the groundwater samples.

Analytical results of the groundwater samples collected from these three (3) monitoring wells indicated that herbicides, pesticides, and VOCs were not present in groundwater at detectable concentrations. Low concentrations of select heavy metals and one incidence of bis (2-ethylhexyl) phthalate (a plasticizer) were detected above the laboratory LOQ at Finding #14, as presented in the following **Table 6.5-2**. The detailed laboratory report in **Appendix F** includes LOQ, quality control, and quantitative results for all samples and analytes.

Table L Summary of Groundwater Detections at Finding #14

Well ID		14-1	14-2	14-3	EPA MCL*
Lab ID		17J0112-04	17J0112-05	17J0112-06	
Date Collected		10/3/2017	10/3/2017	10/3/2017	
Analyte	CAS	Units	Result	Result	Result (mg/l)
bis (2-Ethylhexyl) phthalate	117-81-7	mg/l	< 0.00260	< 0.00269	0.00309 0.006
Arsenic	7440-38-2	mg/l	0.0014	0.0055	0.001 0.01
Barium	7440-39-3	mg/l	0.0505	0.0883	0.0405 2.0
Cobalt	7440-48-4	mg/l	< 0.0040	0.0047	< 0.0040 --
Copper	7440-50-8	mg/l	< 0.0100	0.0161	< 0.0100 1.3
Lead	7439-92-1	mg/l	< 0.0100	0.0231	< 0.0100 0.015
Vanadium	7440-62-2	mg/l	< 0.0100	0.0147	< 0.0100 --
Zinc	7440-66-6	mg/l	0.0129	0.0577	0.0152 --

Notes:

Bold = Detection

Highlight = Detection exceeds MCL

*EPA Maximum Contaminant Level, June 2017

A review of **Table 6.5-2** indicates that:

- ❖ Arsenic, barium, and zinc were detected at low concentrations in all groundwater samples. The detected arsenic and barium concentrations were at least an order of magnitude less than their respective MCLs. Zinc does not have an EPA MCL.
- ❖ Cobalt, Copper, Lead, and Vanadium were also detected in monitoring well 14-2, with lead detected above its MCL of 0.015 mg/l.
- ❖ The samples collected from 14-1 and 14-2 were equally turbid. However, the representative sample collected from 14-1 did not contain detectable concentrations of Cobalt, Copper, Lead, and Vanadium (see **Table 6.5-1**).

6.5.4. Recommendations

Due to the detection of lead in groundwater exceeding the MCL, an additional round of well sampling is recommended to confirm concentrations of metals in the groundwater at Finding #14.

Because this Finding #14 is a former scrap yard and an apparent demolition debris landfill predating modern permitting requirements, it has had no prior assessment, boundary survey, or other protections afforded commensurate landfills that have operated under a permit. Therefore, it should be enrolled into the Virginia DEQ's VRP to obtain a Certification of Satisfactory Completion of Remediation. Additional information on the process and protections afforded by the VRP is included in **Section 8.2**.

The VRP process for this former scrap yard and demolition debris landfill would likely include the following general activities:

- ❖ Determine site eligibility and apply for enrollment into the VRP.

- ❖ Delineate the extent of buried waste using non-intrusive geophysical testing (terrain conductivity) and ground penetrating radar (GPR).
- ❖ Confirm the waste limits with a direct-push GeoProbe drill rig.
- ❖ Collect soil samples and determine the thickness of the existing landfill cap.
- ❖ Apply additional cap material (clay) if warranted.
- ❖ Remove and properly dispose of all debris exposed and/or dispersed at the ground surface.
- ❖ Survey locate the bounds of waste and the limits of the VRP Site.
- ❖ Install one (1) additional monitoring well west of this area, which will likely require installation of an access road to allow both drill rig and future monitoring well access.
- ❖ Collect deep soil gas samples within and adjoining the delineated limits of waste.
- ❖ Perform at least two (2) complete rounds of groundwater sampling.
- ❖ Subdivide the landfill from the larger CVTC parcel, and record land use restrictions into the deed for this VRP Site.

The range of costs associated with this work would likely be from \$80,000 to \$100,000 for all tasks except removal of surface wastes and any required improvements to the existing landfill cap.

6.6. Finding #15: Coal Ash and Debris Dump

6.6.1. Background Summary

ECA Finding #15 was a small (less than 1-acre) area in the wooded ravine immediately west of the greenhouse (Building 83), where mounds of coal ash and partially buried construction debris were observed.

6.6.2. Investigation Summary

The investigation to determine presence or absence of groundwater impacts at Finding #15 included the installation of one (1) monitoring well into the permanent groundwater table using an air rotary rig in accordance with **3e** SOPs 2.3 and 2.4, respectively (see **Appendix B**). Thick vegetation and a steep slope required use of a bulldozer to facilitate drill rig access. The total area disturbed by this activity at Finding #15 was significantly less than the 10,000-ft² threshold requiring an Erosion & Sediment Control Plan. Because this well was installed in proximity to Finding #16, its location is depicted on **Figure 16-1**.

Because the coal ash and debris indicated landfilling activities, the groundwater sample was analyzed for constituents listed on Appendix II to 40 CFR Part 258—List of Hazardous Inorganic and Organic Constituents (Criteria for Municipal Solid Waste Landfills).

6.6.3. Results

The monitoring well at Finding #15 was installed immediately down gradient of the partially buried coal ash and demolition debris piles. This monitoring well was purged and sampled using a low-flow bladder pump on October 3, 2017. The following **Table 6.6-1** summarizes groundwater parameters collected during the purge process method.

Table M Groundwater Purge Details at Finding #15

Well ID	Time*	Purge Volume (gallons)	Temperature (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (%)	Oxidation-Reduction Potential (mV)
15-1	1321	0.0	15.53	5.83	0.173	>1000	116.4	154
	1326	0.5	14.59	5.49	0.174	726.0	104.4	176
	1330	1.0	14.43	5.41	0.174	92.1	100.4	190
	1336	2.0	14.35	5.38	0.175	25.9	97.7	198
	1339	Sample	--	--	--	--	--	--

Notes:

* **Bold** indicates time of sample collection

A review of **Table 6.5-1** indicates that:

- ❖ An adequate purge was performed at this well, per **3e SOP 2.7** and low-flow sampling guidance.
- ❖ Turbidity in monitoring well 15-1 decreased significantly during the purge.

Analytical results of the groundwater sample collected from monitoring well 15-1 indicated that only two compounds were detected above the laboratory LOQ at Finding #15: chloroform (a VOC) and barium (a heavy metal), as presented in the following **Table 6.6-2**. The detailed laboratory report in **Appendix F** includes LOQ, quality control, and quantitative results for all samples and analytes.

Table N Summary of Groundwater Detections at Finding #15

Well ID	15-1	EPA MCL*
Lab ID	17J0112-07	
Date Collected	10/3/2017	
Analyte	CAS	Result (mg/l)
Chloroform	67-66-3	0.00134
Barium	7440-39-3	0.0496

Notes:

Bold = Detection

*EPA Maximum Contaminant Level, June 2017

A review of **Table 6.6-2** indicates that:

- ❖ Both barium and chloroform were detected at concentrations at least an order of magnitude less than their respective MCLs.

- ❖ Chloroform can be attributed to laboratory cross contamination when also present at low concentrations in the trip blanks submitted and analyzed as part of the QA/QC process. The trip blank associated with 15-1 (lab sample ID 17J0112-09) did not contain chloroform above the LOQ of 0.0005 mg/l. Therefore, this low concentration of chloroform could be attributed with groundwater impact proximate to Finding #15.

6.6.4. Recommendations

Due to the detection of chloroform in monitoring well 15-1, it should be resampled to confirm presence/absence of chloroform.

Because this Finding #15 could be considered an uncontrolled dump, or unpermitted waste area containing coal ash and demolition debris, it should be enrolled into the Virginia DEQ's VRP to obtain a Certification of Satisfactory Completion of Remediation. Additional information on the process and protections afforded by the VRP is included in **Section 8.2**.

The VRP process for this area would likely include the following general activities:

- ❖ Determine site eligibility and apply for enrollment into the VRP.
- ❖ Due to the smaller area and apparent lesser amount of total wastes, all coal ash and disposed demolition debris should be characterized for waste classification and then removed from Finding #15 and properly disposed of according to waste characteristics (e.g. hazardous or non-hazardous).
- ❖ Collect soil samples after excavation of wastes to demonstrate completion and establish risk.
- ❖ Survey locate the bounds of disturbance and the limits of the VRP Site.
- ❖ Collect a deep soil gas sample within the former area of waste after excavation is complete.
- ❖ Perform at final groundwater sampling event.
- ❖ If risk assessment requires, then subdivide this area from the larger CVTC parcel, and record land use restrictions into the deed for this VRP Site.

The range of costs associated with this work would likely be \$25,000 to \$50,000 for all tasks except removal of wastes. Both a volumetric estimate and toxicity characterization of wastes would be required to provide a cost estimate for removal. This volumetric estimate should be performed during initial resampling of monitoring well 15-1.

6.7. Finding #16: Old Scrap Yard

6.7.1. Background Summary

ECA Finding #16 was the area identified as the “Old Scrap Yard” by an undated facility map. This area contained evidence of dead or distressed vegetation on the forest floor, construction debris and significant amounts of suspect asbestos tile protruding from the ground, several piles of

discarded 55-gallon drums, and other evidence indicating that this area was a combined metal scrap yard and construction debris landfill. Suspect coal ash material was also observed on the forested ground surface in several areas within the area of Finding #16.

6.7.2. Investigation Summary

The investigation to determine presence or absence of groundwater impacts at Finding #16 included the installation of five (5) monitoring wells into the permanent groundwater table using an air rotary rig in accordance with **3e** SOPs 2.3 and 2.4, respectively (see **Appendix B**). Thick vegetation and minor slopes required use of a bulldozer to allow rig access. The total area disturbed by this activity at Finding #16 was measured to be approximately 7,000-ft², which was less than the 10,000-ft² threshold requiring an Erosion & Sediment Control Plan. The locations of these monitoring wells are depicted on **Figure 16-1**.

While a total of six (6) wells were proposed, the depth required to intercept the permanent water table in several of these wells exceeded the estimated footage. Therefore, the sixth well was omitted from the initial group. This well was sited between monitoring wells 16-4 and 16-5, and it was decided that its omission was not likely to affect the contaminant presence/absence determination at Finding #16.

Because of historic debris disposal, buried demolition waste, and scrap yarding activity, the groundwater samples were analyzed for constituents listed on Appendix II to 40 CFR Part 258—List of Hazardous Inorganic and Organic Constituents (Criteria for Municipal Solid Waste Landfills).

6.7.3. Results

The monitoring wells at Finding #16 were purged and sampled using low-flow bladder pumps on October 3-4, 2017. The following **Table 6.7-1** summarizes groundwater parameters collected during the purge process method.

Table O Groundwater Purge Details at Finding #16

Well ID	Time*	Purge Volume (gallons)	Temperature (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (%)	Oxidation-Reduction Potential (mV)
16-1	1524	0.1	18.15	6.68	0.287	37.3	197.5	207
	1529	0.5	17.53	6.96	0.284	7.2	169.9	201
	1534	1.0	17.52	7.00	0.285	3.8	178.1	198
	1541	Sample	--	--	--	--	--	--
16-2	1717	0.5	14.74	6.52	0.117	21.8	160	182
	1723	1.0	14.28	6.27	0.117	6.3	156.9	187
	1728	1.5	14.16	6.18	0.116	4.2	154.1	190
	1731	Sample	--	--	--	--	--	--
16-3	1816	0.5	15.10	6.31	0.212	29.2	106.9	181
	1821	1.0	14.63	6.29	0.212	31.3	69.0	166
	1826	1.5	14.36	6.23	0.207	24.9	49.1	155
	1830	Sample	--	--	--	--	--	--
16-4	1048	0.0	15.68	6.64	0.244	399	102.3	175
	1052	0.3	15.13	6.62	0.241	208	105.6	167
	1056	0.5	15.05	6.59	0.240	147	103.6	162
	1100	0.7	15.09	6.57	0.241	81.8	104.9	157
	1105	1.2	15.16	6.56	0.243	57.6	110.9	154
	1110	Sample	--	--	--	--	--	--
16-5	1156	0.0	18.28	6.88	0.259	306	68.2	152
	1200	0.3	15.71	7.29	0.261	>1000	54.0	120
	1204	0.6	15.34	7.41	0.260	130	42.0	99
	1208	1.0	15.18	7.46	0.260	73.6	29.0	95
	1212	1.3	15.10	7.49	0.261	50.7	23.5	87
	1216	1.7	15.23	7.51	0.262	36.1	20.4	80
	1220	2.0	15.21	7.53	0.262	29.6	18.3	76
	1225	Sample	--	--	--	--	--	--

Notes:

* **Bold** indicates time of sample collection

A review of **Table 6.7-1** indicates that:

- ❖ An adequate purge was performed at each well, per **3e SOP 2.7** and low-flow sampling guidance.
- ❖ Turbidity decreased significantly in all five (5) monitoring wells.

Analytical results of samples collected from these five (5) monitoring wells indicated that low concentrations of barium were detected in all monitoring wells at Finding #16. Two polycyclic aromatic hydrocarbons (PAHs) were also detected above the laboratory LOQ in one well (16-2), as presented in the following **Table 6.7-2**. The detailed laboratory report in **Appendix F** includes LOQ, quality control, and quantitative results for all samples and analytes.

Table P Summary of Groundwater Detections at Finding #16

	Well ID	16-1	16-2	16-3	16-4	16-5	EPA MCL*
	Lab ID	17J0112-08	17J0155-01	17J0155-02	17J0155-03	17J0155-04	
	Date Collected	10/3/2017	10/3/2017	10/3/2017	10/4/2017	10/4/2017	
Analyte	CAS	Units	Result	Result	Result	Result	(mg/l)
Benzo (a) anthracene	56-55-3	mg/l	< 0.00005	0.00088	< 0.00005	< 0.00005	< 0.00005
Benzo (a) pyrene	50-32-8	mg/l	< 0.00011	0.00037	< 0.00011	< 0.00011	< 0.00011
Barium	7440-39-3	mg/l	0.044	0.0206	0.0170	0.0300	0.0893
							2.0

Notes:

Bold = Detection

Highlight = Detection exceeds MCL

*EPA Maximum Contaminant Level, June 2017

A review of **Table 6.7-2** indicates that:

- ❖ The total barium concentration detections in all groundwater samples were at least an order of magnitude less than the respective MCL of 2.0 mg/l.
- ❖ Two PAHs (benzo (a) anthracene and benzo (a) pyrene) were detected in 16-2, with benzo (a) anthracene present at a concentration slightly above the MCL of 0.0002 mg/l.

6.7.4. Recommendations

Due to the detection of benzo (a) anthracene in groundwater at a concentration exceeding the MCL, monitoring well 16-2 should be resampled to confirm the detected PAH.

Because Finding #16 is a former scrap yard and an apparent demolition debris landfill predating modern permitting requirements, it has had no prior assessment, boundary survey, or other protections afforded commensurate landfills that have operated under a permit. Therefore, it should be enrolled into the Virginia DEQ's VRP to obtain a Certification of Satisfactory Completion of Remediation. Additional information on the process and protections afforded by the VRP is included in **Section 8.2**.

The VRP process for this former scrap yard and demolition debris landfill would likely include the following general activities:

- ❖ Determine site eligibility and apply for enrollment into the VRP.
- ❖ Delineate the extent of buried waste using non-intrusive geophysical testing (terrain conductivity) and GPR.
- ❖ Confirm the waste limits with a direct-push GeoProbe drill rig.
- ❖ Collect soil samples and determine the thickness of the existing landfill cap.
- ❖ Apply additional cap material (clay) if warranted.
- ❖ Remove and properly dispose of all debris exposed and/or dispersed at the ground surface.
- ❖ Survey locate the bounds of waste and the limits of the VRP Site.
- ❖ Collect deep soil gas samples within and adjoining the delineated limits of waste.
- ❖ Perform at least two (2) complete rounds of groundwater sampling.
- ❖ Subdivide the landfill from the larger CVTC parcel, and record land use restrictions into the deed for this VRP Site.

The range of costs associated with this work would likely be from \$80,000 to \$100,000 for all tasks except removal of surface wastes and any required improvements to the existing landfill cap.

6.8. Findings #20 and #27: Bulk Pesticide and Oil Storage in Building 39

6.8.1. Background Summary

ECA Findings #20 and #27 were both within and proximate to Building 39, utilized by facility grounds maintenance. An interior room within Building 39 was used by grounds maintenance for several decades to store and handle bulk pesticide containers. Several 55-gallon drums of used motor oil were located within Building 39, and smaller fuel containers were in a block structure just outside this building. Significant oil stains were observed on the earthen floor surrounding these drums and within the block structure.

6.8.2. Investigation Summary

Due to the type of potential impacts (bulk pesticide storage and handling, equipment maintenance, and new and used oil storage) and associated constituents of concern, it was proposed that presence or absence of contaminants be determined by the advancement of six (6) shallow soil borings (0-5-ft below ground surface) inside the earthen floor of Building 39 and immediately outside (see **Figure 20-1**). The resultant soil cores from each boring were analyzed for TPH-GRO/DRO, pesticides, herbicides, and TAL metals.

Four (4) of these borings were advanced using a direct-push GeoProbe, while the remaining two (2) were collected using a hand auger because the low ceiling within Building 39 did not offer sufficient clearance for the drill rig. Because each boring only contained one (1) 5-ft soil sleeve, or was collected with a hand auger, boring log information was condensed into the following **Table 6.8-1**, which summarizes the physical characteristics of each boring. Note: all borings were classified as “39” based upon proximity to Building 39 (former grounds maintenance building).

Table Q Summary of Boring Descriptions at Finding #20

Boring ID	Depth (ft BGS)	Material Description
39-1	0-5	0-1.5-ft topsoil and gravel fill, then red silty CLAY
39-2	0-5	red-tan silty CLAY, very dry
39-3	0-5	red-tan silty CLAY, very dry
39-4	0-3	red-tan silty CLAY, very dry, refusal at 3-ft BGS
39-5	0-1.5	Hand auger boring, rocky and compacted at 1.5-ft BGS
39-6	0-1.5	Hand auger boring, rocky and compacted at 1.5-ft BGS

6.8.3. Results

The following **Table 6.8-2** presents a summary of the TAL Metals, petroleum, and detected pesticides.

Table R Summary of Soil Sample Detections at Findings #20 & #27

Analyte	CAS	Units	TAL Metals						EPA Residential Soil Screening Level*
			39-1	39-2	39-3	39-4	39-5	39-6	
			Lab ID	17I0299-01	17I0299-02	17I0299-03	17I0299-04	17I0299-05	
			Depth (feet BGS)	0-5	0-5	0-5	0-3	0-1.5	0-1.5
			Date Collected	9/11/2017	9/11/2017	9/11/2017	9/11/2017	9/11/2017	9/11/2017
Aluminum	7429-90-5	mg/kg	26300	27300	30700	27000	25100	31400	77,000
Antimony	7440-36-0	mg/kg	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	31
Arsenic	7440-38-2	mg/kg	5.65	7.76	6.00	6.39	5.36	5.27	0.68
Barium	7440-39-3	mg/kg	140	54.9	76.3	67.1	138	76.8	15,000
Beryllium	7440-41-7	mg/kg	< 0.938	< 1.88	< 0.937	< 1.92	< 0.375	< 0.780	160
Cadmium	7440-43-9	mg/kg	1.85	2.57	2.11	2.92	1.85	2.52	71
Calcium	7440-70-2	mg/kg	39500	1450	22400	19700	10300	21100	--
Chromium	7440-47-3	mg/kg	21.7	27.0	29.1	32.4	21.2	28.9	--
Chromium, Hexavalent	18540-29-9	mg/kg	0.32	0.27	0.39	0.36	< 0.20	0.67	0.3
Cobalt	7440-48-4	mg/kg	5.80	3.79	4.44	3.42	7.86	3.68	23
Copper	7440-50-8	mg/kg	8.81	10.2	13.9	10.0	15.4	10.8	3,100
Iron	7439-89-6	mg/kg	29500	41200	34200	48700	25900	35300	55,000
Lead	7439-92-1	mg/kg	23.5	12.5	40.1	231	74.2	1140	400
Magnesium	7439-95-4	mg/kg	13000	1480	2960	2770	4880	1980	--
Manganese	7439-96-5	mg/kg	376	69.6	128	66.1	257	71.7	1,800
Mercury	7439-97-6	mg/kg	0.052	0.086	0.152	0.510	0.072	0.334	11
Nickel	7440-02-0	mg/kg	9.24	6.48	8.28	6.55	10.3	7.89	--
Potassium	7440-09-7	mg/kg	2600	1950	2720	1860	5790	1520	--
Selenium	7782-49-2	mg/kg	3.63	< 2.50	12.9	3.75	< 2.50	< 9.76	390
Silver	7440-22-4	mg/kg	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	390
Sodium	7440-23-5	mg/kg	1250	123	269	74.3	839	2880	--
Thallium	7440-28-0	mg/kg	< 11.7	< 2.50	< 2.50	< 2.50	2.67	< 2.50	--
Vanadium	7440-62-2	mg/kg	36.7	48.4	45.6	58.4	31.6	47.8	390
Zinc	7440-66-6	mg/kg	55.3	65.4	63.6	89.6	114	211	23,000
Petroleum									
TPH-DRO		mg/kg	< 10.0	1360	330	< 10.0	952	34.9	96**
TPH-GRO		mg/kg	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	82***
Pesticides									
2,4,5-T	93-76-5	mg/kg	< 5.00	< 5.00	0.0116	< 0.005	10.8	0.0261	630
Chlordane	57-74-9	mg/kg	< 0.042	< 0.042	< 0.042	< 0.042	8.07	< 0.042	1.7
Heptachlor	76-44-8	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	0.311	< 0.002	0.13
4,4'-DDE	72-55-9	mg/kg	< 0.004	< 0.004	< 0.004	< 0.004	< 0.186	0.00831	2.0
4,4'-DDT	50-29-3	mg/kg	< 0.004	< 0.004	< 0.004	< 0.004	< 0.186	0.0332	1.9

Notes:

Bold = Detection

Highlight = Detection Above Residential SSL

*EPA Residential Screening Levels, June 2017

**Value for Aliphatic Medium (C9-C18), representative of liquid fuels and appropriate for TPH-DRO

*** Value for Aromatic Low (C6-C8), most conservative value for TPH-GRO

A review of **Table 6.8-2** indicates that:

- ❖ Arsenic was detected at total concentrations exceeding the EPA Tier II SSL for unrestricted use; however, none of the detected concentrations exceeded the 12.41 mg/kg threshold for naturally occurring arsenic in the Piedmont physiographic province (explained in detail at **Section 8.1**).
- ❖ Hexavalent chromium was detected at concentrations slightly above the EPA Tier II SSL of 0.3 mg/kg.

- ❖ Lead exceeded the EPA Tier II SSL in boring 39-6, which was collected inside the northeastern half of the building.
- ❖ Several of the borings contained TPH-DRO that exceeded the EPA Tier II SSL of 96 mg/kg. This confirms residual petroleum impact from equipment maintenance and fuel/oil storage within the building.
- ❖ Three (3) of the borings contained detections of pesticides, all of which have been banned from purchase since the late 1980s. Therefore, detections of these substances are likely from historic uses.
- ❖ Borings 39-5 and 39-6 contained two insecticide compounds (chlordan and heptachlor) at concentrations exceeding their respective EPA Tier II SSLs. These detections indicate residual impact from storage and handling of pesticides within the former grounds Building 39.

6.8.4. Recommendations

The shallow soil samples collected at Findings #20 and #27 contained detectable concentrations of hexavalent chromium, lead, TPH-DRO, and pesticides, many of which exceeded their respective Tier II SSLs. Based on this information, this area should be enrolled into the Virginia DEQ's VRP to obtain a Certification of Satisfactory Completion of Remediation. Additional information on the process and protections afforded by the VRP is included in **Section 8.2**.

The VRP process for this area would likely include the following general activities:

- ❖ Determine site eligibility and apply for enrollment into the VRP.
- ❖ Deconstruct/demolish Building 39 in a way to minimize disturbance of the earthen floor and soil proximate to the structure. An asbestos containing materials survey and demolition permit must be obtained prior to demolition.
- ❖ Perform in-situ waste characterization to determine proper disposal of soil to be excavated.
- ❖ Excavate all soil within and 5-ft beyond the footprint of Building 39 once it has been demolished. Soil should be excavated to a minimum depth of 2-ft BGS. This would result in excavation of approximately 230 cubic yards (350 tons) of soil.
- ❖ Collect samples after excavation of wastes to demonstrate removal of contaminants from the area. This data will also support the VRP required risk assessment.
- ❖ Survey locate the bounds of the VRP Site.
- ❖ Chlordan, heptachlor, and the other detected pesticides are hydrophobic, indicating that impact to groundwater at this area is not likely. However, groundwater characterization may be required under the VRP to determine presence or absence of impacts from common contaminants associated with equipment maintenance (i.e. petroleum compounds, VOCs, etc.).
- ❖ If risk assessment activities identify the potential for impacts to sensitive receptors, then subdivide this area from the larger CVTC parcel, and record land use restrictions into the deed for this VRP Site.

The range of costs associated with this work would likely be from \$80,000 to \$150,000 for all tasks, depending on the waste classification of excavated soil. This includes all tasks except groundwater monitoring well installation and sampling. If required, groundwater characterization would likely cost an additional \$12,000 to \$15,000 depending on depth to groundwater.

6.9. Finding #21: Former Transformer Storage

6.9.1. Background Summary

ECA Finding #21 was an area surrounded by chain link fence fully within the “New Scrap Yard.” According to interviews, it formerly stored polychlorinated biphenyl (PCB) containing transformers and electrical equipment generated during prior facility upgrades. All transformers and most electrical equipment have since been removed.

6.9.2. Investigation Summary

Incremental sampling (IS) was proposed as the most representative method to determine presence/absence of impacts to surface soil (0-6-inches BGS) within this area. To perform IS, the area was first divided into six equal quadrants, and 10 aliquots of equal mass were collected and composited to form one IS from each quadrant. The samples were then submitted for analysis of dioxins, PCBs, SVOCs, hexavalent chromium, and total TAL Metals by the following methods:

- ❖ SVOCs and dibenzofurans by EPA Method 8270D
- ❖ Dioxins (2,3,7,8-TCDD) by EPA Method 8270D (SIM) – a very sensitive qualitative analysis used to determine presence/absence
- ❖ TAL Metals by EPA Methods 6010C and 7471B (mercury)
- ❖ Hexavalent Chromium by EPA Method 7196A

6.9.3. Results

The following **Table 6.9-1** presents a summary of the TAL Metals and PCB analyses, and the SVOC detections within this area defined as Finding #21. No dioxins or dibenzofurans were detected in the surficial soil samples collected from this area.

Table S Summary of TAL Metals, PCBs, and Detections at Finding #21

Analyte	CAS	Units	TAL Metals							EPA Residential Soil Screening Level*
			Sample ID	Finding 21-1	Finding 21-2	Finding 21-3	Finding 21-4	Finding 21-5	Finding 21-6	
			Lab ID	17I0317-01	17I0317-02	17I0317-03	17I0317-04	17I0317-05	17I0317-06	
			Depth (feet BGS)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	
			Date Collected	9/8/2017	9/8/2017	9/8/2017	9/8/2017	9/8/2017	9/8/2017	
Aluminum	7429-90-5	mg/kg	20400	21100	20200	29400	24000	31700	77,000	
Antimony	7440-36-0	mg/kg	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	31
Arsenic	7440-38-2	mg/kg	3.90	6.82	6.70	4.07	4.15	4.68	0.68	
Barium	7440-39-3	mg/kg	67.1	63.5	63.6	82.7	69.1	72.2	15,000	
Beryllium	7440-41-7	mg/kg	< 1.86	< 1.87	< 1.93	< 1.86	< 1.83	< 1.88	< 1.88	160
Cadmium	7440-43-9	mg/kg	1.65	1.98	2.03	1.75	2.19	1.81	71	
Calcium	7440-70-2	mg/kg	857	1330	1100	893	1410	2410	--	
Chromium	7440-47-3	mg/kg	17.0	22.1	21.8	16.5	15.8	18.1	--	
Chromium, Hexavalent	18540-29-9	mg/kg	0.39	< 0.19	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.3
Cobalt	7440-48-4	mg/kg	7.55	7.53	7.42	10.2	8.07	7.91	23	
Copper	7440-50-8	mg/kg	9.72	11.9	11.9	9.07	9.51	9.92	3,100	
Iron	7439-89-6	mg/kg	24000	23500	25700	26400	26200	29600	55,000	
Lead	7439-92-1	mg/kg	19.6	17.7	17.7	14.2	11.1	12.0	400	
Magnesium	7439-95-4	mg/kg	4150	4670	4040	7300	5710	6030	--	
Manganese	7439-96-5	mg/kg	178	168	167	262	196	187	1,800	
Mercury	7439-97-6	mg/kg	0.025	0.015	0.025	0.014	0.015	0.029	11	
Nickel	7440-02-0	mg/kg	11.5	10.2	10.2	12.5	10.9	10.3	--	
Potassium	7440-09-7	mg/kg	4650	4820	4210	6090	5080	4870	--	
Selenium	7782-49-2	mg/kg	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	390
Silver	7440-22-4	mg/kg	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	390
Sodium	7440-23-5	mg/kg	31.8	31.5	26.7	32.5	35.2	30.2	--	
Thallium	7440-28-0	mg/kg	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	--
Vanadium	7440-62-2	mg/kg	26.9	29.0	28.8	26.4	28.9	37.9	390	
Zinc	7440-66-6	mg/kg	95.3	122	125	167	98.4	96.3	23,000	
Polychlorinated Biphenyls (PCBs)										
PCB as Aroclor 1016	12674-11-2	mg/kg	< 0.131	< 0.126	< 0.134	< 0.131	< 0.141	< 0.127	4.1	
PCB as Aroclor 1221	11104-28-2	mg/kg	< 0.131	< 0.126	< 0.134	< 0.131	< 0.141	< 0.127	0.2	
PCB as Aroclor 1232	11141-16-5	mg/kg	< 0.131	< 0.126	< 0.134	< 0.131	< 0.141	< 0.127	0.17	
PCB as Aroclor 1242	53469-21-9	mg/kg	< 0.131	< 0.126	< 0.134	< 0.131	< 0.141	< 0.127	0.23	
PCB as Aroclor 1248	12672-29-6	mg/kg	< 0.131	< 0.126	< 0.134	< 0.131	< 0.141	< 0.127	0.23	
PCB as Aroclor 1254	11097-69-1	mg/kg	< 0.131	< 0.126	< 0.134	< 0.131	< 0.141	< 0.127	0.24	
PCB as Aroclor 1260	11096-82-5	mg/kg	< 0.131	< 0.126	< 0.134	< 0.131	< 0.141	< 0.127	0.24	
Semi-Volatile organic Compounds (SVOCs)										
Di-n-butyl phthalate (DBP)	84-74-2	mg/kg	< 0.0833	< 0.0833	< 0.0833	< 0.0833	0.0945	< 0.0833	6,300	

Notes:

Bold = Detection

Highlight = Detection Above Residential SSL

*EPA Residential Screening Levels, June 2017

A review of **Table 6.9-1** indicates that:

- ❖ Based on site history, the primary constituents of concern at Finding #21 were PCBs. According to laboratory results, no PCBs were detected above the LOQs within Finding #21. Additionally, all LOQs were below the respective residential SSLs for each Aroclor.
- ❖ Arsenic was detected at total concentrations exceeding the EPA Tier II SSL for unrestricted use; however, none of the detected concentrations exceeded the 12.41 mg/kg threshold for naturally occurring arsenic in the Piedmont physiographic province (explained in detail at **Section 8.1**).
- ❖ Hexavalent chromium was detected in 21-1 at a concentration slightly above the EPA Tier II SSL of 0.3 mg/kg.

- ❖ One SVOC, di-n-butyl phthalate (DBP) was detected at a concentration several orders of magnitude less than the residential SSL of 6,300 mg/kg. DBP is a commonly used plasticizer that is used as an additive to adhesives or printing inks.

6.9.4. Recommendations

PCBs were not detected in the representative samples collect at Finding #21. The detected total arsenic concentrations are likely indicative of naturally occurring background concentrations. Hexavalent chromium was detected above the Tier II SSL of 0.3 mg/kg for unrestricted sites; however, it was only detected in one sample at a concentration 0.39 mg/kg. Based on these results, no additional characterization or remediation is warranted at this time.

6.10. Finding #28: Suspect Fuel Oil Storage at Building 53

6.10.1. Background Summary

ECA Finding #28 was the suspect location of a former fuel oil tank (AST or UST) at Building 53, which was identified as a Boiler House on the historic fire insurance maps. Site observations during the ECA indicated a significant alteration of steam and water pluming within this structure to its current configuration. There was no indication of coal fuel, thus if this building formerly contained a boiler system, it would have been fueled by a petroleum product (e.g. heating oil, natural gas, propane, etc.). One unidentified 1.5-inch diameter iron pipe existed the building and proceeded underground, indicating the potential that a UST may have been located outside the western wall at Building 53.

6.10.2. Investigation Summary

The investigation to determine presence or absence of petroleum impacts at Finding #28 included the advancement one (1) soil boring with a GeoProbe direct-push rig in a level, gravel surfaced area immediately west of Building 53. Consolidated material prevented further advancement of the direct push probe at 14-ft BGS, which is commonly referred to as “refusal.” Two (2) additional boring offset attempts also encountered boring refusal at depths shallower than 14-ft BGS. Soil encountered consisted of fill to 14-ft BGS, indicating prior disturbance to at least this depth. The location of the boring is depicted on **Figure 10-1** because of its proximity to Finding #10. The boring log is included in **Appendix D**.

Soil samples were collected form the first and last 5-ft sleeves of each boring, to be representative of soil near the ground surface and at maximum probe depth. Additional soil sample intervals were proposed for collection in the event of visual, olfactory, or other field observations indicative of anthropogenic impacts; however, no such impacts were observed during soil sample collection.

Because historic fuel oil was determined to be the likely contaminant, the soil samples were analyzed for TPH-DRO by EPA Methods 8015C.

6.10.3. Results

No indications of a UST and associated appurtenances were encountered during the boring installations. However, the material recovered in the direct push cores was representative of previously disturbed fill, indicating a prior UST may have been located in this area. Additionally, a low concentration of TPH-DRO was present in the sample collected at 53-1 from 13-14-ft BGS (see following **Table 6.10-1**).

Table T Summary of TPH-DRO Data at Finding #28

Boring ID	53-1	53-1	EPA Residential Soil Screening Level*		
Lab ID	17I0320-11	17I0320-12			
Depth (feet BGS)	0-5	13-14			
Date Collected	9/8/2017	9/8/2017			
Analyte	CAS	Units	Result	Result	(mg/kg)
TPH-DRO	none	mg/kg	< 10.0	68.0	96**

Notes:

Bold = Detection

*EPA Residential Screening Levels, June 2017

**Value for Aliphatic Medium (C9-C18), representative of liquid fuels and appropriate for TPH-DRO

The detected TPH-DRO concentration does not exceed the EPA Tier II SSL. However, the subject concentration exceeds the Virginia petroleum release reporting limit for impact to soil as detailed in the following section of this report.

6.10.4. Recommendations

The detected TPH-DRO concentration of 68 mg/kg does not exceed the EPA Tier II SSL. As previously noted, the Virginia DEQ requires that a petroleum release be reported from a regulated UST system when analytical results from samples, collected at any time *other* than storage tank closure, contain any concentration of petroleum or a regulated substance exceeding the laboratory detection limit (DEQ guidance, based on 9VAC25-580-190). Based on this information, a petroleum release should be reported to the Virginia DEQ Blue Ridge Regional Office (DEQ-BRRO). DEQ-BRRO's review of the release reporting documentation will likely result in a site closure response letter because low residual-phase petroleum concentrations typically do not pose adverse risk to potential biological and environmental receptors.

6.11. Finding #29: Diesel Fuel UST at Building 46

6.11.1. Background Summary

ECA Finding #29 was the 1,000-gallon diesel fuel UST associated with the emergency power generator at Building 46. As described in the ECA, this currently in use UST was installed to replace a prior nearby UST, which was closed in place because of its proximity and footprint overlap of subsurface oxygen transmission lines.

6.11.2. Investigation Summary

Two (2) borings were proposed for installation adjacent to the current UST basin. However, numerous subsurface electric and sanitary sewer lines prohibited their installation to assess subsurface conditions proximate to the UST. Therefore, the presence/absence of petroleum impacts at Finding #29 could not be assessed under this Phase II ESA.

6.11.3. Recommendations

A closure assessment is required to be performed on a regulated UST system once it is no longer in use and removed from the ground. This UST closure and assessment must be performed in accordance with 9VAC25-580-320 et seq.

6.12. Finding #30: Gasoline UST and Diesel AST at Building 36

6.12.1. Background Summary

ECA Finding #30 was the current vehicle fueling area (Building 36). Two other proximate findings (#1 *2,000-gallon diesel AST* and #34 *former 10,000-gallon gasoline UST*) were also assessed under Finding #30.

6.12.2. Investigation Summary

The investigation to determine presence or absence of groundwater and soil impacts at Finding #30 included the installation of five (5) soil borings with a GeoProbe direct-push rig and installation of two (2) monitoring wells into the permanent groundwater table using an air rotary rig in accordance with 3e SOPs 2.3 and 2.4, respectively (see **Appendix B**). The location of these borings and monitoring wells are depicted on **Figure 30-1**. A total of six (6) borings were proposed; however, the location of subsurface utilities and no evidence of apparent field impacts in the installed borings indicated that a sixth boring was not warranted.

Soil samples were collected form the first and last 5-ft sleeves of each boring, to be representative of soil near the ground surface and directly above the bedrock interface. Additional soil sample intervals were proposed for collection in the event visual, olfactory, or other field observations

indicated anthropogenic impacts; however, no such impacts were observed during soil sample collection.

Because petroleum compounds were determined to be the likely contaminants, the following analyses were performed on the representative media samples:

- ❖ Total Petroleum Hydrocarbons – Gasoline Range Organics (TPH-GRO) by EPA Method 8015C: all soil and groundwater samples.
- ❖ Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO) by EPA Method 8015C: all soil and groundwater samples.
- ❖ Volatile Organic Compounds (VOCs) by EPA Method 8260B: groundwater samples only.

6.12.3. Results

6.12.3.1. Soil

The soil samples collected at Finding #30 did not contain detectable TPH-GRO and TPH-DRO concentrations. The detailed laboratory report in **Appendix F** includes LOQ, quality control, and quantitative results for all samples and analytes.

6.12.3.2. Groundwater

The two monitoring wells installed to assess groundwater at Finding #30 were purged and sampled using low-flow bladder pumps on October 2, 2017. The following **Table 6.12-1** summarizes groundwater parameters collected during the purge process method.

Table U Groundwater Purge Details at Finding #30

Well ID	Time*	Purge Volume (gallons)	Temperature (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (%)	Oxidation-Reduction Potential (mV)
30-1	1516	0.5	20.3	6.50	0.496	362	129.8	133
	1522	1.0	20.15	6.43	0.460	77.9	106.5	131
	1529	1.5	19.97	6.50	0.481	66.8	99.3	130
	1540	Sample	--	--	--	--	--	--
30-2	1400	0.5	20.75	6.97	0.47	788	81.2	147
	1409	1.0	19.50	6.68	0.457	192	60.4	144
	1416	1.5	18.12	6.66	0.46	182	125.5	141
	1426	2.0	18.62	6.62	0.451	88.2	127.0	138
	1430	Sample	--	--	--	--	--	--

Notes:

* **Bold** indicates time of sample collection

A review of **Table 6.12-1** indicates that:

- ❖ An adequate purge was performed at each well, per **3e SOP 2.7** and low-flow sampling guidance.

- ❖ Turbidity in monitoring wells 30-1 and 30-2 decreased significantly during the purge.

The representative groundwater sample collected from monitoring well 30-1 contained low concentrations of dissolved-phase TPH-GRO and methyl-tert-butyl ether (MTBE), as presented in the following **Table 6.12-2**. The detailed laboratory report in **Appendix F** includes LOQ, quality control, and quantitative results for all samples and analytes.

Table V Summary of Groundwater Detections at Finding #30

Well ID		30-1	30-2	EPA MCL*
Lab ID		17J0020-02	17J0020-01	
Date Collected		10/2/2017	10/2/2017	
Analyte	CAS	Units	Result	(mg/l)
Methyl-t-butyl ether (MTBE)	1634-04-4	mg/l	0.0264	< 0.001
TPH-GRO		mg/l	0.10	< 0.10

Notes:

Bold = Detection

*EPA Maximum Contaminant Level, June 2017

A review of **Table 6.12-2** indicates that:

- ❖ Dissolved-phase TPH-GRO and MTBE concentrations were detected in 30-1, which was installed south of the current gasoline UST basin.
- ❖ TPH-GRO was detected at the LOQ and MTBE was detected an order of magnitude greater than its LOQ of 0.001 mg/l.
- ❖ The EPA does not maintain MCLs for TPH-GRO and MTBE.

6.12.4. Recommendations

The Virginia DEQ requires that a petroleum release be reported from a regulated UST system when analytical results from samples, collected at any time *other* than storage tank closure, contain any concentration of petroleum or a regulated substance exceeding the laboratory detection limit (DEQ guidance, based on 9VAC25-580-190). It is recommended that monitoring well, 30-1 be resampled to confirm the presence of the detected petroleum-indicator compounds. A trip and field blank should accompany this sample set to rule out the possibilities of laboratory and/or field interferences. If the confirmatory sample set contains a detectable petroleum concentration(s), then a confirmed petroleum release should be reported to the DEQ-BRRO.

6.13. Finding #31: Diesel Fuel UST at Building 65

6.13.1. Background Summary

ECA Finding #31 was the 1,000-gallon diesel fuel UST associated with the emergency power generator at Building 65.

6.13.2. Investigation Summary

Two (2) borings were installed adjacent to the current UST basin with a GeoProbe direct-push rig on September 7, 2017. The locations of these boring are depicted on **Figure 31-1**, and the boring logs are included in **Appendix D**.

Soil samples were collected from the first, middle, and last 5-ft sleeves of each boring, to be representative of soil near the ground surface, below the bottom of the UST, and at maximum probe/boring depth. Additional soil sample intervals were proposed for collection in the event of visual, olfactory, or other field observations indicative of anthropogenic impacts; however, no such impacts were observed during soil sample collection. Note: all borings were classified as “65” based upon proximity to Building 65 (i.e. Food Services).

Because diesel fuel was determined to be the likely contaminant, the soil samples were analyzed for TPH-DRO by EPA Method 8015C.

6.13.3. Results

The soil samples collected near the 1,000-gallon diesel UST for the backup generator at Building 65 did not contain detectable residual-phase TPH-DRO concentrations, as presented in the following **Table 6.13-1**.

Table W Summary of TPH-DRO Results for Finding #28

Boring ID			65-1	65-1	65-1	EPA Residential Soil Screening Level*
Lab ID			17I0300-06	17I0300-07	17I0300-08	
Depth (feet BGS)			0-5	10-15	22-23	
Date Collected			9/7/2017	9/7/2017	9/7/2017	
Analyte	CAS	Units	Result	Result	Result	(mg/kg)
TPH-DRO	none	mg/kg	< 10.0	< 10.0	< 10.0	96**
Boring ID			65-2	65-2	65-2	
Lab ID			17I0300-09	17I0300-10	17I0300-11	
Depth (feet BGS)			0-5	10-15	20-22	
Date Collected			9/7/2017	9/7/2017	9/7/2017	
Analyte	CAS	Units	Result	Result	Result	
TPH-DRO	none	mg/kg	< 10.0	< 10.0	< 10.0	

Notes:

Bold = Detection

*EPA Residential Screening Levels, June 2017

**Value for Aliphatic Medium (C9-C18), representative of liquid fuels and appropriate for TPH-DRO

6.13.4. Recommendations

A closure assessment is required to be performed on the UST system once it is no longer in use and removed from the ground. This UST closure and assessment must be performed in accordance

with 9VAC25-580-320 et seq. The sample data from this Phase II ESA can be used to support the closure assessment; however, at least one sample should be collected to characterize soil beneath the bottom footprint of the removed UST. Another representative soil sample should also be collected below the footprint of the former generator housing to demonstrate that no release is present at the time of system closure. Both representative soil samples should be analyzed for TPH-DRO by the appropriate EPA Method.

6.14. Finding #32: Diesel Fuel UST at Building 47

6.14.1. Background Summary

ECA Finding #32 was the 1,000-gallon diesel fuel UST associated with the emergency power generator at Building 47.

6.14.2. Investigation Summary

Two (2) borings were installed adjacent to the current UST basin with a GeoProbe direct-push rig on September 8, 2017. The locations of these boring are depicted on **Figure 10-1**, and the boring logs are included in **Appendix D**.

Soil samples were collected form the first and last 5-ft sleeves of each boring, to be representative of soil near the ground surface and at maximum probe/boring depths. Additional soil sample intervals were proposed for collection in the event of visual, olfactory, or other field observations indicative of anthropogenic impacts; however, no such impacts were observed during soil sample collection. Note: all borings were classified as “47” based upon proximity to Building 47, and field work for this finding was incorporated into the previously described Finding #10.

Because diesel fuel was determined to be the likely contaminant, the soil samples were analyzed for TPH-DRO by EPA Method 8015C.

6.14.3. Results

The soil samples collected near the 1,000-gallon diesel UST for the backup generator at Building 47 did not contain detectable residual-phase TPH-DRO concentrations, as presented in the following **Table 6.14-1**.

Table X Summary of TPH-DRO Results for Finding #32

Boring ID		47-4	47-4	47-5	47-5	EPA Residential Soil Screening Level*
Lab ID		17I0320-07	17I0320-08	17I0320-09	17I0320-10	
Depth (feet BGS)		0-5	22-23	0-5	20-23	
Date Collected		9/8/2017	9/8/2017	9/8/2017	9/8/2017	
Analyte	CAS	Units	Result	Result	Result	(mg/kg)
TPH-DRO	none	mg/kg	< 10.0	< 10.0	< 10.0	96**

Notes:

Bold = Detection

*EPA Residential Screening Levels, June 2017

**Value for Aliphatic Medium (C9-C18), representative of liquid fuels and appropriate for TPH-DRO

6.14.4. Recommendations

A closure assessment is required to be performed on the UST system once it is no longer in use and removed from the ground. This UST closure and assessment must be performed in accordance with 9VAC25-580-320 et seq. The sample data from this Phase II ESA can be used to support the closure assessment; however, at least one sample should be collected to characterize soil beneath the bottom footprint of the removed UST. Another representative soil sample should also be collected below the footprint of the former generator housing to demonstrate that no release is present at the time of system closure. Both representative soil samples should be analyzed for TPH-DRO by the appropriate EPA Method.

6.15. Finding #33: Diesel Fuel UST at Building 31

6.15.1. Background Summary

ECA Finding #33 was the 1,000-gallon diesel fuel UST associated with the emergency power generator at Building 31.

6.15.2. Investigation Summary

Two (2) borings were installed adjacent to the current UST basin with a GeoProbe direct-push rig on September 7, 2017. The locations of these boring are depicted on **Figure 33-1**, and the boring logs are included in **Appendix D**.

Soil samples were collected form the first and last 5-ft sleeves of each boring, to be representative of soil near the ground surface and at maximum probe/boring depths. Additional soil sample intervals were proposed for collection in the event visual, olfactory, or other field observations indicative of anthropogenic impacts; however, no such impacts were observed during soil sample collection. Note: all borings were classified as “31” based upon proximity to Building 31.

Because diesel fuel was determined to be the likely contaminant, the soil samples were analyzed for TPH-DRO by EPA Method 8015C.

6.15.3. Results

The soil samples collected near the 1,000-gallon diesel UST for the backup generator at Building 31 did not contain detectable residual-phase TPH-DRO concentrations, as presented in the following **Table 6.15-1**.

Table Y Summary of TPH-DRO Results for Finding #33

Boring ID		31-1	31-1	31-2	31-2	EPA Residential Soil Screening Level*
Lab ID		17I0300-01RE1	17I0300-02	17I0300-03	17I0300-04	
Depth (feet BGS)		0-5	10-12	0-5	10-13	
Date Collected		9/7/2017	9/7/2017	9/7/2017	9/7/2017	
Analyte	CAS	Units	Result	Result	Result	(mg/kg)
TPH-DRO	none	mg/kg	< 10.0	< 10.0	< 10.0	< 10.0

Notes:

Bold = Detection

*EPA Residential Screening Levels, June 2017

**Value for Aliphatic Medium (C9-C18), representative of liquid fuels and appropriate for TPH-DRO

6.15.4. Recommendations

A closure assessment is required to be performed on the UST system once it is no longer in use and removed from the ground. This assessment must be performed in accordance with This UST closure and assessment must be performed in accordance with 9VAC25-580-320 et seq. The sample data from this Phase II ESA can be used to support the closure assessment; however, at least one sample should be collected to characterize soil beneath the bottom footprint of the removed UST. Another representative soil sample should also be collected below the footprint of the former generator housing to demonstrate that no release is present at the time of system closure. Both representative soil samples should be analyzed for TPH-DRO by the appropriate EPA Method.

6.16. Finding #35: Former Gasoline UST at Building 49

6.16.1. Background Summary

ECA Finding #35 was the location of a former 1,000-gallon gasoline UST at Building 49. This UST was reportedly removed from the ground in March 1995, and representative samples at the time of closure did not indicate any evidence of a release.

6.16.2. Investigation Summary

The investigation to determine presence or absence of petroleum impacts at Finding #35 included the advancement one (1) soil boring with a GeoProbe direct-push rig in a level, grass-surfaced area immediately east of Building 49. This boring was advanced to refusal at 8-ft BGS, and five (5) additional attempts encountered boring refusal at depths shallower than 8-ft BGS. The soil

observed in the retrieved direct push cores/sleeves indicated non-native fill material to 8-ft BGS, indicating prior disturbance to at least this depth. The location of the boring is depicted on **Figure 35-1**. The boring log is included in **Appendix D**.

As previously noted, the retrieved soil cores from this boring contained material indicative of disturbance/filling activities at this location on-site. Therefore, only the material encountered at and above the refusal depth (5-8-ft BGS) was sampled and submitted for laboratory analysis of TPH-GRO by EPA Method 8015C.

6.16.3. Results

The soil sample collected near the former 1,000-gallon gasoline UST at Building 49 did not contain detectable residual-phase TPH-GRO concentrations, as presented in the following **Table 6.16-1**.

Table Z Summary of TPH-GRO Analysis at Finding #35

Boring ID	49-1	EPA Residential Soil Screening Level*		
Lab ID	17I0300-05			
Depth (feet BGS)	5-8			
Date Collected	9/7/2017			
Analyte	CAS	Units	Result	(mg/kg)
TPH-GRO	none	mg/kg	< 0.10	82**

Notes:

Bold = Detection

*EPA Residential Screening Levels, June 2017

** Value for Aromatic Low (C6-C8), most conservative value for TPH-GRO

6.16.4. Recommendations

The soil sample results indicate no evidence of relic contamination from the former gasoline UST reported to be at this location. No additional characterization is recommended.

6.17. Finding #36: Unknown Drum and Spilled Material at Building 45-5A

6.17.1. Background Summary

ECA Finding #36 was an off-white, powdery chemical that was apparently spilled on the ground outside and on the wooden floor of storage Building 45-5A. Dead and stressed vegetation was also observed on the ground surface proximate to where the unknown chemical was spilled. A 30-gallon drum within the shed appeared to be the source of the spill. The original drum label indicated the storage of a vinyl-based asphalt patch; however, the observed chemical spill consisted of an off-white powder.

6.17.2. Investigation Summary

The drum was proposed for sampling to determine toxicity content; however, it was reportedly removed by CVTC staff prior to the implementation of the Phase II assessment activities on-site. Under the direction of CVTC personnel, this drum was reportedly transported and disposed by Environmental Options, Inc. of Rocky Mount, Virginia. A copy of the disposal documentation for this drum is included in **Appendix G**.

3e personnel hand excavated the spilled material and affected soil on September 8, 2017. All material and soil was placed into a 55-gallon drum and sampled for waste characterization purposes by the Toxicity Characteristic Leaching Procedure (TCLP). A copy of the resultant laboratory report (Lab Sample ID 17I0320-13) is included in **Appendix F**.

6.17.3. Results

The TCLP analytical results indicated that the soil/material contained a leachable lead concentration that exceeded the EPA Toxicity Limit of 5.0-mg/L (i.e. 5.40 mg/L in the TCLP leachate). No other constituent was detected above the respective LOQs in the representative TCLP sample. The drum of excavated material was subsequently disposed as a characteristic, lead-impacted hazardous waste (i.e. D008). A copy of the disposal documentation is included in **Appendix G**.

6.17.4. Recommendations

The excavated material was within the dripline of the building, which exhibited severely chipped paint. Because lead was the only TCLP constituent detected above the LOQ, the source of lead in this material is likely associated with lead-based paint on the exterior of Building 45-5A. This indicates that the ground surface below the building dripline and exterior paint on this building may contain leachable lead concentrations that are characteristic of a hazardous waste.

6.18. Finding #38: Drum of Compressor Oil at Building 30

6.18.1. Background Summary

ECA Finding #38 was a 55-gallon drum of air compressor oil located in the surface/ground level of Building 30. Compressor oils blended prior to 1978 are known to contain PCBs. The drum was labeled Roland 32-weight Anti-Wear (32AW), which was manufactured and/or distributed by the Drydene Oil Company. The Drydene Oil Company was purchased by Castrol in 1991, thus this drum is at least 26-years old. Some indication of minor spills was observed in association with this drum, as evidenced by oil-dry on the concrete floor.

6.18.2. Investigation Summary

3e proposed to be sampled for PCB content as part of the Phase II ESA; however, it reportedly was removed under the direction of CVTC personnel prior to the implementation of the Phase II assessment activities. Accordingly, the spent oil dry on the floor proximate to the footprint of this former drum was sampled for PCB content instead.

6.18.3. Results

The representative sample of the spent oil dry did not contain detectable PCB Aroclor concentrations. This information indicates that the former drum contents did not likely contain PCB-based oils. A copy of the laboratory report for this sample (Lab ID 17J0515-04) is included in **Appendix F**.

6.18.4. Recommendations

No additional characterization is warranted in conjunction with this former drum.

7.0 ADDITIONAL CONSIDERATIONS

7.1. Land Disturbance and Demolition of Existing Structures

Prior to any land disturbance, including building demolition, the total amount of disturbance must be calculated to determine applicability of an Erosion & Sediment Control Plan and Stormwater Pollution Prevention Plan.

- ❖ CVTC is located in an area of Amherst County not governed by the Chesapeake Bay Preservation Act. Therefore, an Erosion & Sediment Control Plan (ESC) will be required if total disturbance exceeds 10,000-ft².
- ❖ If total disturbance exceeds one (1) acre, then a Stormwater Pollution Prevention Plan (SWPPP) will be required in addition to the ESC Plan.
- ❖ **If either of these plans are required, they must incorporate control of contaminants of concern in addition to traditional sediment and nutrient control.**

Additionally, the following must occur prior to demolition of existing structures on state owned property:

- ❖ Obtain DGS permit for demolition of building on state property (DGS-30-176).
- ❖ The Virginia Department of Labor and Industry (DOLI) requires the acquisition of an Asbestos Removal and Demolition Permit before the demolition of a building or facility, even when no asbestos containing material (ACM) is present.

7.2. Asbestos Containing Materials

As referenced in **Section 7.1**, the Virginia DOLI demolition permit form combines the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR, Subpart M and the Virginia Department of Labor and Industry Regulation Concerning Licensed Asbestos Contractor Notification, Asbestos Project Permits, and Permits Fees (16VAC25-20). Both regulations require submittal of written notification before beginning renovation project, which include the disturbance of any asbestos-containing material (ACM) in a building or facility or before the demolition of a building or facility, even when no asbestos is present.

Therefore, an ACM survey will be required prior to demolition of any structure. Prior to performing an ACM survey, any and all information documenting the methods, results, conclusions, and recommendations of previously conducted ACM surveys should be made available and reviewed.

7.3. Lead Based Paint

Virginia DOLI Regulation Concerning Certified Lead Contractors Notification, Lead Project Permits and Permit Fees (16 VAC25-35) requires that written notification be submitted before beginning lead-based paint activities in target housing (built before 1978) and child-occupied facilities (e.g. day-care centers, preschools and kindergarten classrooms). Any existing structure to be renovated and used for housing or child-occupied space must meet these requirements.

Additionally, any lead-based paint assessment at CVTC should incorporate sampling of soil within the dripline of buildings. The dripline of some existing buildings has the potential to contain soil that is characteristic of a hazardous waste with respect to lead. This potential is based on TCLP leachable lead concentrations results associated with the spill cleanup at Building #45-5A (Finding #36, see **Section 6.17**).

7.4. Monitoring Well Abandonment

Any monitoring wells not incorporated into future characterization or monitoring activities should be abandoned in accordance with current Virginia Department of Health Private Well regulations governing observation, monitoring, and remediation wells (12VAC5-630-450).

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1. Naturally Occurring Arsenic in Soil

Total arsenic was ubiquitous in all soil analyzed across the CVTC campus at concentrations exceeding the risk-based EPA Region 3 Residential Soil Screening Level of 0.68 mg/kg. The

arsenic concentration detected above this risk-based endpoint for unrestricted site use is likely to be naturally-occurring as detailed below.

To document the natural occurrence of arsenic, 3e utilized the 2012 Draft Metals Background Document prepared by the DEQ, which compiled true background sample data from the VRP program to establish both mean concentrations and the upper prediction limit (UPC) at the 95-percent confidence interval (UCL) for the RCRA 8 metals within the Piedmont physiographic province of Virginia. A comparison of the data presented in the DEQ background metals study to the total arsenic concentrations detected at CVTC, indicates the following:

- ❖ The arsenic calculations were based on a set of 102 background samples
- ❖ The calculated mean background concentration of arsenic was 4.008 mg/kg within the Piedmont physiographic province
- ❖ The calculated UCL of background arsenic was concentrations 12.41 mg/kg within the Piedmont physiographic province.
- ❖ Therefore, any arsenic concentration at or below this 12.41 mg/kg UCL should be considered background (i.e. naturally occurring).

8.2. Virginia VRP

8.2.1. Purpose of VRP

The purpose of the VRP is to encourage hazardous substance cleanups that might not otherwise take place. The VRP program is a streamlined mechanism for site owners or operators to voluntarily address contamination at sites with concurrence from the Virginia DEQ.

When the remediation is satisfactorily completed, DEQ issues a "certification of satisfactory completion of remediation." This VRP certification provides assurance that the remediated site will not become the subject of a future DEQ enforcement action unless new issues are discovered. It is anticipated that the VRP will facilitate the sale and reuse of industrial and commercial properties in the Commonwealth, which is an important benefit to all Virginia residents.

As the potential environmental liabilities of reusing or further developing existing commercial properties diminishes, economic benefits are expected for both the buyer and seller. An added benefit is the decrease of expansion of commercial sites onto pristine lands. By overseeing the process, DEQ is able to ensure that the cleanup achieves a satisfactory level of human health and environmental protection.

8.2.2. Incorporation of CVTC Findings

The following findings in this Phase II ESA are recommended for an eligibility determination and subsequent application for enrollment into the Virginia VRP:

- ❖ Finding #13: Closed Sanitary Landfill (**Section 6.4**)

- ❖ Finding #14: New Scrap Yard (**Section 6.5**)
- ❖ Finding #15: Coal Ash and Debris Dump (**Section 6.6**)
- ❖ Finding #16: Old Scrap Yard (**Section 6.7**)
- ❖ Findings #20 and #27: Bulk Pesticide and Oil Storage in Building 39 (**Section 6.8**)

Due to the VRP application process requirements and associated fees, it is suggested that all findings be recommended for enrollment into the VRP as one “Site,” even if the Findings are physically separated across the CVTC property. Each finding can be surveyed and assessed independently, and land use restrictions, if required for one or more of the Findings, can be addressed under one VRP determination. This approach and corresponding conclusions will be dependent on site-specific conditions, assessment/characterization data and associated risk assessments performed for each Finding as part of the VRP completion processes.

8.2.3. Available Funding Vehicles

Further assessment at CVTC is likely eligible for funding assistance, as it should meet the definition of a “brownfield site” under the 2002 Small Business Liability Relief and Brownfields Revitalization Act:

With certain legal exclusions and additions, the term "brownfield site" means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands.

Several funding mechanisms (including loans and grants) have been established by the Commonwealth of Virginia to assist with financing the assessment and remediation of impacted properties, as stated in the Code of Virginia §10.1-1231 (Brownfield restoration and land renewal policy and programs):

It shall be the policy of the Commonwealth to encourage remediation and restoration of brownfields by removing barriers and providing incentives and assistance whenever possible. The Department of Environmental Quality and the Economic Development Partnership and other appropriate agencies shall establish policies and programs to implement these policies, including a Voluntary Remediation Program, the Brownfields Restoration and Redevelopment Fund, and other measures as may be appropriate.

In addition to state-level funding opportunities, the federal EPA maintains a Brownfield grant program that provides direct funding for Brownfields assessment, cleanup, revolving loans, and environmental job training. To facilitate the leveraging of public resources, EPA's Brownfields Program collaborates with other EPA programs, other federal partners, and state agencies to identify and make available resources that can be used for Brownfields activities.

8.3. Additional Findings

This Phase II ESA assessed those Findings classified as high and moderate risk to third party (offsite) receptors, human health and the environment. The remaining Findings presented in the July 2017 ECA will require assessment and/or management as part of facility closure; however, many of these Findings are associated with processes currently in use at CVTC (e.g. the 90,000-gallon heating oil AST at the boiler plant, USTs currently in use, etc.). There will be future environmental management costs associated with these findings, which should be assessed if/when the associated structures are demolished and/or removed from the site.

9.0 LIMITATIONS

It is impossible to know with certainty the entirety of a site is free of hazardous substances or conditions even with extensive subsurface testing. The conclusions of this investigation are based solely on the scope-of-work and on the sources of information reviewed during this investigation. This report was prepared for the exclusive use of DGS, and their expressly-designated affiliates. **3e** accepts no responsibility for damages or claims resulting from past or future environmental degradation related to the subject property.

10.0 REFERENCES

The following is a list of references used for the Phase II ESA:

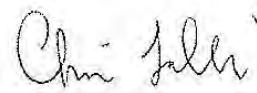
- ❖ Google Earth
- ❖ ASTM E1903-11: Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process
- ❖ Site Specific Environmental Conditions Assessment: Central Virginia Training Center, EEE Consulting, Inc., July 2017
- ❖ Virginia Department of Environmental Quality (Adam Koling), August 23, 2012: Draft Background Metals Project. Included as Attachment 1 in Fact Sheet – Reissuance of a General VPDES Permit for Industrial Activity Stormwater Discharges.

11.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312, and we have the specific qualifications based on education, training, and experience to assess the nature, history, and setting of the subject property. We have developed and performed all appropriate inquiries in general conformance with the standards and practices set forth in 40 CFR Part 312.



Jeffrey A. Fisher, QEP
Senior Project Manager
Preparer



Chris Lalli
Vice President
Reviewer

12.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

The following individuals from EEE Consulting, Inc. were involved in the preparation of this Phase I ESA:

Jeffrey A. Fisher, QEP

B.A., 1996, Natural Science, Messiah College
Qualified Environmental Professional, 2012
Erosion & Sediment Control Combined Administrator, Cert# 6210

Areas of Expertise

- Environmental Site Characterization
- Environmental Site Assessment, Phase I, II, and III
- Soil/groundwater contamination assessment/remediation
- Environmental Data Analysis

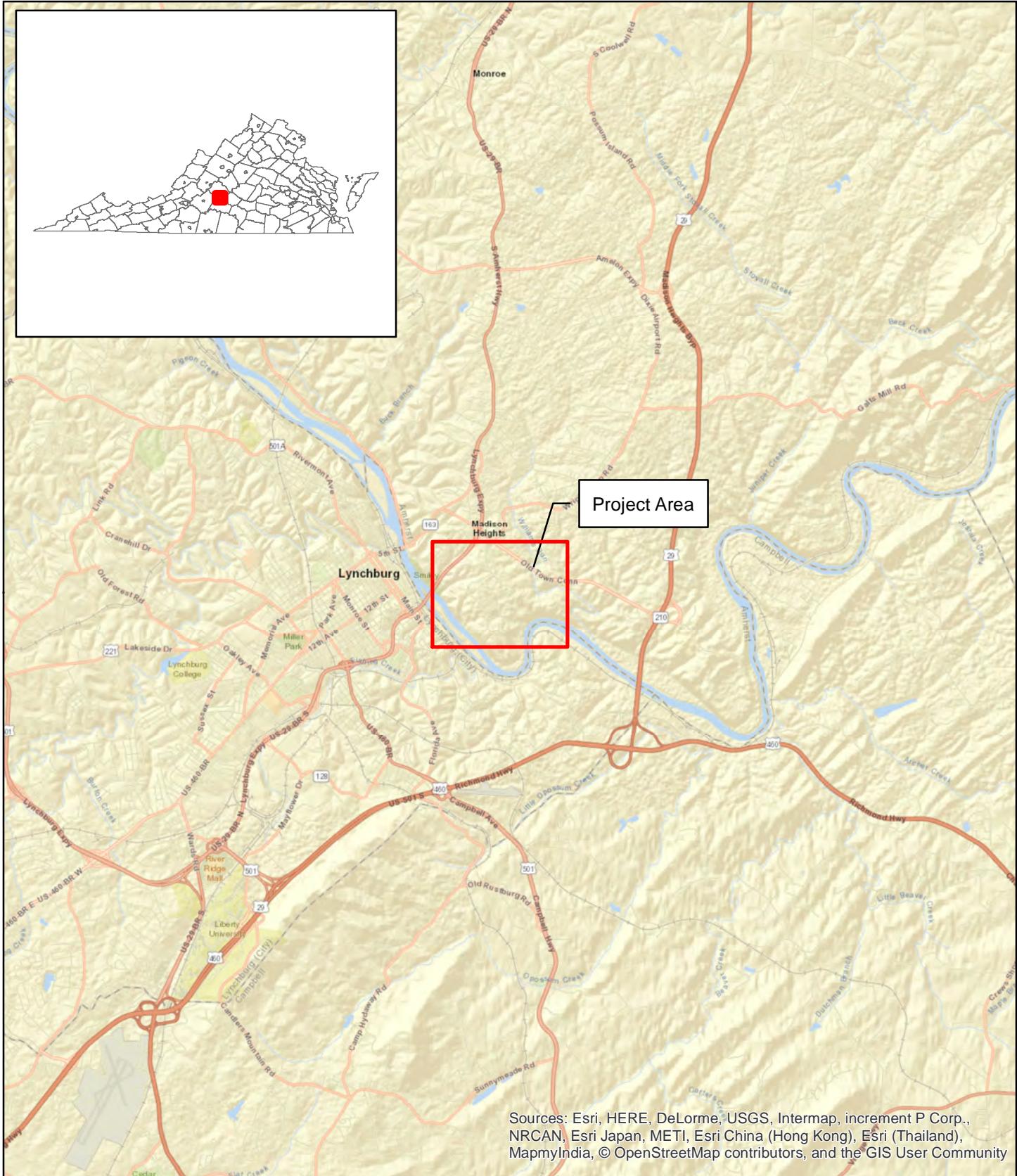
Christopher John Lalli

B.S., 1997, Environmental Science, Virginia Polytechnic Institute and State University

Areas of Expertise

- Soil/groundwater contamination assessment / remediation
- Litigation Support and Expert Witness Testimony
- Contaminant Transport and Fate Evaluations
- Project Management
- Federal Facilities
- Site Characterization and Corrective Action Reports
- Risk Assessment
- Stormwater and Groundwater Monitoring
- Title 40 CFR, Part 112 (SPCC Regulations)

Figures



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

FIGURE 1
PROJECT LOCATION MAP
CVTC Phase II ESA

0 2 4
Miles

Madison Heights, Virginia
Sources: ESRI World Street Map
Prepared by J.Kimmel, October 2017



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Projection: NAD 1983 StatePlane Virginia North FIPS 4501 Feet

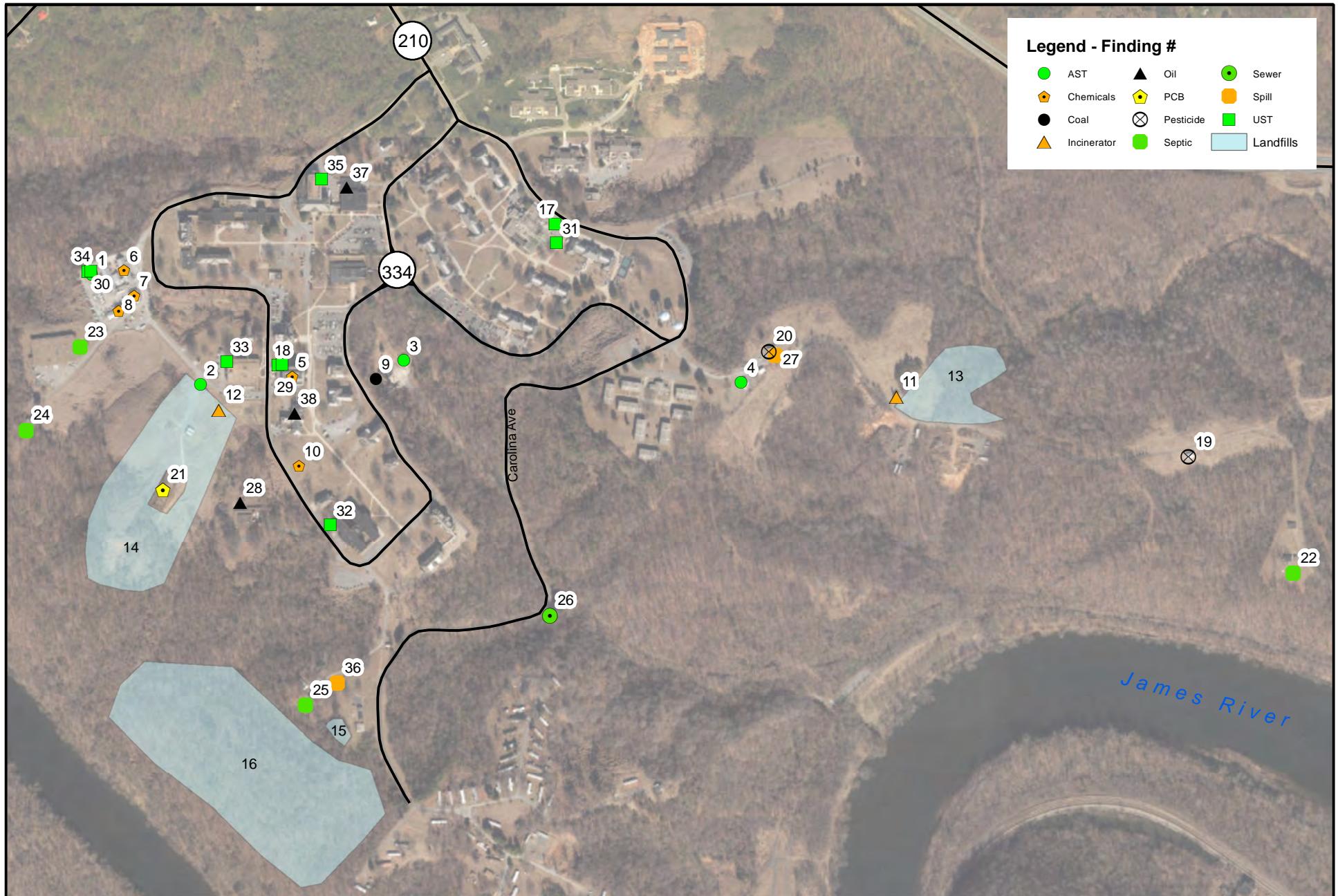


Figure 2. Findings: Locations, Number, and Type
Central Virginia Training Center
Madison Heights, Virginia

Table 1 - Summary of Findings

Finding #	Identity	Building #	Lat	Lon	Description	Source	REC Per ASTM E1527-13?	Recommendations & Notes
1	AST	36	37.41242	-79.1259	current 2,000-gallon diesel AST	Site visit	No	No evidence of staining around tank
2	AST	west of 31	37.4109	-79.124	1,000-gallon diesel AST in good condition, former tank from grounds crew building 37	Site visit, interview	No	No evidence of staining around tank
3	AST	77	37.41127	-79.1205	90,000-gallon #2 AST, formerly 100,000-gallon #6 AST with remote fill	Site visit, interview, FOIA	No	No evidence of staining around tank
4	AST	37	37.41094	-79.124	1,000-gallon diesel AST used to be located at grounds crew facility	Interview	De minimis	AST no longer present, moved and appears to be in good condition. No evidence of leaks or stains
5	Chemicals	46	37.41117	-79.1225	X-ray chemicals and other medically related interior storage	Site visit	No	Stored and used appropriately, no significant materials in lab
6	Chemicals	51	37.41245	-79.1256	Physical plant chemicals, all small containers	Site visit	No	All stored appropriately and no evidence of spills
7	Chemicals	56	37.41214	-79.1251	Screen building used to create vinyl signs and repair window screens, Small amounts of adhesives and paints	Site visit	No	
8	Chemicals	82	37.41194	-79.1254	Paint shop, some generation of hazardous wastes	Site visit	No	All stored appropriately and no evidence of spills. No floor drains present
9	COAL	77	37.41103	-79.121	Coal burning, ash, and accidental discharges to tributary via storm water inlets. Cleaned and ceased coal operations in 1999	FOIA	HREC	All coal ash and remaining coal were removed and excavated under DEQ supervision between 1996 and 1998. This includes around the boiler plant, and the rail siding unloading area to the southeast.
10	Historic Chemicals	47	37.40989	-79.1224	Location of former buildings & grounds, a building prior to 47	Historic Fire insurance maps, aerials, interviews	Yes	Use of paints, solvents, etc. prior to regulatory requirements for storage and disposal
11	Incinerator	13	37.41081	-79.1122	Former coal powered incinerator, used for sanitary and likely also medical waste	Site visit, interview, historic sources	Yes	Shallow soil samples for dioxins, dibenzofurans, PAHs and metals
12	Incinerator	west of 31	37.41057	-79.1237	Former medical waste incinerator, no longer operational	Site visit, interview, FOIA	Yes	Within the limits of the new scrapyard compound (see Finding 14)
13	Landfill	13	37.41097	-79.1109	~4-acre former sanitary landfill, operated since beginning of facility until approximately 1960s	Site visit, interview, historic sources	Yes	Delineate groundwater, secure cover, etc. and put through the VRP
14	Landfill	west of 31	37.40871	-79.1255	Landfill area, dubbed "New Scrap Yard"	Site visit, interview, historic sources	Yes	Delineate groundwater, secure cover, etc. and put through the VRP
15	Landfill	west of 83	37.40629	-79.122	Small landfilled area with construction debris and coal ash	Site visit, interview, historic sources	Yes	Delineate groundwater, secure cover, etc. and put through the VRP
16	Landfill	southwest of 83	37.4052	-79.1225	Large landfill area (6+ acres) dubbed "Old Scrap Yard." Asbestos tiles observed becoming exposed in forest floor, several mounds of discarded drums, etc.	Site visit, interview, historic sources	Yes	Delineate groundwater, secure cover, etc. and put through the VRP
17	LUST, UST	65	37.41312	-79.118	PC 1992-1677. 1,000-gallon gasoline UST removed, along with 26-tons of soil. 3/18/1992. no groundwater encountered above rock at 40.5-ft. All TPH less than 50 mg/kg in final soil samples	Interview, FOIA	HREC	Notation of prior work.
18	LUST, UST	46	37.41124	-79.1226	1,000-gallon diesel UST for backup generator, closed in place due to oxygen lines crossing tank. One sample was 112 mg/kg TPH-DRO, release reported and recorded as PC 2000-2032, but no requirements for follow-up. Appears duplicative of PC 1999-1203	Site visit, interview, FOIA	HREC	Note location of old UST (filled in place), remove UST if possible and perform proper closure assessment
19	Pesticide	41	37.41003	-79.1071	Spilled container of sulfur compound in crawl space, per Reve Carwile	Interview	Yes	segregate first foot of soil beneath building during demolition
20	Pesticide	39	37.41144	-79.1143	Pesticide storage, all bulk containers previously removed	Site visit, interview	Yes	segregate first foot of soil beneath building during demolition
21	PCBs	west of 31	37.40955	-79.1246	fence-enclosed area, formerly housed PCB containing transformers	Site visit, interview	Yes	Prior storage of PCB transformers pending final disposal considered an REC due to material threat of release of PCBs to surrounding ground surface
22	Septic	34-A	37.40862	-79.1053	Septic system for part time residence	Site visit, interview	No	
23	Septic	66	37.41151	-79.1269	Septic system for stock warehouse	Site visit, interview	No	No floor drains, system only for sanitary wastes
24	Septic	48	37.41034	-79.1269	Septic system for part time residence	Site visit, interview	No	
25	Septic	45	37.40664	-79.122	Septic system for part time residence	Site visit, interview	No	
26	Sewer	42-43	37.40786	-79.118	Former sewage treatment plant and outlet	Site visit	No	Long since out of operation, and receiving stream appeared free of any visual impacts
27	Spills	39	37.41136	-79.1143	Surficial oil spills inside garage dirt floor, and inside block containment structure	Site visit	Yes	excavate visually impacted soil, shallow soil borings
28	Suspected Heating Oil	53	37.40933	-79.1233	Originally identified as a boiler house adjoining laundry services building.	Site visit, historic sources	Yes	One soil boring to determine presence/absence of heating oil
29	UST	46	37.41124	-79.1227	1,000-gallon diesel UST for backup generator	Site visit, interview	Yes	Remove UST, perform closure assessment
30	UST	36	37.41253	-79.1258	current 8,000-gallon gasoline UST	Site visit	Yes	Remove UST, perform closure assessment
31	UST	65	37.4129	-79.1179	1,000-gallon diesel UST for backup generator, same place as former	Site visit, interview	Yes	Remove UST, perform closure assessment
32	UST	47	37.40901	-79.1219	1,000-gallon diesel UST for backup generator, same place as former	Site visit, interview	Yes	Remove UST, perform closure assessment
33	UST	31	37.41114	-79.1236	1,000-gallon diesel UST for backup generator, same place as former	Site visit, interview	Yes	Remove UST, perform closure assessment
34	UST	36	37.41253	-79.1258	former 10,000-gallon gasoline UST removed March 13, 1995. Same pit as new UST	Site visit, interview, FOIA	Yes	
35	UST	49	37.41378	-79.122	former 1,000-gallon UST, removed March 27, 1995. 4-ft NE corner of Bldg. 49	Site visit, interview, FOIA	Yes	place one boring in location of former pit
36	Unknown Spill	45-5	37.40689	-79.1224	drum labelled Sta-Fil, but spills of unknown contents (not a vinyl asphalt patch as labelled), dead vegetation	Site visit	Yes	Characterize and excavate soil
37	Oil and Automotive	50	37.41364	-79.1216	Oil, petroleum and chemical storage for automotive maintenance	Site visit	No	All stored in good condition, free of spills or staining
38	Oil drum	30	37.4104	-79.1225	One old Drydene oil drum (company out of business since 1991) and air compressors, suggesting compressor maintenance. 32 aw hydraulic oil	Site visit	Undetermined	Some evidence of minor spill, recommend characterization of contents to determine presence or absence of PCB's



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Legend

- Soil Boring Locations
- Monitoring Well Locations

53 Building Number

697.24 Groundwater Elevations (ft BGS) on 9/27/17

684.63 Groundwater Elevations (ft BGS) on 10/2/17

Projection: NAD 1983 StatePlane Virginia South FIPS 4502 Feet

FIGURE 10-1 CVTC PHASE II ESA Monitoring Well and Soil Boring Locations
Building 47; Former Physical Plant and Laundry

0 75 150

Feet

Madison Heights, Virginia

Source: ESRI USA Aerial

Prepared by JK, Oct 2017

EEE Project No. 17-802



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FIGURE 11-1 CVTC PHASE II ESA

Soil Boring Locations

Building #13, Former Coal-Powered Incinerator

0 10 20

Feet

Madison Heights, Virginia

Source: ESRI USA Aerial

Prepared by JK, Oct 2017

EEE Project No. 17-802

Legend

⊕ Soil Boring Locations



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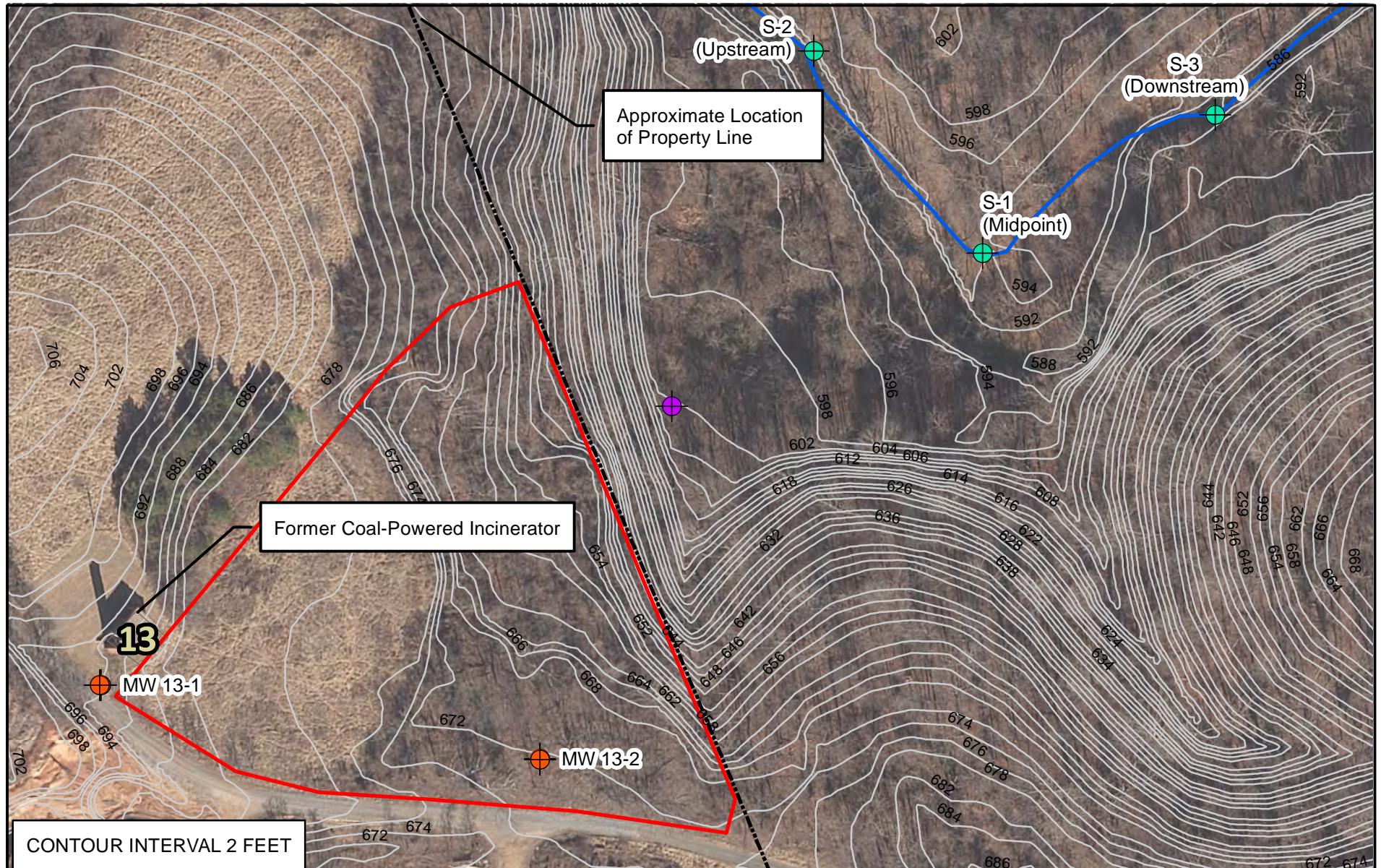
FIGURE 12-1 CVTC PHASE II ESA

Soil Boring Locations

Former Medical Waste Incinerator

0 20 40
Feet

Madison Heights, Virginia
Source: ESRI USA Aerial
Prepared by JK, Oct 2017
EEE Project No. 17-802



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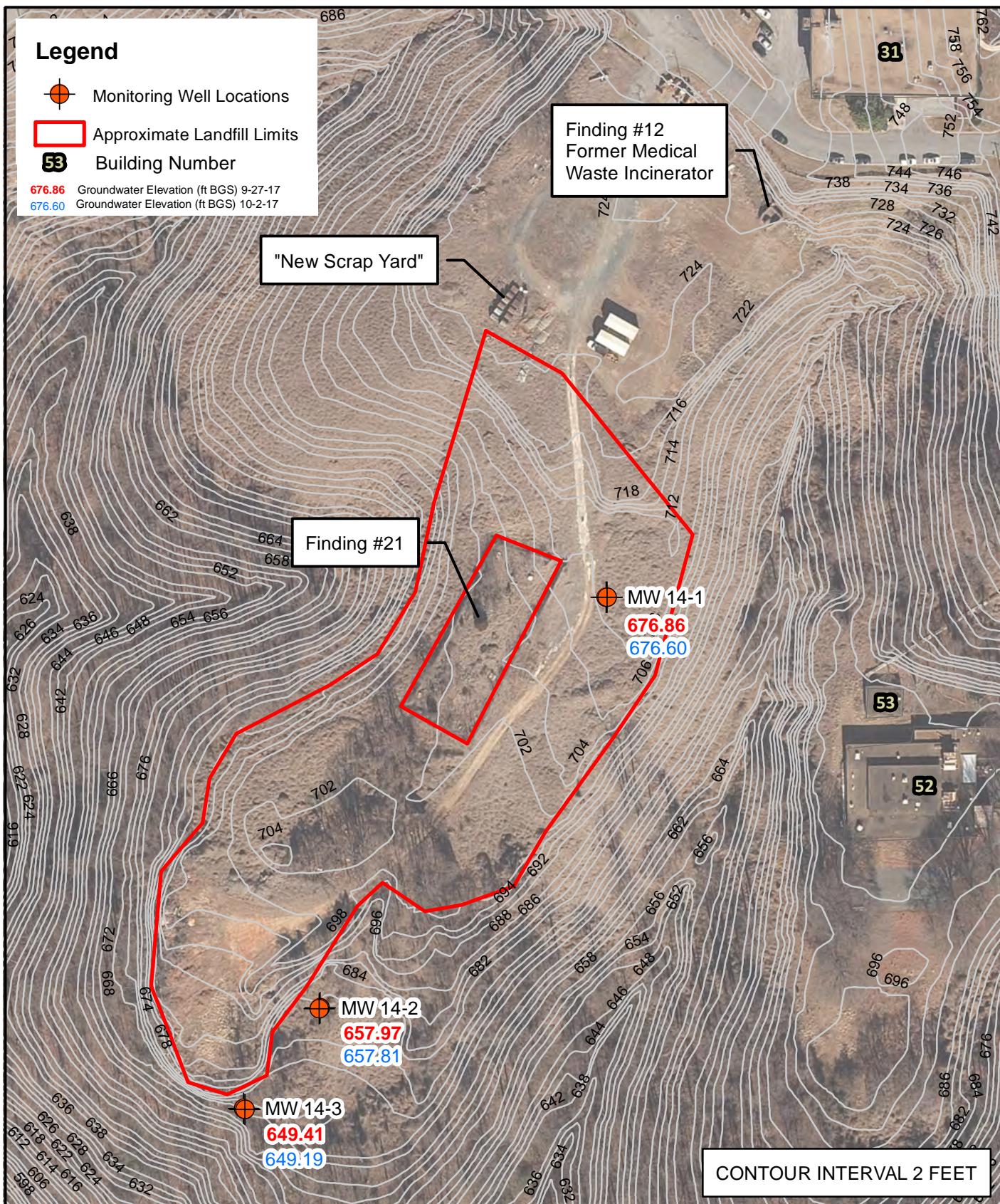
N

Legend

- Proposed Monitoring Well
- Monitoring Well Locations
- Surface Water Sample Locations

Projection: NAD 1983 StatePlane Virginia South FIPS 4502 Feet

FIGURE 13-1 CVTC PHASE II ESA Monitoring Well and Stream Sample Locations



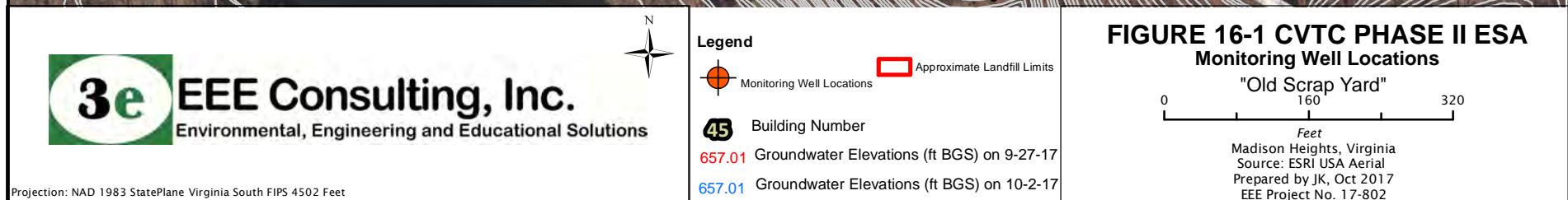
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FIGURE 14-1 CVTC PHASE II ESA
Monitoring Well Locations

"New Scrap Yard"

0 110 220
Feet

Madison Heights, Virginia
Source: ESRI USA Aerial
Prepared by JK, Oct 2017
EEE Project No. 17-802





**FIGURE 20-1 CVTC PHASE II ESA
Soil Boring Locations**

Bulk Pesticide and Oil Storage in Building 39

0 20 40

Feet

Madison Heights, Virginia

Source: ESRI USA Aerial

Prepared by JK, Oct 2017

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Legend

IS Collection Areas

678

682

684

686

688

692

694

696

698

702

704

21-1

21-6

21-2

21-5

21-3

21-4

CONTOUR INTERVAL 2 FEET



FIGURE 21-1 CVTC PHASE II ESA

IS Grid Locations
Former Transformer Storage

0 25 50

Feet
Madison Heights, Virginia
Source: ESRI USA Aerial
Prepared by JK, Oct 2017
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Building #36, Fueling Station.
0 20 40

Feet
Madison Heights, Virginia
Source: ESRI USA Aerial
Prepared by JK, Oct 2017
EEE Project No. 17-802



FIGURE 31-1 CVTC PHASE II ESA
Soil Boring Locations
Building #65

0 20 40
 Feet

Madison Heights, Virginia
 Source: ESRI USA Aerial
 Prepared by JK, Oct 2017
 EEE Project No. 17-802

3e EEE Consulting, Inc.
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N

Projection: NAD 1983 StatePlane Virginia South FIPS 4502 Feet



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FIGURE 33-1 CVTC PHASE II ESA

Soil Boring Locations

Former Gasoline UST at Building 49

0 25 50

Feet

Madison Heights, Virginia
Source: ESRI USA Aerial
Prepared by JK, Oct 2017
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Legend

- Soil Boring Locations
- Building Number



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FIGURE 35-1 CVTC PHASE II ESA

Soil Boring Locations

Building #49
0 50 100
Feet

Madison Heights, Virginia
Source: ESRI USA Aerial
Prepared by JK, Oct 2017
EEE Project No. 17-802

Appendix A: Proposed Workplan



PROPOSED WORK PLAN: CVTC PHASE II ESA

Task 1 – Preliminary Site Scoping and Final Reporting

Task 1 will consist of the following activities:

- ❖ EEE Consulting, Inc. (3e) will kick off this project with a site visit by the Program Manager, Drilling Manager, and Project Manager. This visit will review locations for the placement of monitoring wells, pathways for drill rig access, and coordination with facility staff. Following this visit and staff meeting, a proposed schedule of field work will be submitted for the benefit of key facility management and security staff.
- ❖ The location of underground utilities, both public and private, will be identified and marked to prevent disturbance or disruption of services to the facility. This will be accomplished through notification of public utilities (Miss Utility of Virginia), coordination with Physical Plant staff, and the use of a licensed private utility location contractor.
- ❖ Upon completion of all field work, 3e will draft a Phase II ESA report that will present the investigative methods, data results, interpretation of data, and recommendations.

Task 2 – Characterization of Findings Assessment

3e proposes to characterize the high and moderate priority findings as follows:

- ❖ ECA Finding #10 is the former Physical Plant building and suspected fueling area prior to 1975, located within the area of current Building 47 and surrounding land. Two other proximate findings (#28 *Suspected Heating Oil Tank at Building 53* and #32 *1,000-gallon Diesel UST for Backup Generator*) will be characterized. 3e proposes to advance seven (7) soil borings and install three (3) 2-inch diameter groundwater monitoring wells to characterize these findings. Up to 14 soil samples and three (3) groundwater samples will be collected and analyzed to determine what (if any) impacts are present from these findings.
- ❖ ECA Finding #11 is the former coal powered incinerator, used for sanitary and likely also medical waste (Building 13). 3e proposes to advance 10 shallow soil borings (0-5-ft below ground surface) and analyze soil samples for dioxins, dibenzofurans, PAHs, PCBs and TAL metals.
- ❖ ECA Finding #13 is the approximately 4-acre former sanitary landfill, operated since beginning of facility until approximately 1960s. 3e proposes to install three (3) 2-inch diameter groundwater monitoring wells and sample the nearby stream at three (3) points representing upstream, cross-gradient, and downstream locations relative to this landfill. Three (3) groundwater samples and three (3) surface water samples will be collected and

analyzed for constituents listed on Appendix II to 40 CFR Part 258—List of Hazardous Inorganic and Organic Constituents (Criteria for Municipal Solid Waste Landfills).

- ❖ ECA Finding #14 is the Landfill Area dubbed the "New Scrap Yard." **3e** proposes to install three (3) 2-inch diameter groundwater monitoring wells. Three (3) groundwater samples will be collected and analyzed for constituents listed on Appendix II to 40 CFR Part 258—List of Hazardous Inorganic and Organic Constituents (Criteria for Municipal Solid Waste Landfills).
- ❖ ECA Finding #15 is a small landfilled area with construction debris and coal ash, located west of the greenhouse (Building 83). Landfill Area dubbed the "New Scrap Yard." **3e** proposes to install one (1) 2-inch diameter groundwater monitoring well and collect a groundwater sample to be analyzed for constituents listed on Appendix II to 40 CFR Part 258—List of Hazardous Inorganic and Organic Constituents (Criteria for Municipal Solid Waste Landfills).
- ❖ ECA Finding #16 is the 6+ acre Landfill Area dubbed the "Old Scrap Yard." **3e** proposes to install six (6) 2-inch diameter groundwater monitoring wells. Six (6) groundwater samples will be collected and analyzed for constituents listed on Appendix II to 40 CFR Part 258—List of Hazardous Inorganic and Organic Constituents (Criteria for Municipal Solid Waste Landfills).
- ❖ ECA Finding #21 is the fence-enclosed area within the "New Scrap Yard" that formerly stored PCB-containing electrical transformers, switches, and related equipment. **3e** proposes to collect six (6) incremental samples (IS) of surface soil (0-6-inches BGS) within this area. The area will first be divided into six equal quadrants, and 10 aliquots of equal mass will be collected, sieved, and composited to form one IS from each quadrant. The samples will be submitted for analysis of dioxins, PCBs, SVOCs, hexavalent chromium, and total TAL Metals.
- ❖ ECA Finding #36 is a 30-gallon drum of unknown contents in a small shed (Building 45-5), some of which have been spilled onto nearby grassy lawn with visible impacts and dead vegetation. **3e** proposes to: 1) overpack the 30-gallon drum and its contents spilled within the shed, and 2) hand excavate spilled contents from the lawn and surrounding soil into a second 55-gallon drum. One sample from each drum will be collected and analyzed for full TCLP to determine if the contents are hazardous. Both drums will then be transported and disposed according to content analysis (hazardous or non-hazardous waste).
- ❖ ECA Finding #38 is a drum of compressor oil within a maintenance area of Building 30. **3e** proposes to sample both the drum contents and the surrounding spent oil-dry for PCB content.
- ❖ ECA Finding #12 is the former medical waste incinerator located within the "New Scrap Yard" immediately west of Building 31. **3e** proposes to advance six (6) shallow soil borings (0-5-ft below ground surface) and analyze soil samples for dioxins, dibenzofurans, PAHs, PCBs and TAL metals.

- ❖ ECA Finding #30 is the current vehicle fueling area (Building 36. Two other proximate findings (#1 2,000-gallon diesel AST and #34 former 10,000-gallon gasoline UST) will be characterized. **3e** proposes to advance six (6) soil borings and install two (2) 2-inch diameter groundwater monitoring wells to characterize these findings. Up to 12 soil samples and two (2) groundwater samples will be collected and analyzed to determine what (if any) impacts are present from these findings.
- ❖ ECA Finding #35 is the location of a former 1,000-gallon gasoline UST at Building 49. **3e** proposes to advance one (1) soil boring in the center of the former UST basin to the bedrock interface or boring refusal, and collect samples for analysis of TPH-GRO. If groundwater is present in the boring, a temporary well will be installed from which a groundwater sample will be collected and analyzed for TPH-GRO and VOCs.
- ❖ ECA Findings #20 and 27 consist of apparent shallow soil impacts to the soil within and surrounding the grounds crew Building 39. **3e** proposes to advance six (6) shallow soil borings (0-5-ft below ground surface) and analyze soil samples for TPH-GRO/DRO, pesticides, herbicides, and TAL metals.
- ❖ ECA Findings #29, #31, and #33 are the locations of 1,000-gallon diesel USTs for emergency generators at Buildings 46, 65, and 31, respectively. **3e** proposes to advance two (2) soil borings near the ends of each UST basin to the bedrock interface or boring refusal, and collect up to six (6) samples for analysis of TPH-DRO. If groundwater is present at any of the locations, one of the two borings will be converted to a temporary well, from which a groundwater sample will be collected and analyzed for TPH-DRO.

Appendix B: Standard Operating Procedures

1.0 CONTAMINATION PREVENTION

1.1. Decontamination and Cross-Contamination Prevention

The following procedures shall be implemented to ensure sample collection and other related equipment is properly decontaminated to prevent possible cross-contamination of samples. It is imperative that equipment be properly decontaminated and measures be implemented to prevent cross-contamination of field/sample collection equipment and actual samples that are collected.

1. All work should proceed from areas of suspected or known low contamination to areas of suspected or known high contamination.
2. All heavy equipment (e.g., drill rigs, Geoprobe™ units, backhoes, etc.) shall be decontaminated prior to coming on-site for work and all down-hole drilling equipment (e.g., auger flights, drilling rods, split spoons, etc.) shall be decontaminated between each drilling/sampling location.
 - a. A decontamination station/pad shall be established for cleaning down-hole equipment. Decontamination wastes shall be contained and collected for disposal.
 - b. Large equipment (e.g., augers, drilling rods) shall be decontaminated using a steam cleaner or equivalent, while use of a detergent solution may be appropriate for smaller pieces of equipment (e.g., split spoons).
3. All equipment utilized in water level measurement, sample collection, or that otherwise contacts material to be sampled will be decontaminated between each location and prior to returning to its case and being stowed with other equipment.
 - a. Personnel involved with equipment decontamination shall wear clean gloves during the decontamination process.
 - b. Cleaning shall be performed using a detergent solution (e.g., Alconox) with a distilled water rinse. If equipment has contacted free product, the decontamination process shall include an isopropyl alcohol rinse. All wash/rinse activities shall be performed in buckets or other suitable containers. Used water should be contained in 55-gallon drums for disposal (SOP 1.2) or disposed on-site in accordance with Virginia Department of Environmental Quality Guidelines if deemed appropriate.*
 - c. Reusable sampling equipment that has been cleaned for later use (e.g., steel trowels, hand auger buckets, etc.) shall be wrapped in clean aluminum foil, sealed in plastic bags, or similarly isolated from potential contamination until used.
4. Field Personnel shall use clean gloves when handling any sampling equipment and shall avoid contacting sampling equipment with other potentially contaminated surfaces/materials. New gloves shall be used whenever a new sample is collected or when a break in sampling occurs (e.g. between well purging and sampling).

5. Investigation derived waste (IDW) and other trash and debris shall be staged away from sampling equipment and other materials to avoid potential cross-contamination.
6. Trip blanks should be sent in any cooler where significant volatile organic compound (VOC) contamination is suspected.

* Purged, petroleum contaminated groundwater and other rinsewater from routine sampling/monitoring activities may be discharged back to the area of contamination with certain restrictions (Storage Tank Program Technical Manual).

1.2. Disposal of Investigation Derived Waste

The following activities shall be completed upon completion of fieldwork:

1. All field equipment, instruments, buckets, etc. shall be thoroughly cleaned/ decontaminated per Standard Operating Procedure 1.1 prior to leaving the site.
2. All Investigation Derived Waste (IDW) including purge water, excess soil cuttings, etc. that may be contaminated must be properly contained, labeled and disposed. IDW is and will remain the property of the facility Owner although the Client may pay to dispose of this material as part of its access agreement with a third-party property owner.*
 - a. Use on-site disposal (roll-off container, etc.) for IDW if approved by property owner and appropriate for the type of waste generated, if approved by property owner and Client.
 - b. Provide drums to stage IDW for disposal. Drum staging must be coordinated with the property owner and Client.
3. Any ancillary IDW materials (such as used bailers, gloves, used sample containers, etc.) that may be disposed as solid sanitary waste (e.g. trash) should be properly disposed as such into a proper waste container.
4. Unused equipment may be shipped back to the supplier, as appropriate, or stored for future use.
5. The Client and its consultant shall define responsibility for IDW disposal as part of site specific scopes of work.
6. All IDW will be handled by and disposed in accordance with applicable federal state and local regulations at an appropriately permitted treatment or disposal facility.

* Purged, petroleum contaminated groundwater and other rinsewater from routine sampling/monitoring activities may be discharged back to the area of contamination with certain restrictions (Storage Tank Program Technical Manual).

2.0 SAMPLING PROTOCOL

2.1. Surface and Shallow Soil Sample Collection

Surface and shallow soil samples can be collected to evaluate surface conditions and to characterize shallow soil profiles.

Surface soil samples are typically collected using stainless steel trowels, spoons, or scoops using the following procedure:

1. A decontaminated trowel, spoon, or scoop is used to remove grass, gravel, or other surface cover in the area to be sampled.
2. The underlying soil material is then collected and placed into a decontaminated bowl or directly into the sample container using a second decontaminated trowel, spoon, or scoop.
 - a. For volatile analysis, soil is collected using specially designed equipment (e.g., EPA Method 5035) to minimize the loss of volatile constituents.
 - b. For non-volatile analysis, soil may be placed into a bowl, then mixed and sieved to assure that a homogenous sample free of rocks and debris is delivered to the laboratory for analysis. Once the soil is properly mixed and sieved (if appropriate), it is then placed into the appropriate sample container(s).
3. The steel trowels, spoons, or scoops are decontaminated between each sampling location.

Hand augers can be used to collect shallow soil samples in an effort to characterize shallow soil strata, determine presence of organic vapors, and obtain soil samples for subsequent laboratory analysis. The hand auger method is typically used as a screening method and can provide preliminary indication of stratigraphy and the presence of contaminants in shallow soils. Where more rigorous sampling methods or deeper samples are required, other methods (such as hollow-stem auger borings) are employed.

A hand-auger borehole is advanced by pushing and turning the auger assembly (handle, extension rods and bucket) and retrieving collected soil from the auger bucket. Samples collected from hand auger borings are considered "disturbed" samples.

The following procedure is typically used in collecting soil samples using a hand auger:

1. A decontaminated hand auger assembly (handle, extensions and auger head or bucket) is manually advanced to the desired sampling depth by turning clockwise and pushing downward on the assembly handle.
2. After the auger head is filled with soil, the assembly is pulled from the subsurface, and the contents are removed by either turning the assembly upside-down or by inserting a hand

- tool such as a decontaminated stainless steel spoon, trowel, etc. This process continues until the boring is terminated or the collection of a sample for laboratory analysis is desired.
3. Samples for laboratory analysis are collected using a decontaminated auger head. The soil sample is collected directly from the auger head or by the use of decontaminated hand tools depending on soil consistency.
 - a. For volatile analysis, soil is collected from the auger head utilizing EPA Method 5035 to minimize the loss of volatile constituents.
 - b. For non-volatile analysis, soil may be placed into a bowl, then mixed and sieved (if appropriate) to assure that a homogenous sample free of rocks and debris is delivered to the laboratory for analysis. Once the soil is mixed it is then placed into the appropriate sample container(s).
 4. Abandonment of the boring entails backfilling with auger cuttings (if allowed), or chipped bentonite or grout if the boring is terminated below the water table.
 5. The steel auger head, as well as the extension rods and handle, are decontaminated prior to the start of each hand-auger boring.

2.2. Hollow Stem Auger Drilling and Soil Profiling/Sampling

Hollow-stem auger borings can be used to characterize soil profiles, determine the presence of organic vapors, and to obtain soil samples for subsequent laboratory analysis. Hollow-stem auger borings can also be the first step in the process of installing a groundwater-monitoring well. (Refer to appropriate standard procedures for well installation.)

1. Decontaminate all down-hole drilling/sampling equipment prior to the start of work and between drilling/sampling locations (i.e. between each boring for augers and between each sample location for splits spoons and other sampling equipment).
2. Advance augers to desired depth using continuous flight, hollow-stem augers attached to a truck, trailer, or ATV-mounted drilling rig.
3. Soil samples are collected at regular intervals, as required by the Sampling and Analysis Plan, by advancing the augers to a depth just above the desired sampling zone. (Typically, a five-foot sample interval is used.) A decontaminated split-spoon sampler is attached to the drill rod and lowered through the center of the augers and driven into the soil with a 140-pound hammer according to ASTM D-1586. The split-spoon is retrieved and opened to reveal the semi-undisturbed soil sample. The following information is recorded on the *Boring Log* maintained for each boring (see attached example of an appropriate boring log form in Appendix B):
 - a. Standard Penetration Test (SPT) results (i.e. the number of hammer blows per each six-inch increment of the 18-inch to 24-inch split-spoon penetration or fraction thereof).
 - b. The soil type classified according to the Unified Soil Classification System (USCS) Visual-Manual Procedure (ASTM D-2488) or other recognized method (e.g., USDA soil triangle).
 - c. Other pertinent comments, including color, odor, and moisture content.
4. Collect samples from each split spoon for organic vapor [total volatile organic compounds (VOCs)] using the following procedure:
 - a. Place an aliquot of the soil sample in a clean, airtight container (either sealed Zip-Lock® bag, sealed glass jar, or plastic container) as quickly as possible after sample collection.
 - b. Label the container with boring number and sample depth.
 - c. Allow the samples to sit for approximately 15 minutes to allow the VOC concentration to equilibrate between the soil and air in the container headspace.
 - d. A flame ionization detector (FID) or photo-ionization detector (PID) instrument probe is then inserted into the container to measure the headspace VOC concentration (read directly from the read-out display in parts-per-million (ppm) of total VOCs). The container is opened enough to insert the probe but no further to prevent loss of VOC constituents to the atmosphere.
 - e. VOC concentration is recorded on the boring log/field notes.

5. Collect samples for laboratory analysis, as needed based upon the project requirements, using the following procedure:
 - a. Potential laboratory samples are placed into the appropriate sample container(s) required for the specific analyses to be performed immediately after the samples are retrieved.
 - b. Select samples to be submitted to the laboratory based upon organic vapor screening, visual observations, project Sampling and Analysis Plan, etc.
 - c. Handle samples in accordance with standard sample handling, shipping, and chain-of-custody practices as presented in the project Quality Assurance Project Plan and Sampling and Analysis Plan.
6. Upon boring termination at the desired depth or auger refusal (bedrock), the boring is ready for monitor well installation or will be advanced deeper by using other drilling techniques. If the boring is to be abandoned, it must be abandoned in accordance with 12VAC 5-630-450(C)(8). This typically includes sealing the borehole with bentonite grout if terminated below the water table. Otherwise, the boring is backfilled with auger cuttings, natural material, or bentonite.
7. Upon completion of work, any excess soil that cannot be used as backfill in the core holes must be properly managed. Management of this material shall be as directed by the consultants Technical Lead/Project Manager and Client in accordance with Standard Operating Procedure 1.2.

2.3. Direct Push Borings and Soil Profiling/Sampling

Direct push (e.g., Geoprobe™) equipment may be utilized as an alternative to hollow-stem auger borings to characterize soil profiles, determine the presence of organic vapors, and obtain soil samples for subsequent laboratory analysis. Direct push equipment can also be used to collect groundwater samples and/or to install small diameter piezometers/monitoring wells.

1. Decontaminate all down-hole coring/sampling equipment prior to start of work and between locations (i.e., between each boring for push rods and between each use for samplers).
2. Advance direct push soil coring equipment using truck or ATV-mounted direct push equipment. Coring equipment is advanced using a hydraulic hammer and the weight of the direct push rig.
3. Depending on equipment used, either collect continuous soil cores or advance sampler to specific interval to collect soil core(s) based on the Sampling and Analysis Plan. A precleaned, disposable acetate sleeve is placed into the core sampler, which is advanced continuously or advanced and opened at the desired interval depending on the equipment used. The sample is retrieved and the acetate sleeve containing the soil core is removed. The sleeve is opened to reveal the semi-undisturbed soil sample. The following information is recorded on the *Test Boring Log* maintained for each boring (see attached example of an appropriate boring log form in Appendix B):
 - a. The soil type classified according to the Unified Soil Classification System (USCS) Visual-Manual Procedure (ASTM D-2488) or other recognized method (e.g., USDA soil triangle).
 - b. Other pertinent comments including color, odor, moisture content, type and size of rock fragments (if present), and presence of fill materials.
4. Collect sample from each soil core for organic vapor [total volatile organic compounds (VOCs)] screening using the following procedure:
 - a. Place an aliquot of the soil sample in a clean, airtight container (either sealed Zip-Lock® bag, sealed glass jar, or plastic container) as quickly as possible after sample collection.
 - b. Label container with boring number and sample depth.
 - c. Allow samples to sit for approximately 15 minutes to allow for VOC concentration to equilibrate between the soil and the air in the container headspace.
 - d. A flame ionization detector (FID) or photo-ionization detector (PID) instrument probe is then inserted into the container to measure the headspace VOC concentration. (Read the concentration directly from the read-out display in parts-per-million (ppm) of total VOCs.) The container is opened only enough to insert the probe to prevent loss of VOCs to the atmosphere.
 - e. VOC concentration is recorded on the boring log/field notes.

5. Collect samples for laboratory analysis, as needed based upon the project requirements, using the following procedure:
 - a. Potential laboratory samples are placed into the appropriate sample container(s) required for the specific analyses to be performed immediately after the sample is retrieved.
 - b. Select samples to be submitted to the laboratory based upon organic vapor screening, visual observations, etc.
 - c. Handle samples in accordance with standard sample handling, shipping, and chain-of-custody practices (Standard Operating Procedure 2.9).
6. The core hole is abandoned upon coring termination at the desired depth or at direct push refusal. The core hole is filled with bentonite pellets if terminated below the water table. Otherwise, the core hole is filled with recovered core material, natural on-site material, or bentonite pellets.
7. Groundwater samples may be collected from the corehole using a specialized, sealed, discrete interval groundwater sampler such as the Geoprobe™ Screen Point 15 Groundwater Sampler. A sampler with a stainless steel screen is preferred for decontamination purposes. Samples are collected as follows:
 - a. Advance decontaminated sampler on pushrods to desired depth.
 - b. Retract outer sleeve of sampler to expose screen and allow groundwater to enter sampler.
 - c. Use peristaltic pump with precleaned, disposable tubing or small diameter bailer to extract groundwater from the sampler in accordance with Standard Operating Procedure 2.6 or 2.7. (Note: when a sample is collected immediately from such a sampler, there is no stagnant water to be purged. However, standard purging methods should be used when groundwater recharge rates allow to ensure a representative sample is collected. Recharge into the sampler may be slow, particularly in formations with low-permeability, and care should be taken to properly purge the well while allowing for adequate recharge for representative sample collection. If the sampler is left in the formation for greater than 24-hours, the well must be properly purged to remove the stagnant water.)
 - d. Discharge groundwater into the appropriate sample container(s) required for the specific analyses to be performed immediately after the sample is retrieved.
 - e. Handle samples in accordance with standard sample handling, shipping, and chain-of-custody practices as outlined in the Quality Assurance Project Plan.
8. Small diameter piezometers/monitoring wells may be installed in the core hole upon removal of the coring equipment. Screen and casing pipe are lowered into the hole, and the piezometer/monitoring well is constructed following standard practices as described in Standard Operating Procedure 2.4.
9. Upon completion of work, any excess soil that cannot be used as backfill in the core holes must be properly managed. Management of this material shall be as directed by the

consultant's Technical Lead/Project Manager and Client in accordance with Standard Operating Procedure 1.2.

2.4. Shallow Monitoring Well and Piezometer Installation

Shallow monitoring wells and piezometers are installed in unconsolidated material to provide secure sampling points for the uppermost zones of water table (unconfined) aquifers.

Following boring termination (typically borings advanced using hollow-stem augers), the well is constructed. Typically, the well is built within the hollow stem of the augers as this method allows for protection of the well screen against collapse of the borehole before the well filter pack is properly emplaced. The auger flights may be removed from the ground prior to well construction if there is reason to believe that the borehole will not collapse. If a well is constructed within a borehole advanced using air rotary drilling or direct push technology, the drilling equipment must be removed prior to well construction.

The following procedure is used for well construction:

1. Clean, flush-threaded well casing with factory-slotted well screen (typically Schedule 40 polyvinyl chloride (PVC)) is lowered into the borehole. Compatibility of screen material and slot size with site conditions must be considered. Stainless steel well screen may be needed at extremely contaminated sites.
2. Filter sand is then gravity-fed into the annulus between the well screen and the inside of the augers as the augers are slowly pulled from the borehole (or between the well screen and the boring walls if the drilling equipment has been removed). Filter sand is added to a height of approximately one to two feet above the top of the screen.
3. A bentonite seal is emplaced above the sand filter pack (approximately one to two feet thick) to prevent vertical movement of groundwater within the borehole (i.e., to prevent cross contamination from upper to lower zones). Bentonite pellets are placed into the annular space above the sand filter pack and then hydrated with distilled water to create a low permeability barrier.
4. A neat cement grout is then tremied (gravity-fed, if the bentonite seal is within a few feet of the surface) into the remaining annulus to ground surface.
5. The uppermost portion of each well is constructed to protect the well casing from damage.
 - a. The protective cover may be finished above grade with a steel protective outer casing with locking cover. A slip cap is typically placed over the well casing to prevent dirt and debris from entering the well.
 - b. The protective cover may be finished at grade with a steel man way with a bolt-down cover. A locking, watertight expanding cap is placed on the well to prevent dirt, debris, and water from entering the well.
6. The following information is recorded to complete the *Boring Log/Well Completion Record* (see attached example of an appropriate well completion record form in Appendix B):

- a. Depth of borehole
 - b. Length of screen pipe and actual screened interval
 - c. Length of casing pipe
 - d. Screen slot size
7. The top of casing (TOC) of the wells is surveyed for horizontal and vertical control for use in evaluating hydraulic gradients.
 8. Wells should be labeled when constructed (metal tags in or on well protective casing). A description of the well location should be included in the field notes.
 9. If the well is to be used as a temporary (one-time) sampling point, neat cement grout is not placed above the bentonite seal. After sampling, the temporary well can be abandoned by either pulling the casing and screen then filling the borehole with cement grout, or by leaving the casing in place and filling the casing and annular space above the bentonite seal with cement grout.
 10. Piezometers are installed when there is only a need to measure liquid levels (rather than collecting actual groundwater samples). Piezometers are typically constructed with small diameter (1-inch) casing.
 11. Prior to sampling, monitoring wells are developed to reduce the amount of sediment in well annular space. This enhances the flow of groundwater from the formation into the well and helps to ensure that the samples collected are representative of the quality of water in the aquifer. The well may be developed using a bailer or small pump as follows:
 - a. A disposable bailer or decontaminated pump is lowered into the well and allowed to sink to the bottom of the well casing.
 - b. If the well is developed by manual bailing, the bailer is raised using periodic, sharp upward tugs (surges). The surging motion of the bailer causes water to be extracted from the formation, through the screen filter pack into the screen. This also causes fine material that may have been mixed into the filter pack during installation to become suspended in the well water so that it can be removed via bailing.
 - c. If the well is developed using a pump, the pump must be periodically raised with sharp tugs (surges) to facilitate the removal of sediment from the filter pack and well casing.
 - d. Well development continues with water removal and periodic surging until the bailed water becomes as clear as practical.
 - e. In some cases, the well will go dry before the "clear water" endpoint is reached. If this happens, the well should be given time to recharge and the process repeated. If, after several such attempts, the well water remains turbid, the development process can cease. It is possible that, in certain low-yielding geologic units, a well cannot be developed to the clear water condition in a practical length of time. The endpoint for well development should be coordinated with the Technical Lead/Project Manager.

12. Well Abandonment - when a decision is made to abandon a monitoring well, the borehole should be sealed in such a manner that the well can not act as a conduit for migration of contaminants from the ground surface to the water table or between aquifers. To properly abandon a well, the preferred method is to completely remove the well casing and screen from the borehole, clean out the borehole, and backfill with a cement or bentonite grout, neat cement, or concrete.
- As previously stated the preferred method should be to completely remove the well casing and screen from the borehole. For shallow wells this can be accomplished by attaching a drilling rig cable tool to the casing and slowly pulling the casing from the well.
 - The clean borehole can then be backfilled with the appropriate bentonite grout material. The backfill material should be placed into the borehole from the bottom to the top by pressure grouting with the positive displacement method (tremie method).
 - The top 2 feet of the borehole should be poured with concrete to insure a secure surface seal (plug).
 - If the casing cannot be readily removed the well can be grouted with the casing left in the borehole. The preferred method in this case is as follows:
 - Pressure grout the borehole by placing the tremie tube to the bottom of the well casing, which will be the well screen or the bottom sump area below the well screen.
 - The pressurized grout is forced out through the well screen into the filter material and up the inside of the well casing sealing holes and breaks that are present.
 - The tremie tube is retracted slowly as the grout fills the casing.
 - The well casing is cut off even with the ground surface and filled with concrete to a depth of 2 feet below the surface. If the casing has been broken off below the surface, the grout should be tremied to within 2 feet of the surface and then finished to the ground surface with concrete.
 - If geologic conditions warrant the complete removal of the well casing, sand pack and other well construction materials, the well must then be over drilled and grouted. After the casing materials have been removed from the borehole, the borehole should be cleaned out and pressure grouted with the approved grouting materials. As previously stated, the borehole should be finished with a concrete surface plug.
13. Temporary Monitoring Well Types - five types of monitoring wells which have been shown to be acceptable are presented in the order of increasing difficulty to install and increasing cost:
- No Filter Pack - this is the most common temporary well and is very effective in many situations. After the borehole is completed, the casing and screen are simply

inserted. This is the most inexpensive and fastest well to install. This type well is extremely sensitive to turbidity fluctuations, because there is no filter pack. Care should be taken to not disturb the casing during purging and sampling.

- b. Inner Filter Pack - this type differs from the "No Pack" only in that a filter pack is placed inside the screen to a level approximately 6 inches above the well screen. This ensures that all water within the casing has passed through the filter pack. For this type well to function properly, the static water level must be 6-12 inches above the filter pack.
- c. Traditional Filter Pack - for this type, the screen and casing are inserted into the borehole, and the sand is poured into the annular space surrounding the screen and casing. Occasionally, it may be difficult to effectively place a filter pack around shallow open boreholes, due to collapse. This method requires more sand than the "inner filter pack" well, increasing material costs. As the filter pack is placed, it mixes with the muddy water in the borehole, which may increase the amount of time needed to purge the well to an acceptable level of turbidity.
- d. Double Filter Pack - the borehole is advanced to the desired depth. As with the "inner filter pack" the well screen is filled with filter pack material and the well screen and casing inserted until the top of the filter pack is at least 6 inches below the water table. Filter pack material is poured into the annular space around the well screen. This type temporary well construction can be very effective in aquifers where fine silts or clays predominate. This construction technique takes longer to implement and uses more filter pack material than others previously discussed.
- e. Well-in-a-Well - the borehole is advanced to the desired depth. At this point, a 1-inch well screen and sufficient riser is inserted into a 2-inch well screen with sufficient riser, and centered. Filter pack material is then placed into the annular space surrounding the 1-inch well screen, to approximately 6 inches above the screen. The well is then inserted into the borehole. This system requires twice as much well screen and casing, with subsequent increase in material cost. The increased amount of well construction materials results in a corresponding increase in decontamination time and costs. If pre-packed wells are used, a higher degree of QA/QC will result in higher overall cost.

2.5. Liquid Level Measurement

Liquid levels (depth to groundwater and free product, as applicable) in groundwater monitoring wells and piezometers are measured (gauged) using an electronic water level indicator or oil/water interface probe as appropriate based on site conditions. Specific steps in the measurement process are as listed below.

Note: Liquid levels shall be measured in all wells prior to sampling so that the measurements are collected over the shortest time period possible. If all wells can be sampled within one day, the groundwater level measurements may be obtained for each well as it is sampled.

1. Remove protective covers, locks, and well caps from all wells to be gauged, and allow the groundwater to equilibrate to atmospheric pressure. Note if any wells are under pressure, under vacuum, or have an odor. Screen well casing for organic vapors using a photoionization detector (PID) or flame ionization detector (FID) if required by the project. Record pertinent observations/measurements in field notes.
2. If the well cap, lock, etc. is damaged or missing, document the condition in the field notes, and replace the material as needed.
3. If a dedicated bailer is contained/stored in the well, remove it, and place it on clean plastic sheeting or aluminum foil to prevent field contamination.
4. Measure liquid levels starting at the background or least impacted well(s) and moving to the most impacted wells.
 - a. Measure depth to groundwater and depth to free product, as appropriate, from the surveyed control point on well top of casing.
 - b. Record measurements in the field notes along with any pertinent comments.
5. Decontaminate the water level indicator and/or oil/water interface probe before use, between each well, and upon completion of measurements.
 - a. Rinse probe and tape with soap solution followed by a distilled water rinse.
 - b. Wash portions exposed to free product with isopropyl alcohol followed by a distilled water rinse.
6. Replace well caps, locks, and bailers, if necessary, and replace protective cover.

Note: High viscosity (thick) oil tends to stick to the oil/water interface probe and can result in exaggerated measurements of free product thickness. To minimize this effect, lower the oil/water interface probe until the probe signals water. Then, slowly raise the probe until the presence of oil is indicated. Record the second measurement as the depth to water in the well. If measurement with the oil/water interface probe is not effective, a bailer may be lowered into the well and the free product thickness in the bailer can then be measured.

2.6. Monitoring Well Sampling Using a Bailer

Bailers can be used to manually collect representative groundwater samples from relatively shallow, small-diameter wells (i.e., 6-inch diameter or smaller). A dedicated Teflon® bailer, decontaminated Teflon® bailer, or disposable polyethylene bailer is used with new nylon cord/rope to purge and then sample the well. Specific steps in the sampling process are as follows:

1. Remove the well cover, lock, and well cap.
2. Record the Photoionization Detector (PID) reading in the well casing as necessary based on project requirements.
3. Make sure all equipment has been thoroughly decontaminated before use.
4. Gauge the depth to water from the top of casing (TOC) mark on the well casing using an electronic water level indicator or oil water interface probe.
5. Using the depth to water measurement, total depth of the well, and well diameter, calculate the required purge volume. (Conversion factors for water column height to volume are as follows: 0.16 gallons per foot for a 2-inch well and 0.61 gallons per foot for a 4-inch well). Record the absence or presence of free phase petroleum hydrocarbons (or free product). The calculation of the required purge volume is as follows:
 - a. Volume of water in well (gallons) = (Total Depth of Well – Depth to Water) * Conversion Factor
 - b. Total Purge Volume (gallons) = 3 * Volume of water in well
6. Water is removed (purged) from the well before sampling in order to remove stagnant water in the well column and to allow "fresh" or representative formation water to enter the well screen.
 - a. Gently lower the bailer to the bottom of well with cord/rope and remove accumulated groundwater.
 - b. Continue the purge process until at least three well volumes have been removed or the well is bailed dry. To determine the volume purged, estimate approximately 0.25 gallons (or 1 liter) as the volume of a 36-inch bailer, or use a graduated bucket.
 - c. A representative water sample shall be collected at a minimum frequency of once after each well volume is purged. These samples shall be checked in the field to assure that the water quality parameters (pH, temperature, and specific conductance) have stabilized (i.e., readings are within 10% of the previous measurement). If water quality parameters have not stabilized, the purge process is continued. The groundwater purge measurements shall be recorded in the field notes or on a separate *Groundwater Purge Data* form (see attached example of an appropriate boring log form in Appendix B).
 - d. Upon completion of purging and prior to sampling, the bailer and cord/rope shall be tied off inside the well casing or removed from the well and placed on clean

- plastic sheeting or aluminum foil to prevent field contamination of the sampling equipment.
- e. Purge water shall be collected and managed as directed by the Technical Lead/Project Manager. In certain circumstances, it may be permissible to discharge purge water to the ground surface if approved by the regulatory agency coordinating the work.
7. Upon satisfactory completion of well purging, groundwater samples are collected for analysis.
- a. Groundwater sampling is performed within 24 hours of purging to minimize the loss of any volatile compounds present (unless insufficient water has re-entered the well).
 - b. The bailer is lowered gently below the water surface (until completely submerged, if possible). It is then retrieved, and the water is gently poured into the appropriate sample containers.
 - c. The sample containers are labeled with well number, date, time, and analysis to be conducted. Samples are collected and contained in order of volatilization sensitivity. The preferred collection order for some common groundwater parameters is as follows:
 - i. Volatile organics
 - ii. Total organic carbon
 - iii. Total petroleum hydrocarbons
 - iv. Semi-volatile organics
 - v. Total metals
 - vi. Phenols
 - vii. Sulfate and chloride
 - viii. Nitrate and ammonia
 - d. All samples are logged on a chain-of-custody form and immediately stored in an ice-filled cooler (maintaining a temperature of approximately 4°C). Samples are transported to the laboratory under EPA approved chain-of-custody procedures.

2.7. Monitoring Well Sampling Using a Pump

Various types of pumps can be used to collect representative groundwater samples from monitoring wells. For the purposes of assessment work performed, it is expected that dedicated groundwater pumps will not typically be installed as it is most likely that Client funds will be used for initial investigations and not long-term monitoring. However, there are times when collecting samples using decontaminated pumps may be applicable, such as collection of samples from deep wells or when low-flow sampling is desired to reduce sample turbidity or potential loss of volatile constituents. Such pumps shall be primarily of stainless steel and Teflon® construction (components that will be in contact with the water) for ease of decontamination between locations. Disposable polyethylene or similar inert tubing is used to convey the groundwater to the surface. Specific steps in the sampling process are as follows:

1. Remove the well cover, lock, and well cap.
2. Record the Photoionization Detector (PID) reading in the well casing as necessary based on project requirements.
3. Make sure all equipment has been thoroughly decontaminated before use.
4. Gauge the depth to water from the top of casing (TOC) mark on the well casing using an electronic water level indicator or oil water interface probe.
5. Using the depth to water measurement, total depth of the well, and well diameter, calculate the required purge volume. (Conversion factors for water column height to volume are as follows: 0.16 gallons per foot for a 2-inch well and 0.61 gallons per foot for a 4-inch well). Record the absence or presence of free phase petroleum hydrocarbons (or free product). The calculation of the required purge volume is as follows:
 - a. Volume of water in well (gallons) = (Total Depth of Well – Depth to Water) * Conversion Factor
 - b. Total Purge Volume (gallons) = 3 * Volume of water in well
6. Purgging with Pumps –
 - a. When peristaltic pumps or centrifugal pumps are used, only the intake line is placed into the water column.
 - b. When submersible pumps (bladder, turbine, displacement, etc.) are used, the pump itself is lowered into the water column. The pump must be decontaminated prior to use.
 - c. Purgging Entire Water Column - the pump/hose assembly used in purging should be lowered into the top of the standing water column and not deep into the column. This is done so that the purging will "pull" water from the formation into the screened area of the well and up through the casing so that the entire static volume can be removed. If the pump is placed deep into the water column, the water above the pump may not be removed, and the subsequent samples, particularly if collected with a bailer, may not be representative of the ground water. (For wells with a low

recharge rate it may be necessary to gradually lower the pump/intake line into the well as the water level drops.) (Careful consideration shall be given to using pumps to purge wells which are excessively contaminated with oily compounds, because it may be difficult to adequately decontaminate severely contaminated pumps under field conditions.)

- d. Low Flow/Low Volume Purging Techniques/Procedures - the low flow/low volume purging is a procedure used to minimize purge water volumes. The pump intake is placed within the screened interval at the zone of sampling, preferably, the zone with the highest flow rate. Low flow rate purging is conducted after hydraulic conditions within the well have re-stabilized. Flow rates should not exceed the recharge rate of the aquifer. This is monitored by measuring the top of the water column with a water level recorder or similar device while pumping. These techniques, however, are only acceptable under certain hydraulic conditions and are not considered standard procedures – specific procedures will be specified in the Sampling and Analysis Plan when used.
 - e. Continue the purge process until at least three well volumes have been removed or the well is pumped dry (unless low flow/low volume purging is used).
 - f. A representative water sample shall be collected at a minimum frequency of once after each well volume is purged. These samples shall be checked in the field to assure that the water quality parameters (pH, temperature, and specific conductance) have stabilized (i.e., readings are within 10% of the previous measurement). If water quality parameters have not stabilized, the purge process is continued. The groundwater purge measurements shall be recorded in the field notes or on a separate *Groundwater Purge Data* form (see attached example of an appropriate groundwater purge data form in Appendix B).
7. Sampling Equipment Available
- a. Peristaltic pump (optional vacuum jug assembly)
 - b. Stainless steel and Teflon[®] bladder pump,
 - c. Stainless steel and Teflon[®], variable speed centrifugal pump (e.g., Grundfos Redi-Flo2[®])
8. Sampling Techniques
- a. Peristaltic pump/vacuum jug
 - i. Precleaned disposable tubing is placed into the pump and from pump to well.
 - ii. Intake is lowered to the appropriate depth.
 - iii. Pump is activated with speed adjusted for appropriate flow rate based on well recharge and types of samples to be collected.
 - iv. Groundwater is discharged into appropriate sample containers.
 - v. The vacuum jug can be used for sample collection as an option because as it allows for sample collection without the sample coming in contact with

the pump tubing. This is accomplished by placing a Teflon® transfer cap assembly onto the neck of a standard cleaned 4-liter (1-gallon) glass container. Teflon® tubing (1/4-inch O.D.) connects the container to both the pump and the sample source. The pump creates a vacuum in the container, thereby drawing the sample into the container without it coming into contact with the pump. Samples for volatile organic compound analysis should be collected using a bailer or by filling intake tube and allowing it to drain into the sample vials.

- b. Submersible bladder Pumps and variable speed centrifugal pumps
 - i. After purging has been accomplished with a bladder pump, the sample is obtained directly from the pump discharge.
 - ii. The pump rate should be reduced during sample collection to minimize sample disturbance, particularly with respect to samples collected for volatile organic compounds analysis.
9. The sample containers are labeled with well number, date, time, and analysis to be conducted. Samples are collected and contained in order of volatilization sensitivity. The preferred collection order for some common groundwater parameters is as follows:
 - a. Volatile organics
 - b. Total organic carbon
 - c. Total petroleum hydrocarbons
 - d. Semi-volatile organics
 - e. Total metals
 - f. Phenols
 - g. Sulfate and chloride
 - h. Nitrate and ammonia
10. All samples are logged on a chain-of-custody form and immediately stored in an ice-filled cooler (maintaining a temperature of approximately 4°C). Samples are transported to the laboratory under EPA approved chain-of-custody procedures.

Appendix C: Soil Boring Logs

Log of Boring: 36-1				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: CVTC						
Coordinates:						
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>		
Drill Rig Type: Geoprobe		Total Depth Drilled: 22 ft		Screened Interval: NA		
DTW Within Soil Boring: NA				Cased Interval: NA		
Static GW Level: NA				Date GW Measured: NA		
Depth (feet)	Sample Info		Material Description			
	PID (ppm)	Sample Interval (ft)				
1						
2						
3	NA		Gravel to 1.5 ft, then clayey mica silt			
4						
5						
6						
7						
8	NA		Dark silty clay, tight, low moisture			
9						
10						
11						
12						
13	NA		11-13 ft fracture gneiss with sandy silt, then tan clayey mica silt. Dry with no odor.			
14						
15						
16						
17						
18	NA		Same as above trending to live and tan banded saprolite at 18-ft.			
19						
20						
21						
22						
23	NA		Saprolite increasing in grain size. Refusal at 22 ft.			
24						
25						

Log of Boring: 36-2				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: CVTC						
Coordinates:						
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>		
Drill Rig Type: Geoprobe		Total Depth Drilled: 21 ft		Screened Interval: NA		
DTW Within Soil Boring: NA				Cased Interval: NA		
Static GW Level: NA				Date GW Measured: NA		
Depth (feet)	Sample Info		Material Description			
	PID (ppm)	Sample Interval (ft)				
1						
2						
3	NA		0-1 ft Gravel, 1-4ft clay fill, 4-5 ft tan clayey silt			
4						
5						
6						
7						
8	NA		Tan and orange fine silt, mica, low moisture, no odor.			
9						
10						
11						
12						
13	NA		Same as above with red clay at 13-15 ft.			
14						
15						
16						
17						
18	NA		Thin clay lens at 17 ft with saprolite at 17-20 ft.			
19						
20						
21						
22						
23	NA		Tan silty saprolite, dry, no odor. Refusal at 21 ft.			
24						
25						

Log of Boring: 36-3				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions
Project Location: CVTC				
Coordinates:				
Date(s) Drilled: September 7, 2017	Logged By: Jeff Fisher		Well Information:	
Drill Rig Type: Geoprobe	Total Depth Drilled: 33 ft		Screened Interval: NA	
DTW Within Soil Boring: NA			Cased Interval: NA	
Static GW Level: NA		Date GW Measured:		NA
Depth (feet)	Sample Info		Material Description	
	PID (ppm)	Sample Interval (ft)	Time	
1				
2				
3	NA			Asphalt then red clay fill.
4				
5				
6				
7				
8	NA			Same as above, tan at 7 ft, then loamy fill
9				
10				
11				
12				
13	NA		10:45	Mixed clay and gravel fill, no odor, dry.
14				
15				
16				
17				
18	NA			Same as above to 17ft. Then, tight red clay, moist, no odor.
19				
20				
21				
22				
23	NA			Same as above trending to saprolite at 22 ft, dry, no odor.
24				
25				
26				
27				
28				Tan and olive saprolite, very dry.
29				
30				
31				
32			10:55	Same as above, mica, very dry. Refusal at 33 ft.
33				

Log of Boring: 36-4 Project Location: CVTC Coordinates:			 3e EEE Consulting, Inc. <small>Environmental, Engineering and Educational Solutions</small>	
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		Well Information:
Drill Rig Type: Geoprobe		Total Depth Drilled: 30 ft		Screened Interval: NA
DTW Within Soil Boring: NA				Cased Interval: NA
Static GW Level: NA		Date GW Measured: NA		
Depth (feet)	Sample Info		Material Description	
	PID (ppm)	Sample Interval (ft)		
1				
2				
3	NA		Asphalt then clay fill, no odor.	
4				
5				
6				
7				
8	NA		Clay fill, dry, no odor.	
9				
10				
11				
12				
13	NA		11:05	Loam and clay fill with quartz clasts.
14				
15				
16				
17				
18	NA		11:15	Reddish tan silty clay, dry, no odor.
19				
20				
21				
22				
23	NA		11:15	Same as above with mica, low moisture, no odor
24				
25				
26				
27				
28			Trending to tan and olive sapprolite, high mica content. Refusal at 30 ft.	
29				
30				

Log of Boring: 36-5			 3e EEE Consulting, Inc. <small>Environmental, Engineering and Educational Solutions</small>		
Project Location: CVTC					
Coordinates:					
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		Well Information:	
Drill Rig Type: Geoprobe		Total Depth Drilled: 18 ft		Screened Interval: NA	
DTW Within Soil Boring: NA				Cased Interval: NA	
Static GW Level: NA			Date GW Measured: NA		
Depth (feet)	Sample Info		Material Description		
	PID (ppm)	Sample Interval (ft)			
1					
2					
3	NA		Asphalt then gravel clay fill, no odor		
4					
5					
6					
7					
8	NA		Red clay fill, no odor, low moisture		
9					
10					
11					
12					
13	NA		11:30	Red olive clay, mica, moist, no odor	
14					
15					
16					
17	NA		11:40	Tan olive clay silt, no odor. Refusal at 18 ft.	
18					
19					
20				*Offset refusal at 15 ft	

Log of Boring: 31-1				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions
Project Location: CVTC Coordinates:				
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>
Drill Rig Type: Geoprobe		Total Depth Drilled: 12 ft		Screened Interval: NA
DTW Within Soil Boring: NA				Cased Interval: NA
Static GW Level: NA				Date GW Measured: NA
Depth (feet)	Sample Info		Material Description	
	PID (ppm)	Sample Interval (ft)		
1				
2				
3	NA		12:05	Loam then tight red clay at 3 ft, dry, no odor.
4				
5				
6				
7				
8	NA			Tan clayey silt trending to red clay, dry, no odor.
9				
10				
11				
12	NA		12:10	Tan saprolite, dry, no odor. Refusal at 12 ft.
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Log of Boring: 36-1				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions
Project Location: CVTC Coordinates:				
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>
Drill Rig Type: Geoprobe		Total Depth Drilled: 13 ft		Screened Interval: NA
DTW Within Soil Boring: NA				Cased Interval: NA
Static GW Level: NA				Date GW Measured: NA
Depth (feet)	Sample Info		Material Description	
	PID (ppm)	Sample Interval (ft)		
1				
2				
3	NA		12:15	Loam then tight red clay at 3 ft, dry, no odor.
4				
5				
6				
7				
8	NA			Red clay, very firm, no odor.
9				
10				
11				
12	NA		12:20	Tan sapprolite, dry, no odor
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Log of Boring: 49-1			 3e EEE Consulting, Inc. <small>Environmental, Engineering and Educational Solutions</small>		
Project Location: CVTC					
Coordinates:					
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>	
Drill Rig Type: Geoprobe		Total Depth Drilled: 8 ft		Screened Interval: NA	
DTW Within Soil Boring: NA				Cased Interval: NA	
Static GW Level: NA			Date GW Measured: NA		
Depth (feet)	Sample Info		Material Description		
	PID (ppm)	Sample Interval (ft)			
1					
2					
3	NA		Sandy olive fill with bands of red clay		
4					
5					
6					
7	NA		14:45	As above. Refusal at 8 ft.	
8					
9					
10				*Five offsets with shallow refusal.	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Log of Boring: 65-1				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: CVTC						
Coordinates:						
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>		
Drill Rig Type: Geoprobe		Total Depth Drilled: 23 ft		Screened Interval: NA		
DTW Within Soil Boring: NA				Cased Interval: NA		
Static GW Level: NA				Date GW Measured: NA		
Depth (feet)	Sample Info		Material Description			
	PID (ppm)	Sample Interval (ft)				
1						
2						
3	NA		Dense red clay, dry, no odor			
4						
5						
6						
7						
8	NA		Tan clayey silt with structure, mica, low moisture.			
9						
10						
11						
12						
13	NA		Tan clayey silt with structure, mica, low moisture.			
14						
15						
16						
17						
18	NA		Tan silty fine sand, dry, no odor.			
19						
20						
21						
22	NA		Tan silty fine sand, dry, no odor. Refusal at 23 ft.			
23						
24						
25						

Log of Boring: 65-2				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: CVTC						
Coordinates:						
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>		
Drill Rig Type: Geoprobe		Total Depth Drilled: 22 ft		Screened Interval: NA		
DTW Within Soil Boring: NA				Cased Interval: NA		
Static GW Level: NA				Date GW Measured: NA		
Depth (feet)	Sample Info		Material Description			
	PID (ppm)	Sample Interval (ft)				
1						
2						
3	NA		Red to tan silty clay, no odor, dry.			
4						
5						
6						
7						
8	NA		Tan clayey silt, dry, no odor.			
9						
10						
11						
12						
13	NA		Tan clayey silt, very dry, no odor.			
14						
15						
16						
17						
18	NA		Tan clayey silt with bands of moist clay at 18 ft.			
19						
20						
21	NA		Tan and grey silty saprolite, dry, no odor.			
22						
23						
24						
25						

Log of Boring: 36-1			 3e EEE Consulting, Inc. <small>Environmental, Engineering and Educational Solutions</small>		
Project Location: CVTC					
Coordinates:					
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>	
Drill Rig Type: Geoprobe		Total Depth Drilled: 14 ft		Screened Interval: NA	
DTW Within Soil Boring: NA				Cased Interval: NA	
Static GW Level: NA			Date GW Measured: NA		
Depth (feet)	Sample Info		Material Description		
	PID (ppm)	Sample Interval (ft)			
1					
2					
3	NA		Asphalt then red clay, tight, low moisture.		
4					
5					
6					
7					
8	NA		Same as above with more silt content at 10 ft, moist, no odor.		
9					
10					
11					
12	NA				
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Log of Boring: 47-OP2				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: CVTC						
Coordinates:						
Date(s) Drilled: September 7, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>		
Drill Rig Type: Geoprobe		Total Depth Drilled: 22 ft		Screened Interval: NA		
DTW Within Soil Boring: NA				Cased Interval: NA		
Static GW Level: NA				Date GW Measured: NA		
Depth (feet)	Sample Info		Material Description			
	PID (ppm)	Sample Interval (ft)				
1						
2						
3	NA		Asphalt and concrete, red clay fill, no odor, dry.			
4						
5						
6						
7						
8	NA		Tan and red mica clayey silt, no odor, low moisture.			
9						
10						
11						
12						
13	NA		16:10	Tan and red mica clayey silt, no odor, low moisture.		
14						
15						
16						
17						
18	NA			Sapprolite, low moisture, no odor.		
19						
20						
21	NA		16:15	Sapprolite, low moisture, no odor. Refusal at 22 ft.		
22						
23						
24						
25						

Log of Boring: 47-1				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions
Project Location: CVTC Coordinates:				
Date(s) Drilled: September 8, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>
Drill Rig Type: Geoprobe		Total Depth Drilled: 15 ft		Screened Interval: NA
DTW Within Soil Boring: NA				Cased Interval: NA
Static GW Level: NA				Date GW Measured: NA
Depth (feet)	Sample Info		Material Description	
	PID (ppm)	Sample Interval (ft)		
1				
2				
3	NA		8:40	Asphalt then clay and gravel fill, pockets of moderate petroleum odor.
4				
5				
6				
7				
8	NA			Tan and red to light tan clayey silt.
9				
10				
11				
12				
13	NA		8:55	Tan to grey silty sandy sapprolite. Refusal at 15 ft.
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Log of Boring: 47-2				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: CVTC						
Coordinates:						
Date(s) Drilled: September 8, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>		
Drill Rig Type: Geoprobe		Total Depth Drilled: 17 ft		Screened Interval: NA		
DTW Within Soil Boring: NA				Cased Interval: NA		
Static GW Level: NA				Date GW Measured: NA		
Depth (feet)	Sample Info			Material Description		
	PID (ppm)	Sample Interval (ft)	Time			
1						
2						
3	NA		9:10	Reddish tan clayey silt, mica, no odor, low moisture.		
4						
5						
6						
7						
8	NA			Same as above trending to fine sandy silt at 10ft, no odor, moist.		
9						
10						
11						
12						
13	NA			Tan fine silt, moist, no odor.		
14						
15						
16						
17	NA		9:20	No description. Refusal at 17 ft.		
18						
19						
20						
21						
22						
23	NA					
24						
25						

Log of Boring: 47-3				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions
Project Location: CVTC				
Coordinates:				
Date(s) Drilled: September 8, 2017			Logged By: Jeff Fisher	Well Information:
Drill Rig Type: Geoprobe			Total Depth Drilled: 24 ft	Screened Interval: NA
DTW Within Soil Boring: NA				Cased Interval: NA
Static GW Level: NA				Date GW Measured: NA
Depth (feet)	Sample Info			Material Description
	PID (ppm)	Sample Interval (ft)	Time	
1				
2				
3	NA		9:50	Topsoil and dark cinders with clay fill to 3 ft. At 3ft clay, moist, slight odor.
4				
5				
6				
7				
8	NA			Red silty clay to tan clayey silt, no odor.
9				
10				
11				
12				
13	NA			Red silty clay to tan clayey silt, moist, no odor.
14				
15				
16				
17				
18	NA			Fine silty mica sapprolite, moist, no odor.
19				
20				
21				
22	NA		10:05	Fine silty mica sapprolite, moist, no odor. Refusal at 24 ft.
23				
24				
25				

Log of Boring: 47-4				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions
Project Location: CVTC				
Coordinates:				
Date(s) Drilled: September 8, 2017		Logged By: Jeff Fisher		Well Information:
Drill Rig Type: Geoprobe		Total Depth Drilled: 23 ft		Screened Interval: NA
DTW Within Soil Boring: NA				Cased Interval: NA
Static GW Level: NA				Date GW Measured: NA
Depth (feet)	Sample Info		Material Description	
	PID (ppm)	Sample Interval (ft)		
1				
2				
3	NA		10:25	Silt and clay fill, dry, no odor.
4				
5				
6				
7				
8	NA			Silt and clay fill, dry, no odor.
9				
10				
11				
12				
13	NA			Tan fine sandy silt, dry, no odor.
14				
15				
16				
17				
18	NA			Tan fine sandy silt, dry, no odor.
19				
20				
21				
22	NA		10:35	
23				Fine sandy silt, very dry, no odor. Refusal at 23 ft.
24				
25				

Log of Boring: 47-5				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: CVTC						
Coordinates:						
Date(s) Drilled: September 8, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>		
Drill Rig Type: Geoprobe		Total Depth Drilled: 23 ft		Screened Interval: NA		
DTW Within Soil Boring: NA				Cased Interval: NA		
Static GW Level: NA				Date GW Measured: NA		
Depth (feet)	Sample Info			Material Description		
	PID (ppm)	Sample Interval (ft)	Time			
1						
2						
3	NA		10:40	Clay, gravel, silt fill. No odor, moist.		
4						
5						
6						
7						
8	NA			Red silty clay, dry, no odor.		
9						
10						
11						
12						
13	NA			Red tan clayey silt, mica, moist, no odor.		
14						
15						
16						
17						
18	NA			Same as above to 18 ft, then tan grey mica silt, low moisture.		
19						
20						
21						
22	NA		10:50			
23				Tan grey mica silt, low moisture. Refusla at 23 ft.		
24						
25						

Log of Boring: 53-1				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions
Project Location: CVTC				
Coordinates:				
Date(s) Drilled: September 8, 2017		Logged By: Jeff Fisher		<u>Well Information:</u>
Drill Rig Type: Geoprobe		Total Depth Drilled: 14 ft		Screened Interval: NA
DTW Within Soil Boring: NA				Cased Interval: NA
Static GW Level: NA				Date GW Measured: NA
Depth (feet)	Sample Info		Material Description	
	PID (ppm)	Sample Interval (ft)		
1				
2				
3	NA		10:55	Fill, no odor, dry.
4				
5				
6				
7				
8	NA			Tan silty fill, dry, no odor.
9				
10				
11				
12				
13	NA		11:00	Tan silty fill, dry, no odor. Refusal at 14 ft.
14				
15				*Offset attempt two times.
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Appendix D: Well Logs

Log of Boring: 10-1			 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center					
Coordinates: 3673161.6573', 11302490.9743'					
Date(s) Drilled:	9/21/2017		Logged By:	Devin Webb	
Drill Rig Type:	Air Rotary		Total Depth Drilled:	65'	
DTW Within Soil Boring:	NA			Screened Interval:	55-65 ft
Static GW Level:	35.73 ft			Date GW Measured:	9/27/2017
Depth (feet)	Sample Info			Material Description	
	PID (ppm)	Sample Interval (ft)	Time		
0-25			Overburden		
25-27			Gniess		
27-34			Sandy		
34-37			Gniess		
37-38			Soft		
38-45			Gniess		
45-47			Soft		
47-49			Gniess		
49-51			Soft		
51-60			Gniess		
60-61			Soft (water)		
61-65			Gniess		

Boring terminated at 65 ft BGS

Log of Boring: 10-2			 EEE Consulting, Inc. <small>Environmental, Engineering and Educational Solutions</small>		
Project Location: Central Virginia Training Center					
Coordinates: 3672947.8432', 11302419.3739'					
Date(s) Drilled:	9/21/2017		Logged By:	Devin Webb	
Drill Rig Type:	Air Rotary		Total Depth Drilled:	110'	
DTW Within Soil Boring:	NA			Screened Interval:	100-110 ft
Static GW Level:	39.81 ft			Cased Interval:	0-100 ft
Date GW Measured: 9/27/2017					
Depth (feet)	Sample Info		Material Description		
	PID (ppm)	Sample Interval (ft)		Time	
0-32			Overburden		
32-35			Gniess		
35-38			Soft (sandy)		
38-45			Gniess		
45-48			Soft (dirty)		
48-55			Gniess		
55-56			Soft		
56-63			Gniess		
63-64			Soft		
64-78			Gniess		
78-79			Soft		
79-85			Gniess		
85-86			Soft		
86-92			Gniess		
92-93			Soft		
93-104			Gniess		
104-105			Soft		
105-110			Gniess		

Boring terminated at 110 ft BGS

Log of Boring: 10-3			 3e EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center					
Coordinates: 3672837.0709', 11302407.3808'					
Date(s) Drilled:		Logged By: Devin Webb		Well Information:	
Drill Rig Type: Air Rotary		Total Depth Drilled: 50'		Screened Interval: 40-50 ft	
DTW Within Soil Boring: NA				Cased Interval: 0-40 ft	
Static GW Level: 31.39 ft			Date GW Measured: 9/27/2017		
Depth (feet)	Sample Info		Material Description		
	PID (ppm)	Sample Interval (ft)			
0-32			Overburden		
32-35			Gniess		
35-39			Soft (Dirty)		
39-42			Gniess		
42-43			Soft		
43-46			Gniess		
46-47			Soft (water)		
47-50			Gniess		
Boring terminated at 50 ft BGS					

Log of Boring: 13-1			 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions						
Project Location: Central Virginia Training Center									
Coordinates: 3673669.2238', 11305109.4304'									
Date(s) Drilled:	9/21/2017		Logged By:	Devin Webb					
Drill Rig Type:	Air Rotary		Total Depth Drilled:	73'					
DTW Within Soil Boring:	NA			Screened Interval: 63-73 ft					
Static GW Level: 43.54 ft			Cased Interval: 0-63 ft						
Date GW Measured: 9/27/2017									
Depth (feet)	Sample Info			Material Description					
	PID (ppm)	Sample Interval (ft)	Time						
0-28			Overburden						
28-32			Gniess						
32-35			Soft (dirty)						
35-37			Gniess						
37-39			Soft						
39-43			Gniess						
43-45			Soft (dirty)						
45-50			Gniess						
50-52			Soft						
52-58			Gniess						
58-59			Soft						
59-61			Gniess						
61-62			Soft						
62-64			Gniess						
64-65			Soft (water)						
65-73			Gniess						

Boring terminated at 73 ft BGS

Log of Boring: 13-2				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions
Project Location: Central Virginia Training Center				
Coordinates: 3673614.0065', 11305438.9852'				
Date(s) Drilled: 9/21/2017		Logged By: Devin Webb		Well Information:
Drill Rig Type: Air Rotary		Total Depth Drilled: 50'		Screened Interval: 40-50 ft
DTW Within Soil Boring: NA				Cased Interval: 0-40 ft
Static GW Level: 37.63 ft				Date GW Measured: 9/27/2017
Depth (feet)	Sample Info			Material Description
	PID (ppm)	Sample Interval (ft)	Time	
0-38				Overburden
38-43				Gniess (some water at 40 ft)
43-45				Soft
45-50				Gniess

Boring terminated at 50 ft BGS

Log of Boring: 14-1			 3e EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center					
Coordinates: 3673287.6348', 11301620.0494'					
Date(s) Drilled:	9/19/2017		Logged By:	Devin Webb	
Drill Rig Type:	Air Rotary		Total Depth Drilled:	90'	
DTW Within Soil Boring:	NA			Screened Interval:	80-90 ft
Static GW Level:	34.57 ft			Cased Interval:	0-80 ft
				Date GW Measured:	9/27/2017
Depth (feet)	Sample Info		Material Description		
	PID (ppm)	Sample Interval (ft)			
0-19			Overburden		
19-23			Gniess		
23-30			Sand/ Dirt		
30-54			Gniess		
54-56			Soft		
56-70			Gniess		
70-74			Soft (water)		
74-90			Gniess		

Boring terminated at 90 ft BGS

Log of Boring: 14-2				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center						
Coordinates: 3672896.9704', 11301348.1569'						
Date(s) Drilled: 9/20/2017		Logged By: Devin Webb		Well Information:		
Drill Rig Type: Air Rotary		Total Depth Drilled: 95'		Screened Interval: 85-95 ft		
DTW Within Soil Boring: NA				Cased Interval: 0-85 ft		
Static GW Level: 25.46 ft				Date GW Measured: 9/27/2017		
Depth (feet)	Sample Info			Material Description		
	PID (ppm)	Sample Interval (ft)	Time			
0-27				Overburden		
27-30				Gniess		
30-32				Sand		
32-37				Schist		
37-39				Gniess		
39-43				Soft (dirty)		
43-50				Gniess		
50-52				Soft		
52-56				Gniess		
56-57				Soft		
57-64				Gniess		
64-65				Soft		
65-72				Gniess		
72-74				Soft (tan)		
74-86				Gniess		
86-88				Soft		
88-91				Gniess		
91-92				Soft		
92-95				Gniess		

Boring terminated at 95 ft BGS

Log of Boring: 14-3			 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center					
Coordinates: 3672801.1034', 11301275.0100'					
Date(s) Drilled:	9/20/2017		Logged By:	Devin Webb	
Drill Rig Type:	Air Rotary		Total Depth Drilled:	90'	
DTW Within Soil Boring:	NA			Screened Interval:	80-90 ft
Static GW Level:	25.78 ft			Date GW Measured:	9/27/2017
Depth (feet)	Sample Info			Material Description	
	PID (ppm)	Sample Interval (ft)	Time		
0-25			Overburden		
25-33			Schist		
33-39			Gniess		
39-41			Soft (dirty)		
41-45			Gniess		
45-46			Soft		
46-53			Gniess		
53-55			Soft		
55-70			Gniess		
70-72			Soft (moisture)		
72-88			Gniess		
88-90			Soft		

Boring terminated at 90 ft BGS

Log of Boring: 15-1				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions
Project Location: Central Virginia Training Center				
Coordinates: 3672026.6127', 11302307.0312'				
Date(s) Drilled:	9/26/2017	Logged By:	Devin Webb	Well Information:
Drill Rig Type:	Air Rotary	Total Depth Drilled:	45'	Screened Interval: 35-45 ft
DTW Within Soil Boring:	NA			Cased Interval: 0-35 ft
Static GW Level:	25.81 ft		Date GW Measured:	9/27/2017
Depth (feet)	Sample Info			Material Description
	PID (ppm)	Sample Interval (ft)	Time	
0-23				Overburden
23-25				Gniess
25-26				Dirty
26-29				Gniess
29-30				Dirty
30-32				Gniess
32-34				Soft (dirty) water
34-39				Gniess
39-40				Soft (water)
39-45				Gniess

Boring terminated at 45 ft BGS

Log of Boring: 16-1				 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center						
Coordinates: 3671798.4295', 11302399.5418'						
Date(s) Drilled:	9/22/2017		Logged By:	Devin Webb		Well Information:
Drill Rig Type:	Air Rotary		Total Depth Drilled:	150'		Screened Interval: 140-150 ft
DTW Within Soil Boring:	NA					Cased Interval: 0-140 ft
Static GW Level:	82.72 ft			Date GW Measured:	9/27/2017	
Depth (feet)	Sample Info			Material Description		
	PID (ppm)	Sample Interval (ft)	Time			
0-15			Overburden			
15-19			Schist			
19-21			Soft			
21-23			Schist			
23-26			Gniess			
26-27			Soft			
27-31			Gniess			
31-33			Soft			
33-38			Gniess			
38-39			Soft			
39-45			Gniess			
45-46			Soft			
46-51			Gniess			
51-52			Soft			
52-64			Gniess			
64-65			Soft			
65-68			Gniess			
68-71			Soft			
71-80			Gniess			
80-81			Soft			
81-88			Gniess			
88-89			Soft			
89-135			Gniess			
135-137			Soft			
137-150			Gniess			

Boring terminated at 150 ft BGS

Log of Boring: 16-2			 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center					
Coordinates: 3671613.0321', 11302545.8103'					
Date(s) Drilled:	9/25/2017		Logged By:	Devin Webb	
Drill Rig Type:	Air Rotary		Total Depth Drilled:	61'	
DTW Within Soil Boring:	NA			Screened Interval: 51-61 ft	
Static GW Level: 36.69 ft			Cased Interval: 0-51 ft		Date GW Measured: 9/27/2017
Depth (feet)	Sample Info			Material Description	
	PID (ppm)	Sample Interval (ft)	Time		
0-20			Overburden		
20-32			Schist		
32-37			Gniess		
37-38			Soft		
38-40			Gniess		
40-41			Soft (dirty)		
41-46			Gniess		
46-49			Soft (dirty)		
49-54			Gniess		
54-55			Soft		
55-58			Gniess		
58-60			Soft		
60-61			Gniess		

Boring terminated at 61 ft BGS

Log of Boring: 16-3			 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center					
Coordinates: 3671636.1214', 11302292.1687'					
Date(s) Drilled:	9/25/2017 - 9/26/2017		Logged By:	Devin Webb	
Drill Rig Type:	Air Rotary		Total Depth Drilled:	100'	
DTW Within Soil Boring:	NA			Screened Interval:	90-100 ft
DTW Within Soil Boring:	NA			Cased Interval:	0-90 ft
Static GW Level:	54.83 ft		Date GW Measured:	9/27/2017	
Depth (feet)	Sample Info			Material Description	
	PID (ppm)	Sample Interval (ft)	Time		
0-7			Overburden		
7-10			Schist		
10-15			Dirt		
15-27			Gniess		
27-28			Soft (dirty)		
28-32			Soft		
32-37			Gniess		
37-41			Soft (dirty)		
41-43			Gniess		
43-44			Soft		
44-48			Gniess		
48-50			Soft		
50-52			Gniess		
52-53			Soft		
53-65			Gniess		
65-66			Soft		
66-72			Gniess		
72-73			Soft		
73-76			Gniess		
76-77			Soft		
77-84			Gniess		
84-85			Soft		
85-88			Gniess		
88-89			Soft		
89-93			Gniess		
93-94			Soft		
94-100			Gniess		

Boring terminated at 100 ft BGS

Log of Boring: 16-4			 3e EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center					
Coordinates: 3671611.3144', 11302092.0515'					
Date(s) Drilled:	9/25/2017 - 9/26/2017		Logged By:	Devin Webb	
Drill Rig Type:	Air Rotary		Total Depth Drilled:	110'	
DTW Within Soil Boring:	NA			Screened Interval:	100-110 ft
Static GW Level:	54.40 ft			Cased Interval:	0-100 ft
Date GW Measured: 9/27/2017					
Depth (feet)	Sample Info		Material Description		
	PID (ppm)	Sample Interval (ft)		Time	
0-3			Overburden		
3-10			Schist		
10-12			Dirt		
12-18			Gniess		
18-20			Soft		
20-26			Gniess		
26-27			Soft		
27-30			Gniess		
30-31			Soft		
31-34			Gniess		
34-35			Soft (dirty)		
35-38			Gniess		
38-39			Soft		
39-45			Gniess		
45-47			Soft		
47-50			Soft (dirty)		
50-68			Gniess		
68-70			Soft		
70-73			Gniess		
73-74			Soft		
74-81			Gniess		
81-84			Soft (tan)		
84-96			Gniess		
96-97			Soft		
97-110			Gniess		

Boring terminated at 110 ft BGS

Log of Boring: 16-5			 EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center					
Coordinates: 3671872.2432', 11301814.6680'					
Date(s) Drilled: 9/26/2017			Logged By: Devin Webb		
Drill Rig Type: Air Rotary			Total Depth Drilled: 120'		
DTW Within Soil Boring: NA			Screened Interval: 110-120 ft		
Static GW Level: 66.66 ft			Cased Interval: 0-110 ft		
Date GW Measured: 9/27/2017					
Depth (feet)	Sample Info			Material Description	
	PID (ppm)	Sample Interval (ft)	Time		
0-5			Overburden		
5-15			Schist		
15-17			Gniess		
17-19			Sandy		
19-25			Gniess		
25-26			Soft		
26-28			Gniess		
28-29			Soft		
29-32			Gniess		
32-33			Soft (dirty)		
33-36			Gniess		
36-38			Soft		
38-44			Gniess		
44-45			Soft (tan)		
45-46			Gniess		
46-57			Soft (sandy)		
57-58			Soft		
58-62			Gniess		
62-67			Soft		
67-103			Gniess		
103-105			Soft (sandy)		
105-120			Gniess		

Boring terminated at 120 ft BGS

Log of Boring: 30-1			 3e EEE Consulting, Inc. Environmental, Engineering and Educational Solutions		
Project Location: Central Virginia Training Center					
Coordinates: 3674306.6971', 11301149.8734'					
Date(s) Drilled:		Logged By: Devin Webb		<u>Well Information:</u>	
Drill Rig Type: Air Rotary		Total Depth Drilled: 100'		Screened Interval: 90-100 ft	
DTW Within Soil Boring: NA				Cased Interval: 0-90 ft	
Static GW Level: 48.89 ft			Date GW Measured: 9/27/2017		
Depth (feet)	Sample Info		Material Description		
	PID (ppm)	Sample Interval (ft)			
0-25			Overburden		
25-30			Schist		
30-33			Dirt		
33-43			Gniess		
43-47			Soft (dirty)		
47-48			Gniess		
48-53			Dirt		
53-61			Sandstone		
61-67			Gniess		
67-71			Soft (dirty)		
71-74			Gniess		
74-75			Soft		
75-97			Gniess		
97-99			Soft		
99-100			Gniess		

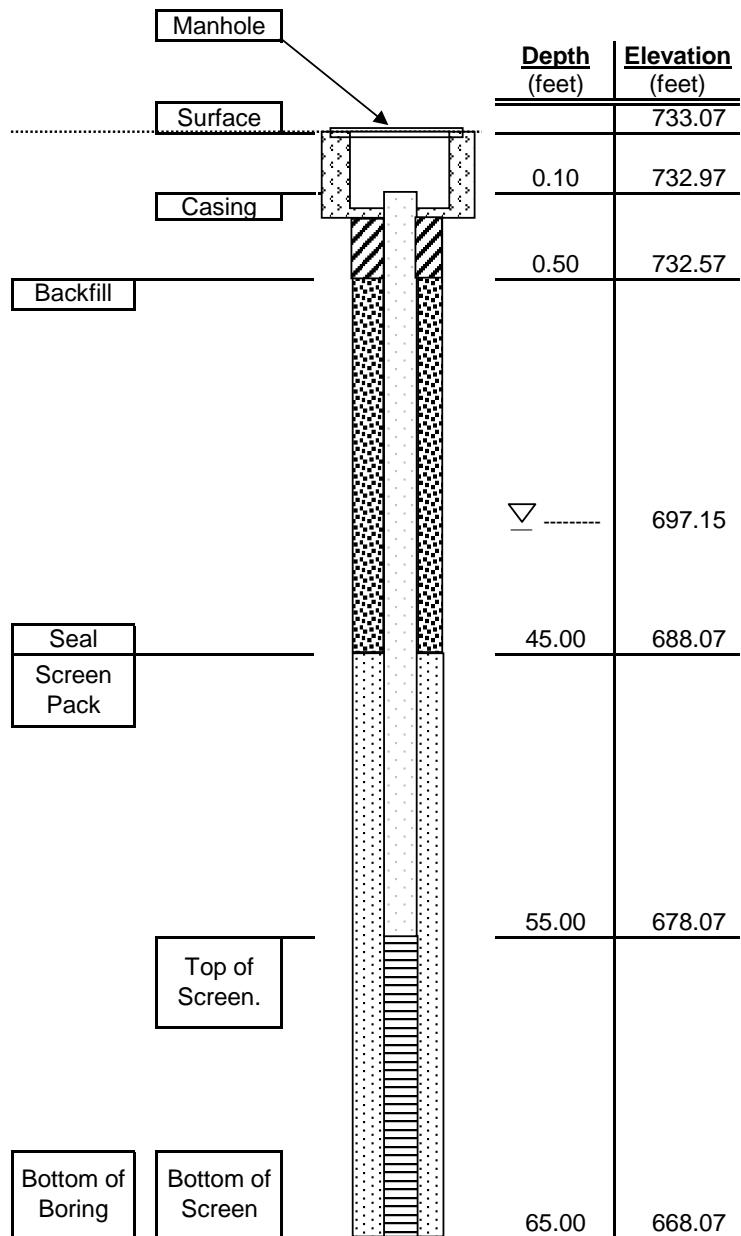
Boring terminated at 100 ft BGS

Log of Boring: 30-2			 EEE Consulting, Inc. <small>Environmental, Engineering and Educational Solutions</small>		
Project Location: Central Virginia Training Center					
Coordinates: 3674332.4758', 11301107.6309'					
Date(s) Drilled:	9/20/2017		Logged By:	Devin Webb	
Drill Rig Type:	Air Rotary		Total Depth Drilled:	80'	
DTW Within Soil Boring:	NA			Screened Interval:	70-80 ft
Static GW Level:	66.90 ft			Date GW Measured:	9/27/2017
Depth (feet)	Sample Info			Material Description	
	PID (ppm)	Sample Interval (ft)	Time		
0-35			Overburden		
35-38			Schist		
38-44			Gniess		
44-46			Soft (dirty)		
46-58			Gniess		
58-60			Soft		
60-63			Gniess		
63-64			Soft		
64-70			Gniess		
70-72			Soft (brown)		
72-75			Gniess		
75-76			Soft (wet)		
76-80			Gniess		

Boring terminated at 80 ft BGS

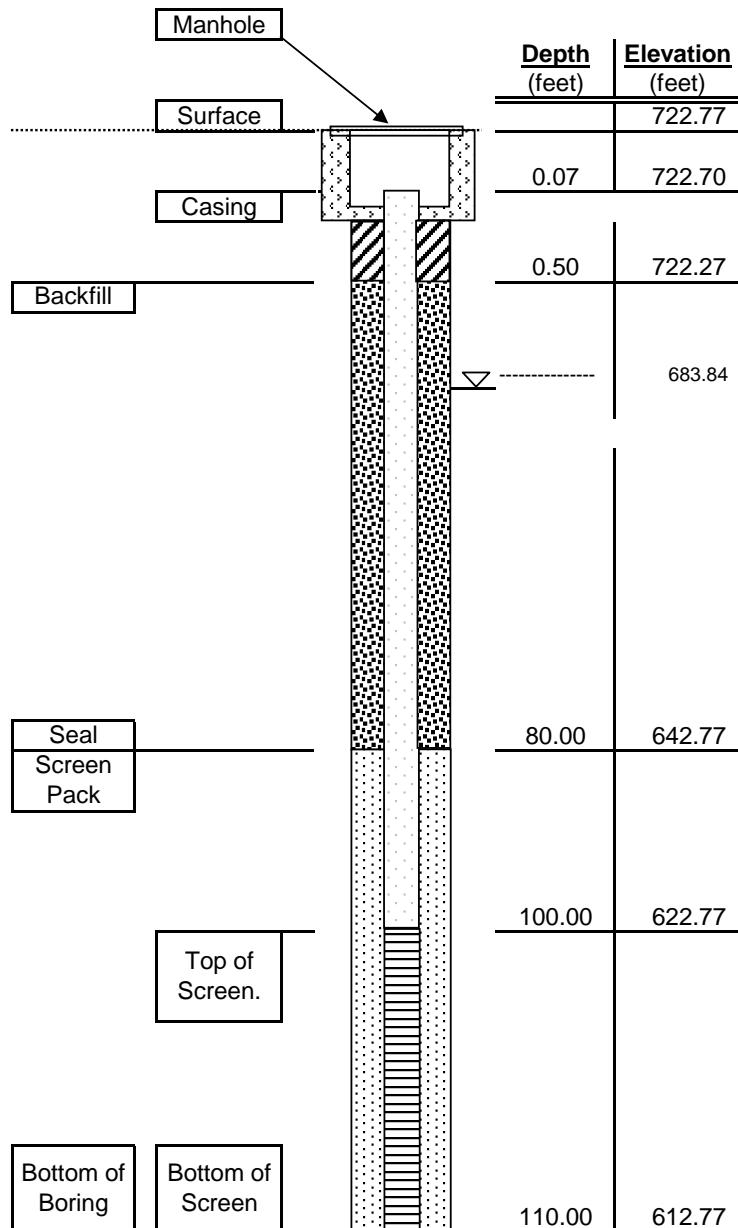
Appendix E: Well Diagrams

WELL CONSTRUCTION DIAGRAM



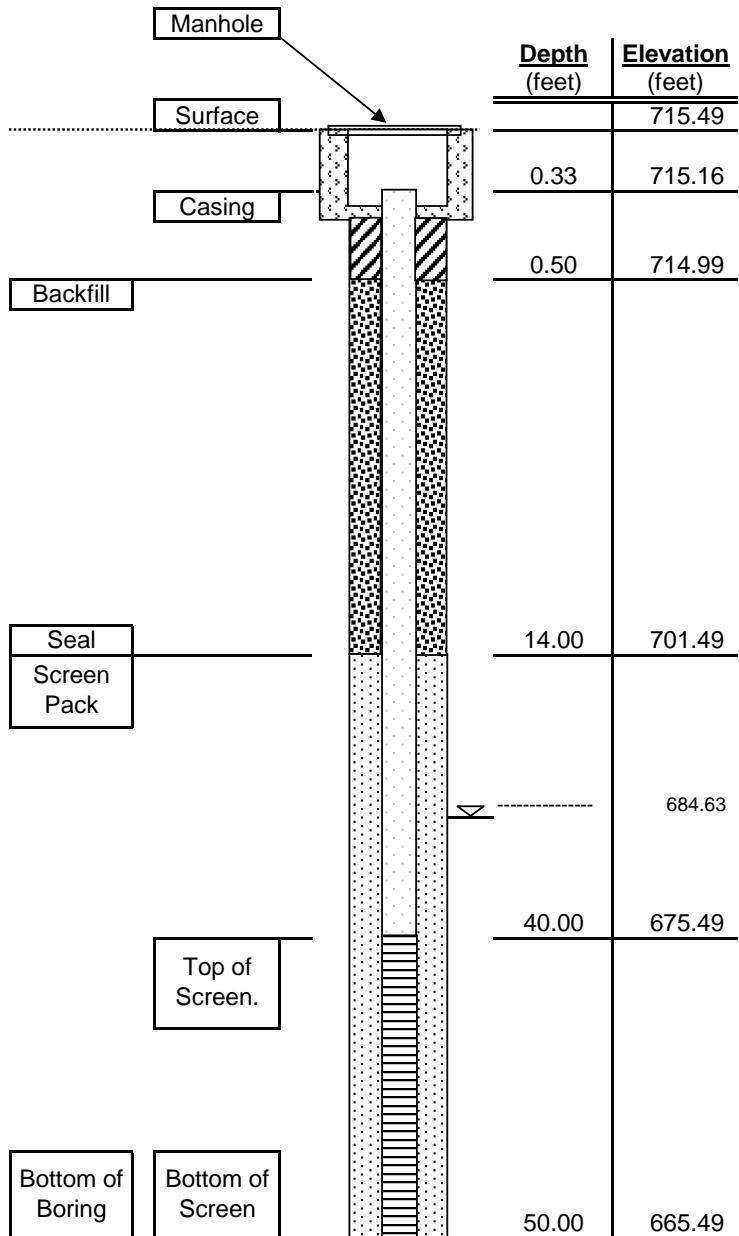
Well No.	10-1
Location	CVTC, Madison Heights, VA
Installation Date	09/21/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	15 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC, 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	35.82
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



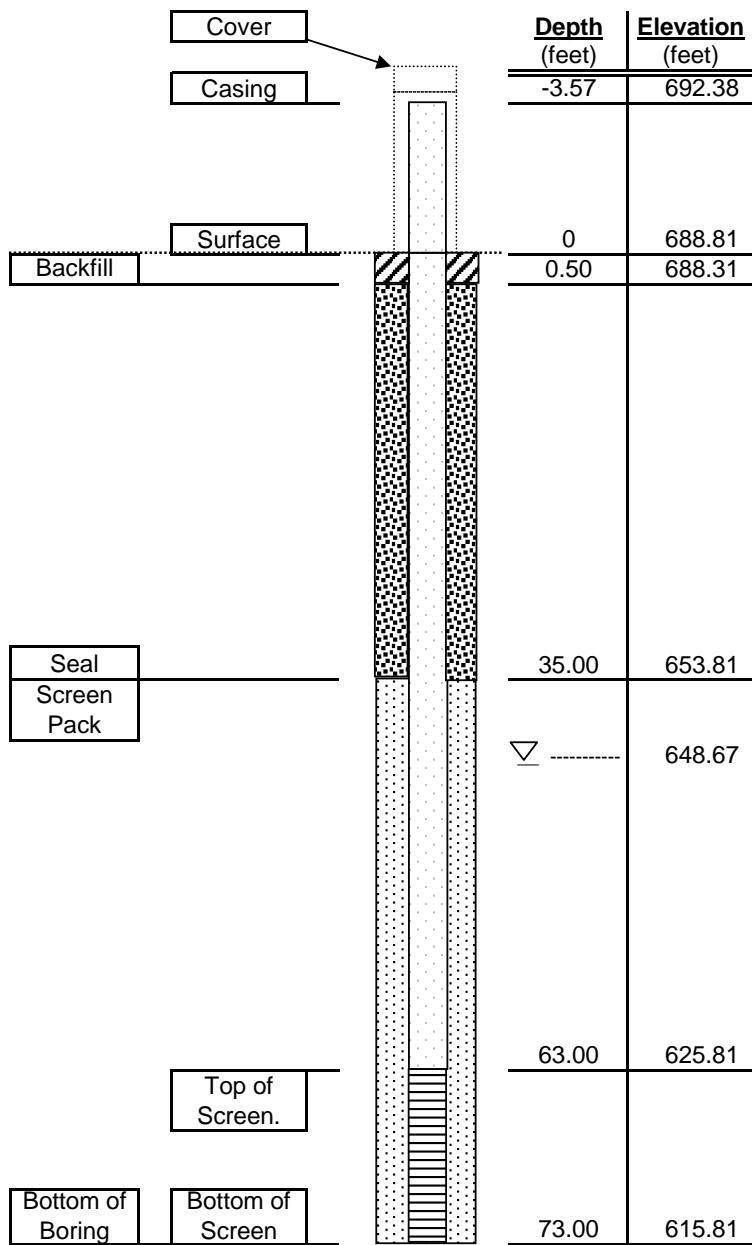
Well No.	10-2
Location	CVTC, Madison Heights, VA
Installation Date	09/21/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	33 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC, 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	38.86
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



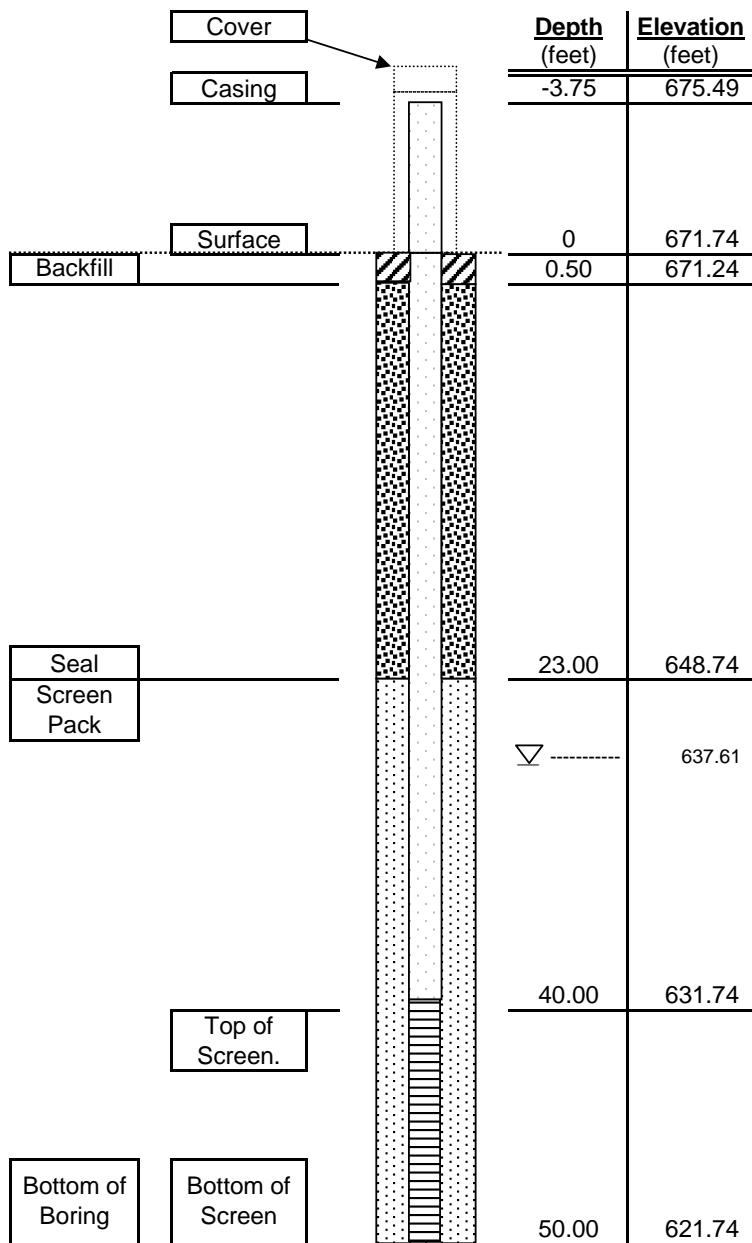
Well No.	10-3
Location	CVTC, Madison Heights, VA
Installation Date	09/21/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	30 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC, 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	30.53
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



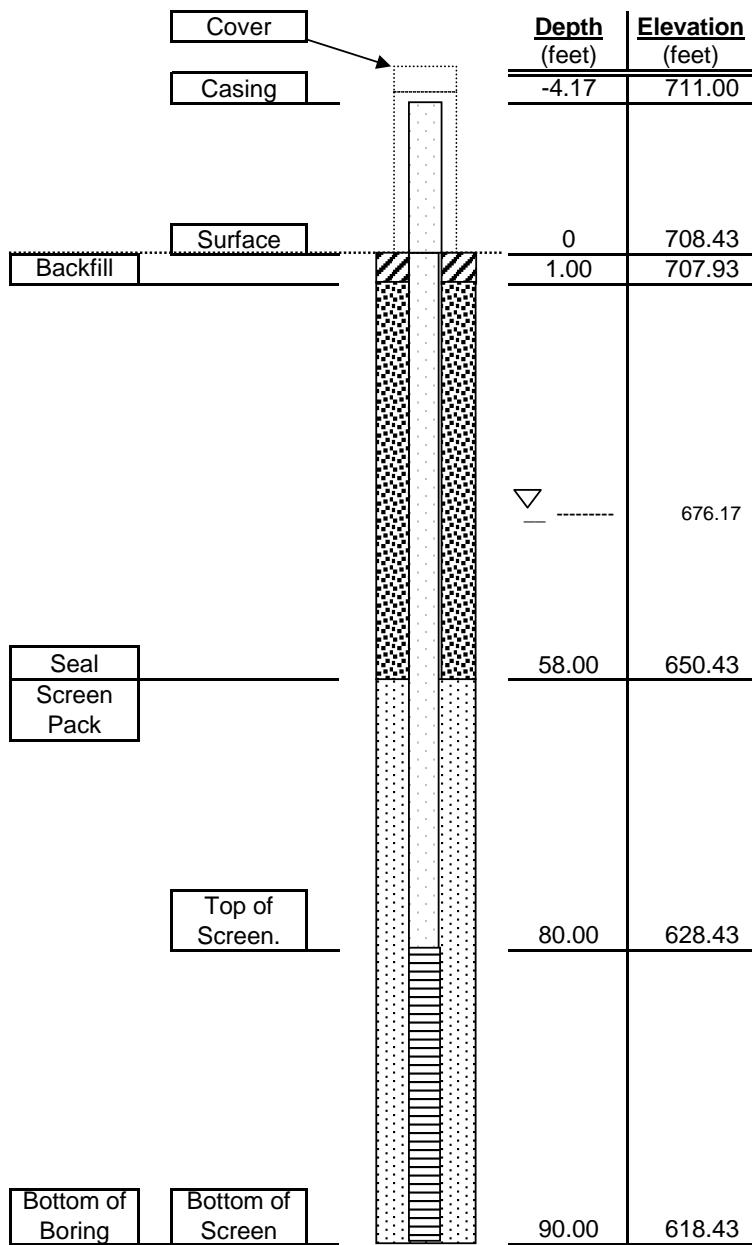
Well No.	13-1
Location	CVTC Madison Heights, VA
Installation Date	09/21/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	18 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	43.71
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



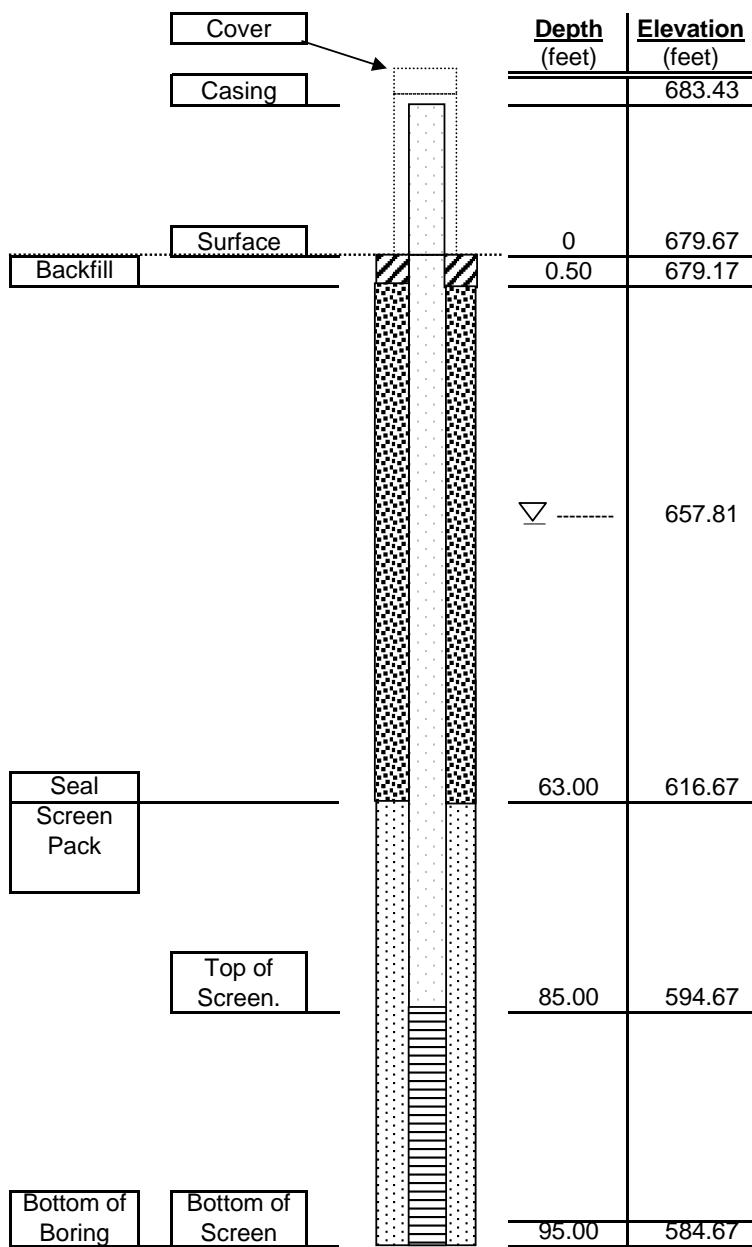
Well No.	<u>13-2</u>
Location	<u>CVTC Madison Heights, VA</u>
Installation Date	<u>09/21/17</u>
Drilling Method	<u>Air Rotary</u>
Drilling Contractor	<u>Rorrer</u>
Drilling Fluid	<u>water, as needed</u>
Water Removed During Development	<u>17 gallons</u>
Borehole Dia.	<u>6"</u>
Casing Dia.	<u>2"</u>
Casing Type	<u>PVC Schedule 40</u>
Screen Type	<u>PVC 0.020"</u>
Backfill	<u>Bentonite grout 60/40</u>
Screen Pack	<u>#2 Sand</u>
Water Depth (below TOC)	<u>37.88</u>
Seal	<u>Bentonite, 3/8" granules</u>
Notes	<u>Static water level measured on 10/2/2017</u>

WELL CONSTRUCTION DIAGRAM



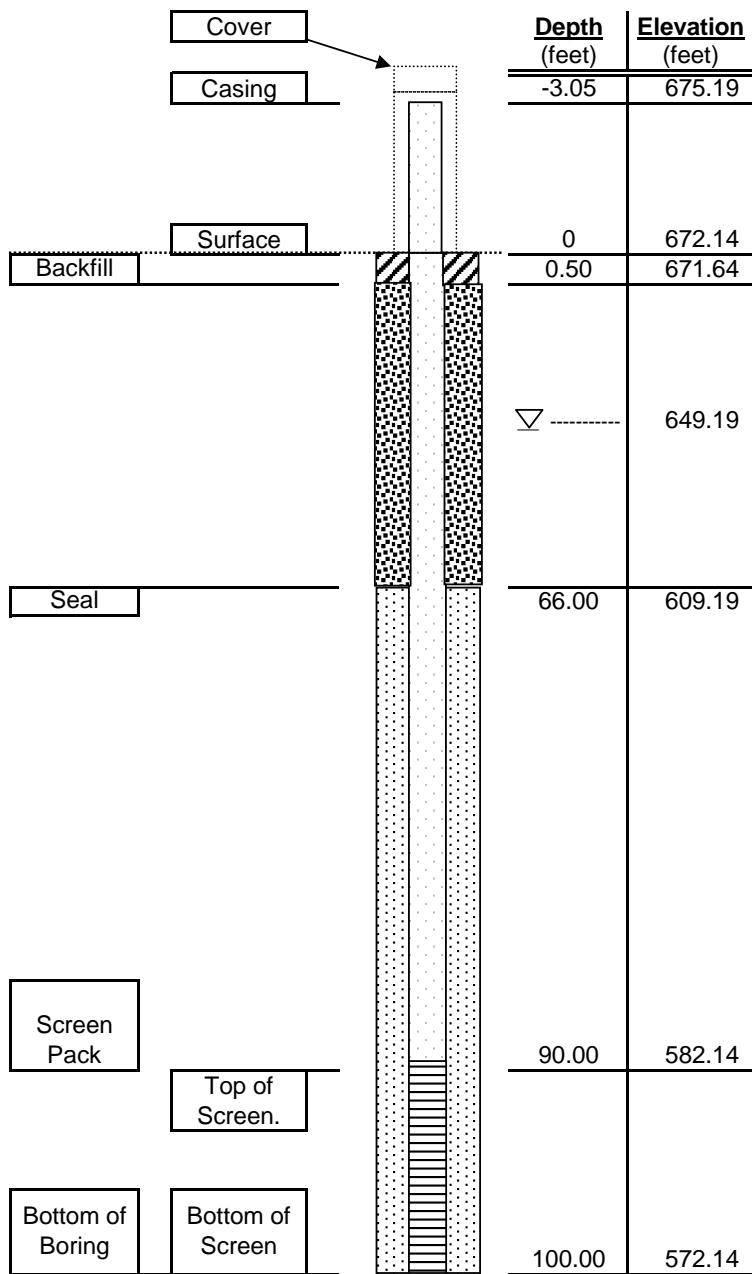
Well No.	14-1
Location	CVTC Madison Heights, VA
Installation Date	09/19/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	10 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	34.83
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



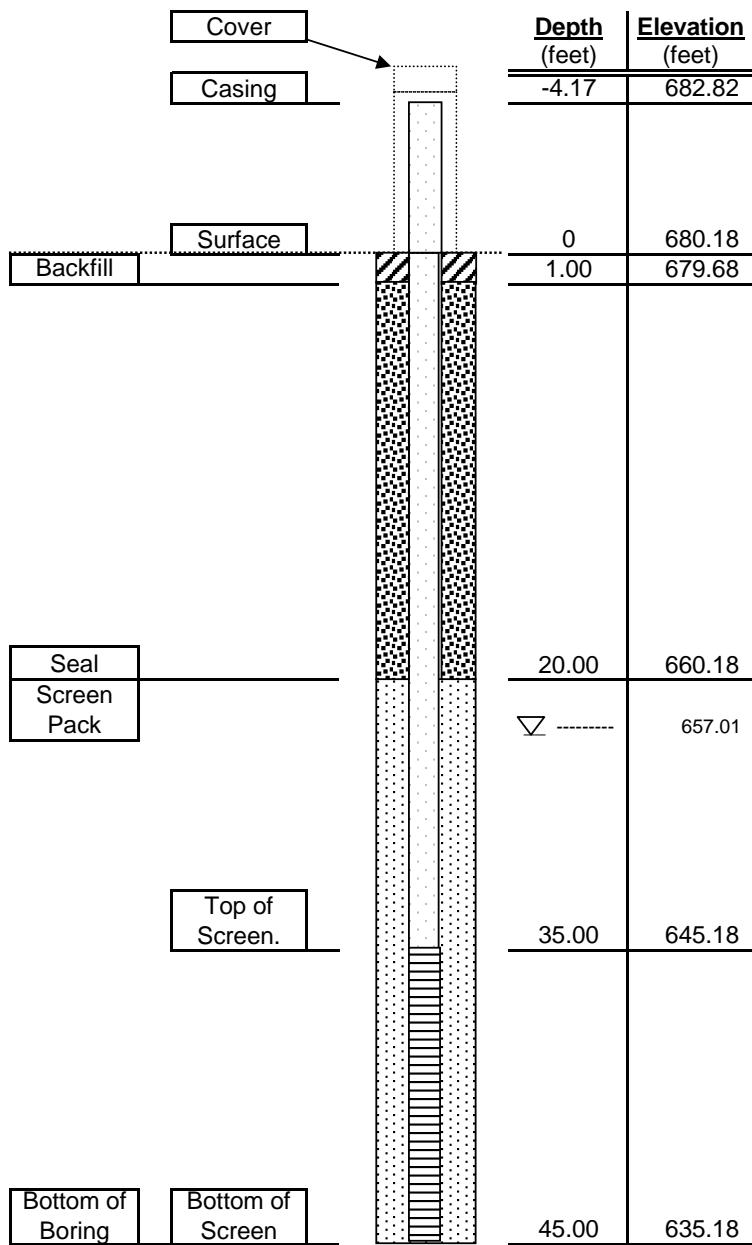
Well No.	14-2
Location	CVTC Madison Heights, VA
Installation Date	09/20/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	30 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	25.62
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



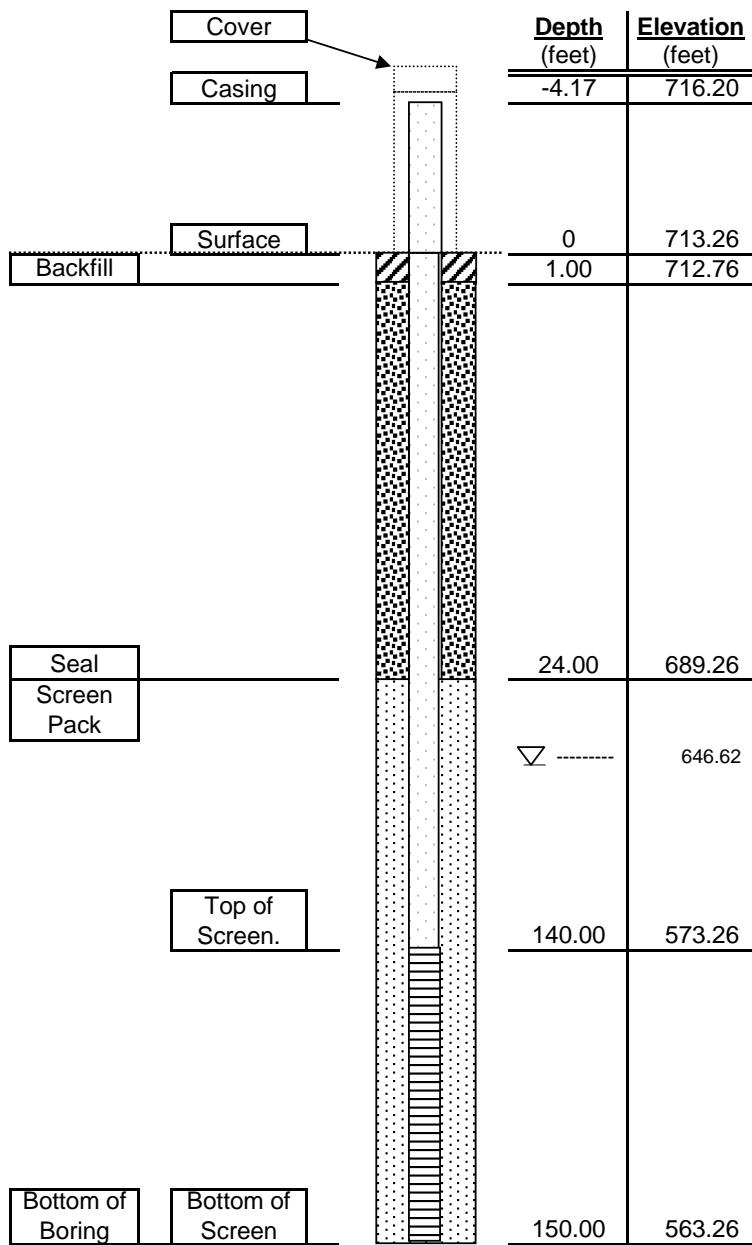
Well No.	<u>14-3</u>
Location	<u>CVTC Madison Heights, VA</u>
Installation Date	<u>09/20/17</u>
Drilling Method	<u>Air Rotary</u>
Drilling Contractor	<u>Rorrer</u>
Drilling Fluid	<u>water, as needed</u>
Water Removed During Development	<u>35 gallons</u>
Borehole Dia.	<u>6"</u>
Casing Dia.	<u>2"</u>
Casing Type	<u>PVC Schedule 40</u>
Screen Type	<u>PVC 0.020"</u>
Backfill	<u>Bentonite grout 60/40</u>
Screen Pack	<u>#2 Sand</u>
Water Depth (below TOC)	<u>26</u>
Seal	<u>Bentonite, 3/8" granules</u>
Notes	<u>Static water level measured on 10/2/2017</u>

WELL CONSTRUCTION DIAGRAM



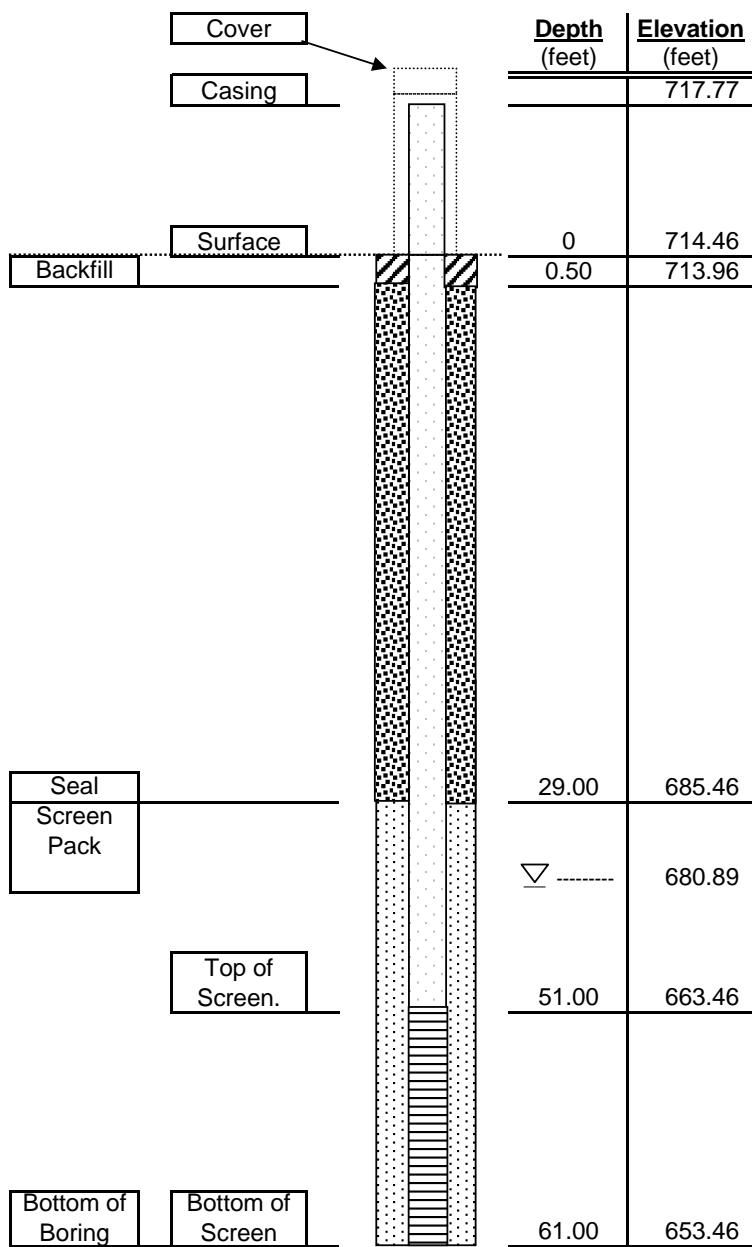
Well No.	<u>15-1</u>
Location	<u>CVTC Madison Heights, VA</u>
Installation Date	<u>09/26/17</u>
Drilling Method	<u>Air Rotary</u>
Drilling Contractor	<u>Rorrer</u>
Drilling Fluid	<u>water, as needed</u>
Water Removed During Development	<u>12 gallons</u>
Borehole Dia.	<u>6"</u>
Casing Dia.	<u>2"</u>
Casing Type	<u>PVC Schedule 40</u>
Screen Type	<u>PVC 0.020"</u>
Backfill	<u>Bentonite grout 60/40</u>
Screen Pack	<u>#2 Sand</u>
Water Depth (below TOC)	<u>25.81</u>
Seal	<u>Bentonite, 3/8" granules</u>
Notes	<u>Static water level measured on 10/2/2017</u>

WELL CONSTRUCTION DIAGRAM



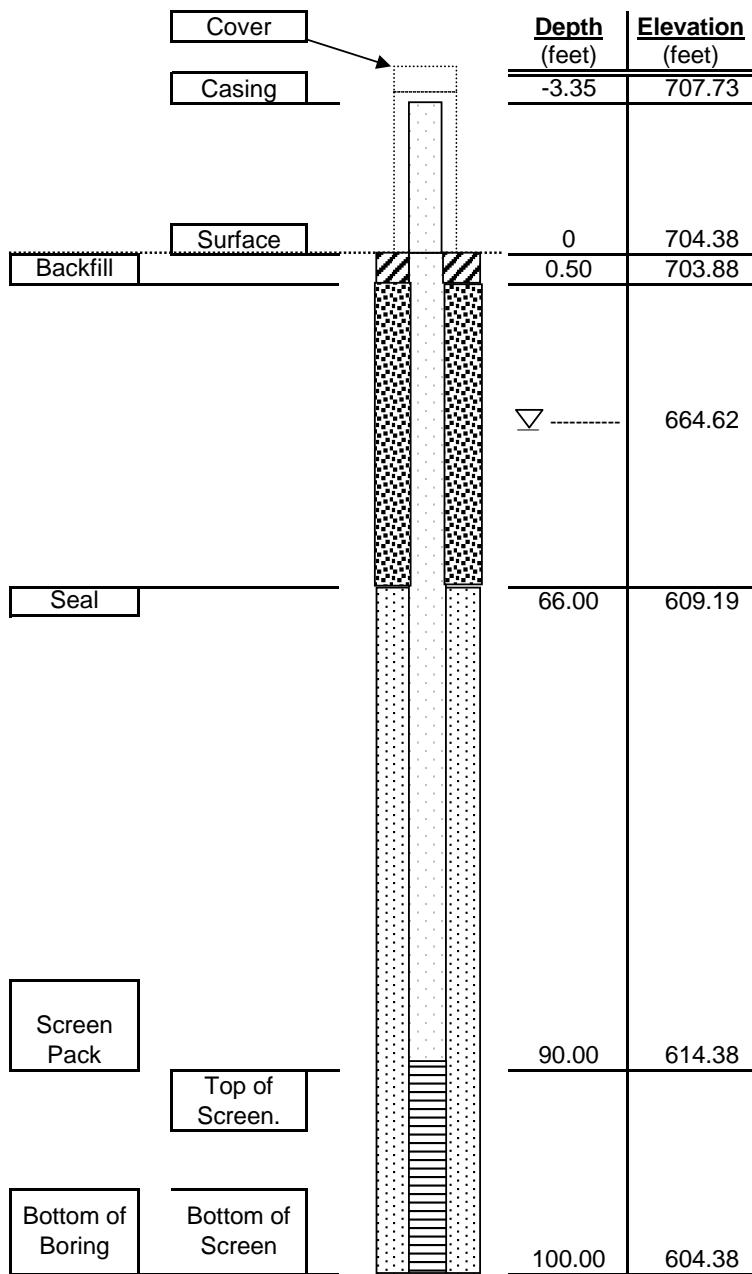
Well No.	<u>16-1</u>
Location	<u>CVTC Madison Heights, VA</u>
Installation Date	<u>09/22/17</u>
Drilling Method	<u>Air Rotary</u>
Drilling Contractor	<u>Rorrer</u>
Drilling Fluid	<u>water, as needed</u>
Water Removed During Development	<u>27 gallons</u>
Borehole Dia.	<u>6"</u>
Casing Dia.	<u>2"</u>
Casing Type	<u>PVC Schedule 40</u>
Screen Type	<u>PVC 0.020"</u>
Backfill	<u>Bentonite grout 60/40</u>
Screen Pack	<u>#2 Sand</u>
Water Depth (below TOC)	<u>69.58</u>
Seal	<u>Bentonite, 3/8" granules</u>
Notes	<u>Static water level measured on 10/2/2017</u>

WELL CONSTRUCTION DIAGRAM



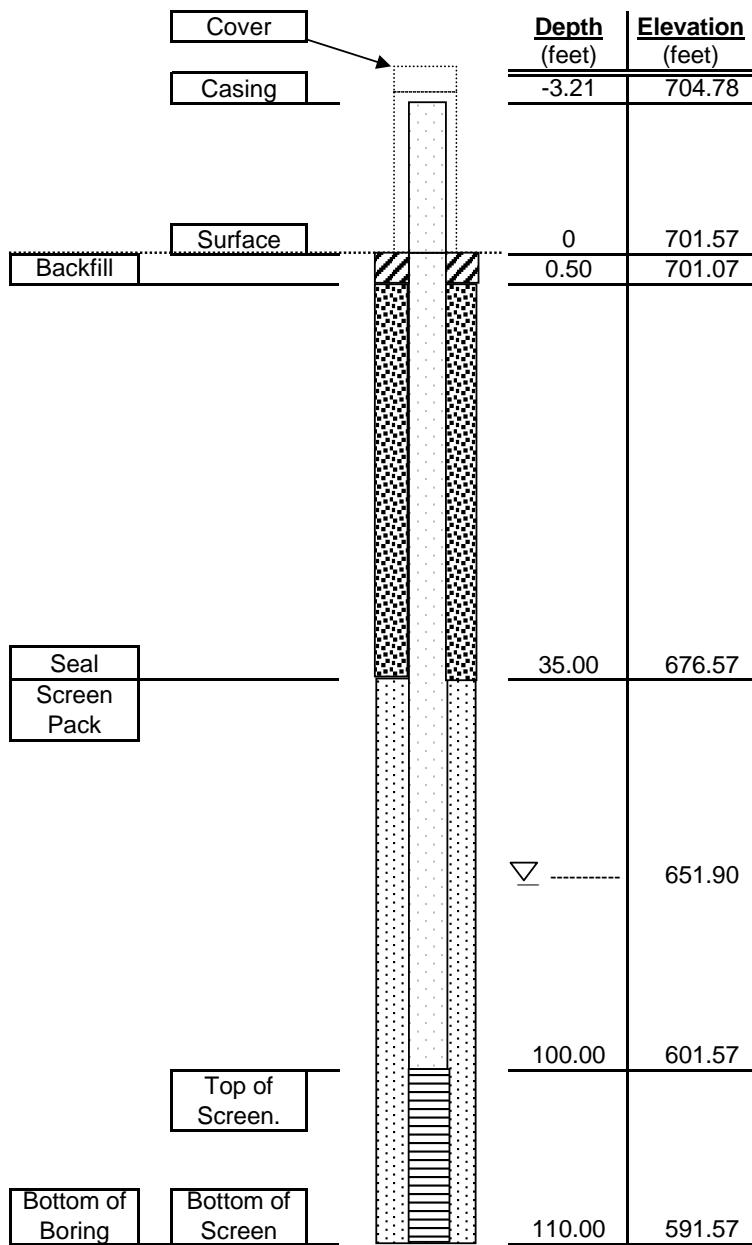
Well No.	16-2
Location	CVTC Madison Heights, VA
Installation Date	09/25/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	13 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	36.88
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



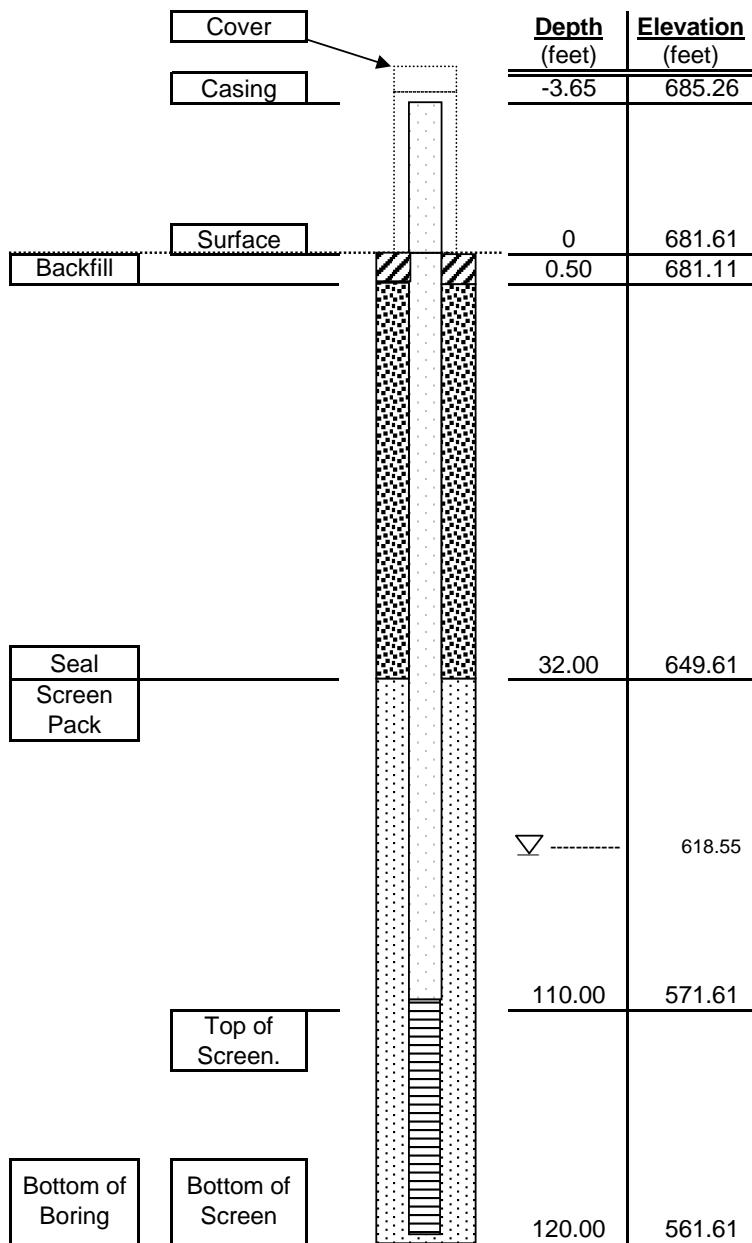
Well No.	16-3
Location	CVTC Madison Heights, VA
Installation Date	09/25/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	25 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	43.11
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



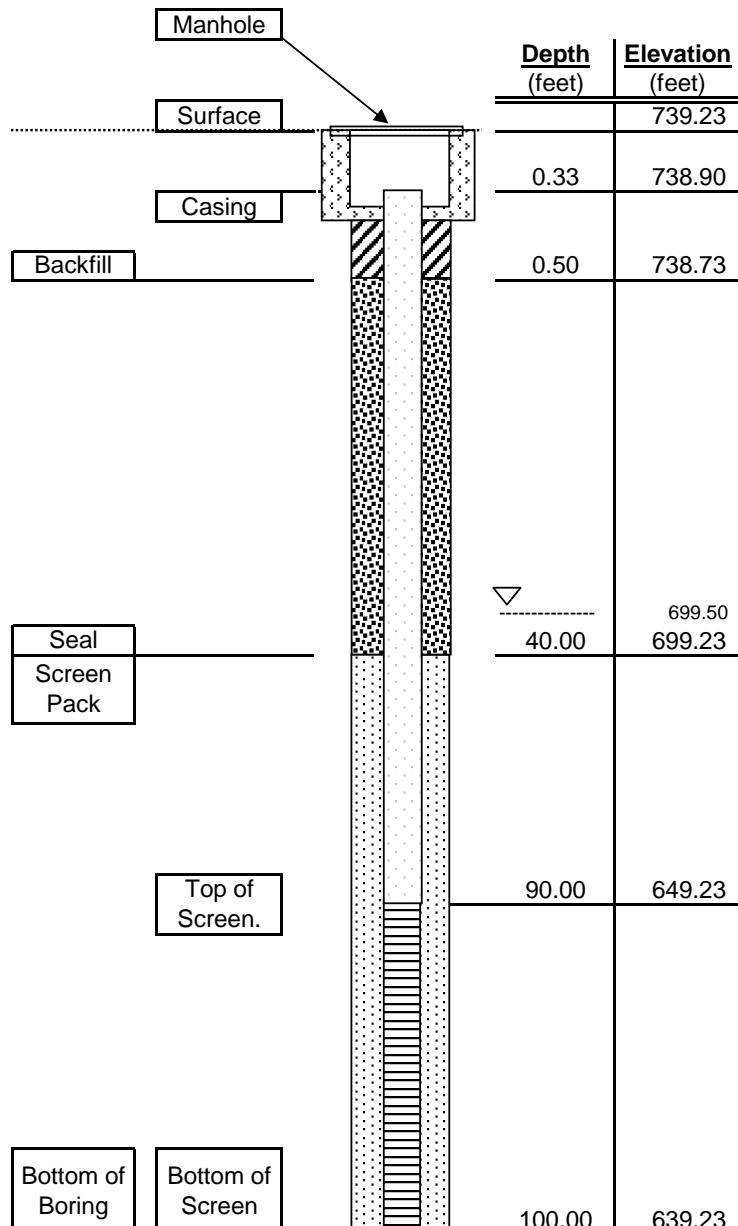
Well No.	16-4
Location	CVTC Madison Heights, VA
Installation Date	09/25/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	30 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	52.88
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



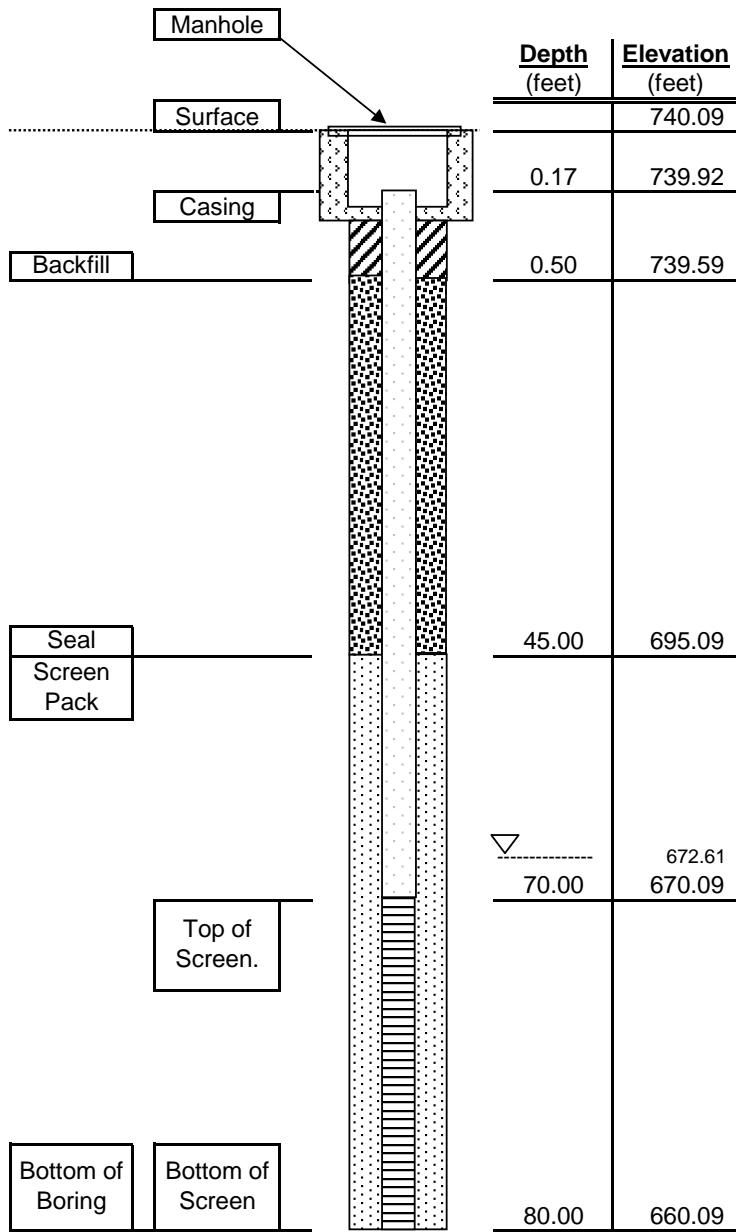
Well No.	16-5
Location	CVTC Madison Heights, VA
Installation Date	09/26/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	28 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	66.71
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



Well No.	30-1
Location	CVTC, Madison Heights, VA
Installation Date	09/20/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	27 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC, 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	39.4
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

WELL CONSTRUCTION DIAGRAM



Well No.	30-2
Location	CVTC, Madison Heights, VA
Installation Date	09/20/17
Drilling Method	Air Rotary
Drilling Contractor	Rorrer
Drilling Fluid	water, as needed
Water Removed During Development	13 gallons
Borehole Dia.	6"
Casing Dia.	2"
Casing Type	PVC Schedule 40
Screen Type	PVC, 0.020"
Backfill	Bentonite grout 60/40
Screen Pack	#2 Sand
Water Depth (below TOC)	67.31
Seal	Bentonite, 3/8" granules
Notes	Static water level measured on 10/2/2017

Appendix F: Laboratory Report and Sample Custody Documentation



1941 Reymet Road • Richmond, Virginia 23237 • Tel: (804)-358-8295 Fax: (804)-358-8297

Certificate of Analysis

Final Report

Laboratory Order ID 17J0173

Client Name:	EEE Consulting (Blacksburg, VA) 201 Church Street Blacksburg, VA 24060	Date Received:	October 5, 2017 13:50
		Date Issued:	October 24, 2017 9:53
		Project Number:	17-802
Submitted To:	Jeff Fisher	Purchase Order:	17-802 Task 2.2

Client Site I.D.: CVTC

Enclosed are the results of analyses for samples received by the laboratory on 10/05/2017 13:50. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

A handwritten signature in black ink that reads "Ted Soyars".

Ted Soyars
Laboratory Manager

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Air Water & Soil Laboratories, Inc.





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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/24/2017 9:53
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

ANALYTICAL REPORT FOR SAMPLES

Laboratory Order ID 17J0173

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
13-3	17J0173-01	Soil	09/11/2017 09:55	10/05/2017 13:50
13-8	17J0173-02	Soil	09/11/2017 10:22	10/05/2017 13:50

Analysis for TCDD was subcontracted to Cape Fear Analytical. The subcontracted results are attached at the end of this Certificate of Analysis.



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/24/2017 9:53
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17J0173

Analytical Results

Sample I.D. 13-3 Laboratory Sample ID: 17J0173-01

Grab Date/Time: 09/11/2017 09:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
-----------	---------	--------	--------	------	-----------------	------	-----------------------	--------------------	---------

Subcontracted Analysis

2,3,7,8-TCDD	01	SW8290	Attached	--	1	10/24/17 09:25	10/24/17 09:28	N/A
--------------	----	--------	----------	----	---	----------------	----------------	-----



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 9:53

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17J0173

Analytical Results

Sample I.D. 13-8 Laboratory Sample ID: 17J0173-02

Grab Date/Time: 09/11/2017 10:22

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
-----------	---------	--------	--------	------	-----------------	------	-----------------------	--------------------	---------

Subcontracted Analysis

2,3,7,8-TCDD 02 SW8290 Attached -- 1 10/24/17 09:25 10/24/17 09:28 N/A

Analytical Summary

Administrative

Preparation Method:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
-----------	--	--------	----------	-------------	----------------

Subcontracted Analysis

		Preparation Method:	*** DEFAULT PREP ***
17J0173-01	1.00 g / 1.00 mL	SW8290	BAJ0723
17J0173-02	1.00 g / 1.00 mL	SW8290	BAJ0723



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/24/2017 9:53
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	------



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 9:53

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Certified Analyses included in this Report

Analyte	Certifications
MdDOE	Maryland DE Drinking Water
NC	North Carolina DENR
PADEP	NELAC-Pennsylvania
VELAP	NELAC-Virginia Certificate #9439
WVDEP	West Virginia DEP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/24/2017 9:53
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Summary of Data Qualifiers

Attached Attached

RPD Relative Percent Difference

Qual Qualifiers

-RE Denotes sample was re-analyzed

D.F. Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.

TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library . A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.

PCBs, Total Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.



1941 REYMET ROAD
RICHMOND, VIRGINIA 23237
(804) 358-8295 PHONE
(804) 358-8297 FAX

Chain of Custody
Form #: D1331
Rev. 1.0
Effective: Feb 14, 2014

CHAIN OF CUSTODY

COMPANY NAME: EEE Consulting		INVOICE TO: Same	PROJECT NAME/Quote #: CVTC
CONTACT: Jeff Fisher		INVOICE CONTACT:	SITE NAME: CVTC
ADDRESS: 201 Church Street, Blacksburg, VA 24060		INVOICE ADDRESS:	PROJECT NUMBER: 17-802
PHONE #:	1-540-953-0170	INVOICE PHONE #:	P.O. #: 17-802 Task 2.2
FAX #:		EMAIL: jfisher@eee-consulting.com	Pretreatment Program:
Is sample for compliance reporting? YES NO		Is sample from a chlorinated supply? YES NO	PWS I.D. #:
SAMPLER NAME (PRINT): Jeff Fisher		SAMPLER SIGNATURE:	Turn Around Time 10 Day(s)

CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered / Dissolved Metals	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	ANALYSIS / (PRESERVATIVE)					COMMENTS		
										Number of Containers	TAL Metals, Cr VI	PCB	SVOC 8270/ 2,3,7,8 TCDD SIM	VOC 8260		DRO	Herb 8151
1) 13-1	X				9-11-17	0345			1	X	X	X					
2) 13-2	X					0750			1	X	X	X					
3) 13-3	X					0955			1	X	X	X					
4) 13-4	X					1000			1	X	X	X					
5) 13-5	X					1010			1	X	X	X					
6) 13-6	X					1015			1	X	X	X					
7) 13-7	X					1018			1	X	X	X					
8) 13-8	X					1022			1	X	X	X					
9) 13-9	X					1028			1	X	X	X					
10) 13-10	X					1035			1	X	X	X					
RELINQUISHER:			DATE / TIME	RECEIVED:			DATE / TIME		C Data Packag	LAB USE ONLY			COOLER TEMP		4.2 °C		
			9-11-17 1200				9-11-17 12:00		Level I	<input type="checkbox"/>							
RELINQUISHER:			DATE / TIME	RECEIVED:			DATE / TIME		Level II	<input checked="" type="checkbox"/>	EEE-Blacksburg			17J0173			
			9-11-17 9:55				11 Sept 2017 15:55		Level III	<input type="checkbox"/>	CVTC						
RELINQUISHER:			DATE / TIME	RECEIVED:			DATE / TIME		Level IV	<input type="checkbox"/>	Recd: 09/11/2017 Due: 10/19/2017						

v130325002



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Certificate of Analysis

Final Report

Client Name:	EEE Consulting (Blacksburg, VA) 201 Church Street Blacksburg VA, 24060	Date Issued:	10/24/2017 9:53
Submitted To:	Jeff Fisher	Project Number:	17-802
Client Site I.D.:	CVTC	Purchase Order:	17-802 Task 2.2

Sample Conditions Checklist

Samples Received at:	4.20°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

Work Order Comments

As per Jeff Fisher, relog 17I0322-03 and 17I0322-08 for TCDD 1613 only on a 10 day TAT. MMB 10/5/17 13:51

CFA

Cape Fear Analytical LLC

an affiliate of **The GEL Group INC**

3306 Kitty Hawk Road, Suite 120 • Wilmington, NC 28405

P 910.795.0421www.capecfearanalytical.com

October 23, 2017

Ms. Jennifer Sult
Air Water & Soil
1941 Reymet Road
Richmond, Virginia 23237

Re: Dioxin & HRMS PCB's subcontract
Work Order: 11465
SDG: 17J0173

Dear Ms. Sult:

Cape Fear Analytical LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 06, 2017. This original data report has been prepared and reviewed in accordance with CFA's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at 910-795-0421.

Sincerely,

Cynde Larkins
Project Manager

Purchase Order: 808
Enclosures



Cape Fear
Analytical
3306 Kitty Hawk Rd. Suite 120
Wilmington, NC 28405

CFA WO#11465

CHAIN OF CUSTODY

COMPANY NAME:	AWS Labs, Inc.	INVOICE TO:	AWS Labs, Inc.	PROJECT NAME/Quote #:	17J0173
CONTACT:	Mary Mullen Boteler	INVOICE CONTACT:	Jennifer Sult	SITE NAME:	
ADDRESS:	1941 Reymet Road, Richmond, VA 23237	INVOICE ADDRESS:	1941 Reymet Rd., Richmond, VA 23237	PROJECT NUMBER:	
PHONE #:	(804) 358-8295	INVOICE PHONE #:	(804) 358-8295	P.O. #:	808
FAX #:		EMAIL:	support@awslabs.com	Pretreatment Program:	

Is sample for compliance reporting? YES NO Is sample from a chlorinated supply? YES NO PWS I.D. #:

SAMPLER NAME (PRINT): SAMPLER SIGNATURE: Turn Around Time:

CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE)							COMMENTS
											2,3,7,8 TCDD EPA 1613							
1) 17J0173-01 (13-3)	X					09/11/17	0955		S	1	X							Due 10/19/17
2) 17J0173-02 (13-8)	X					09/11/17	1022		S	1	X							
3)																		
4)																		
5)																		
6)																		
7)																		
8)																		
9)																		
10)																		

RELINQUISHED: <i>[Signature]</i>	DATE / TIME 10/5/17 1700	RECEIVED: <i>UPS</i>	DATE / TIME	QC Data Package	LAB USE ONLY	COOLER TEMP	1.8 °C
RELINQUISHED: <i>UPS</i>	DATE / TIME	RECEIVED: <i>Cynide Larkins</i>	DATE / TIME 06 OCT 17 001215	Level I <input type="checkbox"/>			
RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME 06 OCT 17 001215	Level II <input type="checkbox"/>			
				Level III <input type="checkbox"/>			
				Level IV <input type="checkbox"/>			

SAMPLE RECEIPT CHECKLIST
Cape Fear Analytical

Client:	AWSL	Work Order:	11465
Shipping Company:	ULPS	Date/Time Received:	OCT 17 1215

Suspected Hazard Information		
Yes	NA	No
Shipped as DOT Hazardous?		
Samples identified as Foreign Soil?		

DOE Site Sample Packages		
Yes	NA	No*
Screened <0.5 mR/hr?		
Samples < 2x background?		

* Notify RSO of any responses in this column immediately.

Air Sample Receipt Specifics	Yes	NA	No
Air sample in shipment?			

Air Witness:

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
Shipping containers received intact and sealed?	✓			(Circle Applicable: seals broken damaged container leaking container other(describe))
Chain of Custody documents included with shipment?	✓			
Samples requiring cold preservation within 0-6°C?	✓			Preservation Method: ice bags blue ice dry ice none other (describe) $1.6^\circ + 0.2 = 1.8^\circ$
Aqueous samples found to have visible solids?	✓			Sample IDs, containers affected: Sample IDs, containers affected and pH observed:
Samples requiring chemical preservation at proper pH?	✓			If preservative added, Lot#: Sample IDs, containers affected:
Samples requiring preservation have no residual chlorine?	✓			If preservative added, Lot#: Sample IDs, tests affected:
Samples received within holding time?	✓			Sample IDs, containers affected: Sample IDs, containers affected:
Sample IDs on COC match IDs on containers?	✓			Sample IDs, containers affected: List type and number of containers / Sample IDs, containers affected: <i>1 - 8 oz clear soil jar per sample</i>
Date & time of COC match date & time on containers?	✓			
Number of containers received match number indicated on COC?	✓			
COC form is properly signed in relinquished/received sections?	✓			

Comments:

Checklist performed by: Initials: **CJF** Date: **OCT 17**

CF-UD-F-7

High Resolution Dioxins and Furans Analysis

Case Narrative

**HDOX Case Narrative
Air Water & Soil (AWSL)
SDG 17J0173
Work Order 11465**

Method/Analysis Information

Product: TCDD Only by EPA Method 1613B in Solids
Analytical Method: EPA Method 1613B
Extraction Method: SW846 3540C
Analytical Batch Number: 35937
Clean Up Batch Number: 35936
Extraction Batch Number: 35935

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA Method 1613B:

Sample ID	Client ID
11465001	17J0173-01 (13-3)
11465002	17J0173-02 (13-8)
12019796	Method Blank (MB)
12019797	Laboratory Control Sample (LCS)
12019798	Laboratory Control Sample Duplicate (LCSD)
12019799	11465001(17J0173-01 (13-3)) Matrix Spike (MS)
12019800	11465001(17J0173-01 (13-3)) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-002 REV# 14.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

Calibration Information

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

Continuing Calibration Verification (CCV) Requirements

All associated calibration verification standard(s) (CCV) met the acceptance criteria.

Quality Control (QC) Information

Certification Statement

The test results presented in this document are certified to meet all requirements of the 2009 TNI Standard.

Method Blank (MB) Statement

The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery

The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement

The RPD(s) between the LCS and LCSD met the acceptance limits.

QC Sample Designation

Sample 11465001 (17J0173-01 (13-3)) - Batch 35937 was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD(s) between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

Holding Time Specifications

CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of

expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation

A NCR was not required for this SDG.

Manual Integrations

Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction. Manual integrations were required for data files in this SDG.

Sample Preparation

No difficulties were encountered during sample preparation.

System Configuration

This analysis was performed on the following instrument configuration:

HRP750_2	Waters Autospec Premier high-resolution GC/MS system	Waters Autospec Prem	DB-5MS	60m x 0.25mm, 0.25um
----------	--	----------------------	--------	----------------------

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Sample Data Summary

Cape Fear Analytical, LLC

3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - www.capefearanalytical.com

Certificate of Analysis Report for

AWSL001 Air Water & Soil

Client SDG: 17J0173 CFA Work Order: 11465

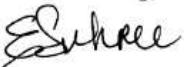
The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- K Estimated Maximum Possible Concentration
- U Analyte was analyzed for, but not detected above the specified detection limit.

Review/Validation

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

Signature: 

Name: **Erin Suhrie**

Date: **23 OCT 2017**

Title: **Data Validator**

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

SDG Number: 17J0173
Lab Sample ID: 11465001
Client Sample: 1613B TCDD Soil
Client ID: 17J0173-01 (13-3)
Batch ID: 35937
Run Date: 10/21/2017 21:46
Data File: A21OCT17A_2-5
Prep Batch: 35935
Prep Date: 16-OCT-17

Client: AWSL001
Date Collected: 09/11/2017 09:55
Date Received: 10/06/2017 12:15
Method: EPA Method 1613B
Analyst: MJC
Prep Method: SW846 3540C
Prep Aliquot: 12.25 g

Project: AWSL00110
Matrix: SOIL
%Moisture: 17.7
Prep Basis: Dry Weight
Instrument: HRP750
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	0.992	pg/g	0.992

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		174	198	pg/g	87.7	(37%-137%)
37Cl-2,3,7,8-TCDD		17.2	19.8	pg/g	86.6	(42%-164%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

Page 1 of 1

SDG Number: 17J0173
Lab Sample ID: 11465002
Client Sample: 1613B TCDD Soil
Client ID: 17J0173-02 (13-8)
Batch ID: 35937
Run Date: 10/22/2017 00:08
Data File: A21OCT17A_2-8
Prep Batch: 35935
Prep Date: 16-OCT-17

Client: AWSL001
Date Collected: 09/11/2017 10:22
Date Received: 10/06/2017 12:15
Method: EPA Method 1613B
Analyst: MJC
Prep Method: SW846 3540C
Prep Aliquot: 12.64 g

Project: AWSL00110
Matrix: SOIL
%Moisture: 20.7
Prep Basis: Dry Weight
Instrument: HRP750
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	0.997	pg/g	0.997

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		151	199	pg/g	75.8	(37%-137%)
37Cl-2,3,7,8-TCDD		16.3	19.9	pg/g	81.6	(42%-164%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Quality Control Summary

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 17J0173

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12019797	LCS for batch 35935	13C-2,3,7,8-TCDD 37Cl-2,3,7,8-TCDD		83.1 83.0	(25%-141%) (37%-158%)
12019798	LCSD for batch 35935	13C-2,3,7,8-TCDD 37Cl-2,3,7,8-TCDD		83.4 81.2	(25%-141%) (37%-158%)
12019796	MB for batch 35935	13C-2,3,7,8-TCDD 37Cl-2,3,7,8-TCDD		85.4 83.1	(37%-137%) (42%-164%)
11465001	17J0173-01 (13-3)	13C-2,3,7,8-TCDD 37Cl-2,3,7,8-TCDD		87.7 86.6	(37%-137%) (42%-164%)
12019799	17J0173-01 (13-3)(11465001MS)	13C-2,3,7,8-TCDD 37Cl-2,3,7,8-TCDD		85.3 87.2	(37%-137%) (42%-164%)
12019800	17J0173-01 (13-3)(11465001MSD)	13C-2,3,7,8-TCDD 37Cl-2,3,7,8-TCDD		80.4 82.3	(37%-137%) (42%-164%)
11465002	17J0173-02 (13-8)	13C-2,3,7,8-TCDD 37Cl-2,3,7,8-TCDD		75.8 81.6	(37%-137%) (42%-164%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Hi-Res Dioxins/Furans
Quality Control Summary
Spike Recovery Report

SDG Number: 17J0173 Sample Type: Laboratory Control Sample
Client ID: LCS for batch 35935 Matrix: SOIL
Lab Sample ID: 12019797
Instrument: HRP750 Analysis Date: 10/21/2017 18:37 Dilution: 1
Analyst: MJC Prep Batch ID: 35935
 Batch ID: 35937

CAS No.	Parmname	Amount	Spike	Recovery	Acceptance
		Added	Conc.		
		pg/g	pg/g	%	Limits
1746-01-6	LCS	20.0	20.1	100	73-146

Hi-Res Dioxins/Furans

Page 2 of 2

Quality Control Summary

Spike Recovery Report

SDG Number: 17J0173

Sample Type: Laboratory Control Sample Duplicate

Client ID: LCSD for batch 35935

Matrix: SOIL

Lab Sample ID: 12019798

Instrument: HRP750

Analysis Date: 10/21/2017 19:24

Dilution: 1

Analyst: MJC

Prep Batch ID: 35935

Batch ID: 35937

CAS No.	Parmname	Amount	Spike	Recovery	Acceptance	RPD	Acceptance
		Added	Conc.				
1746-01-6	LCSD	20.0	19.9	99.6	73-146	0.810	0-20

Hi-Res Dioxins/Furans Quality Control Summary Spike Recovery Report

SDG Number: 17J0173 **Sample Type:** Matrix Spike
Client ID: 17J0173-01 (13-3)(11465001MS) **Matrix:** SOIL
Lab Sample ID: 12019799 **%Moisture:** 17.7
Instrument: HRP750 **Analysis Date:** 10/21/2017 22:33 **Dilution:** 1
Analyst: MJC **Prep Batch ID:** 35935
 Batch ID: 35937

CAS No.	Parname	Amount Added pg/g	Spike Conc. pg/g	Recovery Acceptance	
				%	Limits
1746-01-6	MS	2,3,7,8-TCDD	19.8	U	20.4 103 70-130

Hi-Res Dioxins/Furans

Page 2 of 2

Quality Control Summary

Spike Recovery Report

SDG Number: 17J0173

Sample Type: Matrix Spike Duplicate

Client ID: 17J0173-01 (13-3)(11465001MSD)

Matrix: SOIL

Lab Sample ID: 12019800

%Moisture: 17.7

Instrument: HRP750

Analysis Date: 10/21/2017 23:21

Dilution: 1

Analyst: MJC

Prep Batch ID: 35935

Batch ID: 35937

CAS No.	Parmname		Amount	Spike	Recovery	Acceptance	RPD	Acceptance
			Added	Conc.				
1746-01-6	MSD	2,3,7,8-TCDD	19.8	U	22.0	111	70-130	7.86

Method Blank Summary

Page 1 of 1

SDG Number: 17J0173
Client ID: MB for batch 35935
Lab Sample ID: 12019796
Column:

Client: AWSL001
Instrument ID: HRP750
Prep Date: 16-OCT-17

Matrix: SOIL
Data File: A21OCT17A_2-3
Analyzed: 10/21/17 20:11

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 35935	12019797	A21OCT17A_2-1	10/21/17	1837
02 LCSD for batch 35935	12019798	A21OCT17A_2-2	10/21/17	1924
03 17J0173-01 (13-3)	11465001	A21OCT17A_2-5	10/21/17	2146
04 17J0173-01 (13-3)(11465001MS)	12019799	A21OCT17A_2-6	10/21/17	2233
05 17J0173-01 (13-3)(11465001MSD)	12019800	A21OCT17A_2-7	10/21/17	2321
06 17J0173-02 (13-8)	11465002	A21OCT17A_2-8	10/22/17	0008

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

Page 1 of 1

SDG Number: 17J0173
 Lab Sample ID: 12019796
 Client Sample: QC for batch 35935
 Client ID: MB for batch 35935
 Batch ID: 35937
 Run Date: 10/21/2017 20:11
 Data File: A21OCT17A_2-3
 Prep Batch: 35935
 Prep Date: 16-OCT-17

Client: AWSL001
 Method: EPA Method 1613B
 Analyst: MJC
 Prep Method: SW846 3540C
 Prep Aliquot: 10 g

Project: AWSL00110
 Matrix: SOIL
 Prep Basis: As Received
 Instrument: HRP750
 Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	1	pg/g	1.00

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		171	200	pg/g	85.4	(37%-137%)
37Cl-2,3,7,8-TCDD		16.6	20.0	pg/g	83.1	(42%-164%)

Comments:

K Estimated Maximum Possible Concentration

U Analyte was analyzed for, but not detected above the specified detection limit.

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

Page 1 of 1

SDG Number: 17J0173
 Lab Sample ID: 12019797
 Client Sample: QC for batch 35935
 Client ID: LCS for batch 35935
 Batch ID: 35937
 Run Date: 10/21/2017 18:37
 Data File: A21OCT17A_2-1
 Prep Batch: 35935
 Prep Date: 16-OCT-17

Client: AWSL001
 Method: EPA Method 1613B
 Analyst: MJC
 Prep Method: SW846 3540C
 Prep Aliquot: 10 g

Project: AWSL00110
 Matrix: SOIL
 Prep Basis: As Received
 Instrument: HRP750
 Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		20.1	pg/g	1.00

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		166	200	pg/g	83.1	(25%-141%)
37Cl-2,3,7,8-TCDD		16.6	20.0	pg/g	83.0	(37%-158%)

Comments:

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

Page 1 of 1

SDG Number: 17J0173
 Lab Sample ID: 12019798
 Client Sample: QC for batch 35935
 Client ID: LCSD for batch 35935
 Batch ID: 35937
 Run Date: 10/21/2017 19:24
 Data File: A21OCT17A_2-2
 Prep Batch: 35935
 Prep Date: 16-OCT-17

Client: AWSL001
 Method: EPA Method 1613B
 Analyst: MJC
 Prep Method: SW846 3540C
 Prep Aliquot: 10 g

Project: AWSL00110
 Matrix: SOIL
 Prep Basis: As Received
 Instrument: HRP750
 Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		19.9	pg/g	1.00

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		167	200	pg/g	83.4	(25%-141%)
37Cl-2,3,7,8-TCDD		16.2	20.0	pg/g	81.2	(37%-158%)

Comments:

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

Page 1 of 1

SDG Number: 17J0173
Lab Sample ID: 12019799
Client Sample: QC for batch 35935
Client ID: 17J0173-01 (13-3)(11465001MS)
Batch ID: 35937
Run Date: 10/21/2017 22:33
Data File: A21OCT17A_2-6
Prep Batch: 35935
Prep Date: 16-OCT-17

Client: AWSL001
Date Collected: 09/11/2017 09:55
Date Received: 10/06/2017 12:15
Method: EPA Method 1613B
Analyst: MJC
Prep Method: SW846 3540C
Prep Aliquot: 12.25 g

Project: AWSL00110
Matrix: SOIL
%Moisture: 17.7
Prep Basis: Dry Weight
Instrument: HRP750
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		20.4	pg/g	0.992

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		169	198	pg/g	85.3	(37%-137%)
37Cl-2,3,7,8-TCDD		17.3	19.8	pg/g	87.2	(42%-164%)

Comments:

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

Page 1 of 1

SDG Number: 17J0173
Lab Sample ID: 12019800
Client Sample: QC for batch 35935
Client ID: 17J0173-01 (13-3)(11465001MSD)
Batch ID: 35937
Run Date: 10/21/2017 23:21
Data File: A21OCT17A_2-7
Prep Batch: 35935
Prep Date: 16-OCT-17

Client: AWSL001
Date Collected: 09/11/2017 09:55
Date Received: 10/06/2017 12:15
Method: EPA Method 1613B
Analyst: MJC
Prep Method: SW846 3540C
Prep Aliquot: 12.26 g

Project: AWSL00110
Matrix: SOIL
%Moisture: 17.7
Prep Basis: Dry Weight
Instrument: HRP750
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		22.0	pg/g	0.991

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		159	198	pg/g	80.4	(37%-137%)
37Cl-2,3,7,8-TCDD		16.3	19.8	pg/g	82.3	(42%-164%)

Comments:



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Certificate of Analysis

Final Report

Sample Delivery Group ID CVTC GW 10317

Client Name: EEE Consulting (Blacksburg, VA)	Date Issued:	10/24/2017 16:07
201 Church Street	Project Number:	17-802
Blacksburg, VA 24060	Purchase Order:	CVTC 17-802

Submitted To: Jeff Fisher

Client Site I.D.: CVTC

Enclosed are the results of analyses for samples received by the laboratory in sample delivery group CVTC GW 10317 . Work orders included in the sample delivery group:

17J0515

10/17/2017 8:00

A handwritten signature in black ink that reads "Ted Soyars".

Ted Soyars

Laboratory Manager

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.





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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/24/2017 16:07
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

ANALYTICAL REPORT FOR SAMPLES

Laboratory Order ID 17J0515

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S1	17J0515-01	Surface Water	10/16/2017 11:55	10/17/2017 08:00
S2	17J0515-02	Surface Water	10/16/2017 12:10	10/17/2017 08:00
S3	17J0515-03	Surface Water	10/16/2017 12:40	10/17/2017 08:00
Building 30	17J0515-04	Solids	10/16/2017 11:30	10/17/2017 08:00

PCB results have been calculated based on dry weight.



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S1	Laboratory Sample ID: 17J0515-01							
Grab Date/Time:		10/16/2017 11:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	01	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:53	BG
Arsenic	01	SW6010C	<0.0200 mg/L		0.0200	1	10/17/17 17:00	10/18/17 20:53	BG
Arsenic	01	SW6020A	1.2 ug/L		1.0	1	10/17/17 17:00	10/18/17 16:02	MWL
Barium	01	SW6010C	0.0406 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:53	BG
Beryllium	01	SW6010C	<0.0040 mg/L		0.0040	1	10/17/17 17:00	10/18/17 20:53	BG
Cadmium	01	SW6010C	<0.0040 mg/L		0.0040	1	10/17/17 17:00	10/18/17 20:53	BG
Cobalt	01	SW6010C	<0.0040 mg/L		0.0040	1	10/17/17 17:00	10/18/17 20:53	BG
Chromium	01	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:53	BG
Copper	01	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:53	BG
Mercury	01	SW7470A	<0.00020 mg/L		0.00020	1	10/17/17 10:30	10/17/17 14:59	RCV
Nickel	01	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:53	BG
Lead	01	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:53	BG
Antimony	01	SW6020A	<1.00 ug/L		1.00	1	10/17/17 17:00	10/18/17 16:02	MWL
Selenium	01	SW6010C	<0.0500 mg/L		0.0500	1	10/17/17 17:00	10/18/17 20:53	BG
Tin	01	SW6010C	<0.0200 mg/L		0.0200	1	10/17/17 17:00	10/18/17 20:53	BG
Thallium	01	SW6020A	<1.00 ug/L		1.00	1	10/17/17 17:00	10/18/17 16:02	MWL
Vanadium	01	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:53	BG
Zinc	01	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:53	BG
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	10/17/17 10:02	10/17/17 10:02	KCS
1,1,1-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,1,2,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	10/17/17 10:02	10/17/17 10:02	KCS
1,1,2-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,1-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,1-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,1-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results		Laboratory Sample ID: 17J0515-01							
Sample I.D.	S1								
Grab Date/Time:	10/16/2017 11:55								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,3-Trichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,2,4-Trichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,2-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,2-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,2-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,3-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,3-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
1,4-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
2,2-Dichloropropane	01	SW8260B	<2.00 ug/L		2.00	1	10/17/17 10:02	10/17/17 10:02	KCS
2-Butanone (MEK)	01	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:02	10/17/17 10:02	KCS
2-Hexanone (MBK)	01	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:02	10/17/17 10:02	KCS
4-Methyl-2-pentanone (MIBK)	01	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Acetone	01	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:02	10/17/17 10:02	KCS
Acetonitrile	01	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:02	10/17/17 10:02	KCS
Acrolein	01	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:02	10/17/17 10:02	KCS
Acrylonitrile	01	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Allyl chloride	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Benzene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Bromochloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Bromodichloromethane	01	SW8260B	<0.50 ug/L		0.50	1	10/17/17 10:02	10/17/17 10:02	KCS
Bromoform	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Bromomethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Carbon disulfide	01	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:02	10/17/17 10:02	KCS
Carbon tetrachloride	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Chlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Chloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results		Laboratory Sample ID: 17J0515-01							
Sample I.D.	S1								
Grab Date/Time:	10/16/2017 11:55								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloroform	01	SW8260B	<0.50 ug/L		0.50	1	10/17/17 10:02	10/17/17 10:02	KCS
Chloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Chloroprene	01	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:02	10/17/17 10:02	KCS
cis-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
cis-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Dibromochloromethane	01	SW8260B	<0.50 ug/L		0.50	1	10/17/17 10:02	10/17/17 10:02	KCS
Dibromomethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Dichlorodifluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Ethyl methacrylate	01	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Ethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Hexachlorobutadiene	01	SW8260B	<0.80 ug/L		0.80	1	10/17/17 10:02	10/17/17 10:02	KCS
Iodomethane	01	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:02	10/17/17 10:02	KCS
Isobutyl Alcohol	01	SW8260B	<40.0 ug/L		40.0	1	10/17/17 10:02	10/17/17 10:02	KCS
m+p-Xylenes	01	SW8260B	<2.00 ug/L		2.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Methacrylonitrile	01	SW8260B	<1.50 ug/L		1.50	1	10/17/17 10:02	10/17/17 10:02	KCS
Methyl methacrylate	01	SW8260B	<2.00 ug/L		2.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Methylene chloride	01	SW8260B	<4.00 ug/L		4.00	1	10/17/17 10:02	10/17/17 10:02	KCS
o-Xylene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Propionitrile	01	SW8260B	<40.0 ug/L		40.0	1	10/17/17 10:02	10/17/17 10:02	KCS
Styrene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Tetrachloroethylene (PCE)	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Toluene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
trans-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
trans-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
trans-1,4-Dichloro-2-butene	01	SW8260B	<4.00 ug/L		4.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Trichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S1	Laboratory Sample ID: 17J0515-01							
Grab Date/Time:		10/16/2017 11:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Trichlorofluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Vinyl acetate	01	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:02	10/17/17 10:02	KCS
Vinyl chloride	01	SW8260B	<0.50 ug/L		0.50	1	10/17/17 10:02	10/17/17 10:02	KCS
Xylenes, Total	01	SW8260B	<3.00 ug/L		3.00	1	10/17/17 10:02	10/17/17 10:02	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	01	SW8260B	98.2 %		70-120		10/17/17 10:02	10/17/17 10:02	KCS
Surr: 4-Bromofluorobenzene (Surr)	01	SW8260B	98.4 %		75-120		10/17/17 10:02	10/17/17 10:02	KCS
Surr: Dibromofluoromethane (Surr)	01	SW8260B	98.8 %		80-119		10/17/17 10:02	10/17/17 10:02	KCS
Surr: Toluene-d8 (Surr)	01	SW8260B	100 %		85-120		10/17/17 10:02	10/17/17 10:02	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	01	EPA625	Not Detected			1	10/19/17 09:33	10/19/17 20:18	SKS
1,2,4,5-Tetrachlorobenzene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
1,3,5-Trinitrobenzene	01	SW8270D	<5.38 ug/L		5.38	1	10/19/17 09:33	10/19/17 20:18	SKS
1,3-Dinitrobenzene	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
1,4-Naphthoquinone	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
1-Naphthylamine	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2,3,4,6-Tetrachlorophenol	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2,4,5-Trichlorophenol	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2,4,6-Trichlorophenol	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2,4-Dichlorophenol	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2,4-Dimethylphenol	01	SW8270D	<0.54 ug/L		0.54	1	10/19/17 09:33	10/19/17 20:18	SKS
2,4-Dinitrophenol	01	SW8270D	<53.8 ug/L		53.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2,4-Dinitrotoluene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2,6-Dichlorophenol	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2,6-Dinitrotoluene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S1	Laboratory Sample ID: 17J0515-01							
Grab Date/Time:		10/16/2017 11:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Acetylaminofluorene	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
2-Chloronaphthalene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2-Chlorophenol	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2-Methylnaphthalene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2-Naphthylamine	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2-Nitroaniline	01	SW8270D	<21.5 ug/L		21.5	1	10/19/17 09:33	10/19/17 20:18	SKS
2-Nitrophenol	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
3,3'-Dichlorobenzidine	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
3,3'-Dimethylbenzidine	01	SW8270D	<2.69 ug/L	C	2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
3-Methylcholanthrene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
3-Nitroaniline	01	SW8270D	<21.5 ug/L		21.5	1	10/19/17 09:33	10/19/17 20:18	SKS
4,6-Dinitro-2-methylphenol	01	SW8270D	<53.8 ug/L		53.8	1	10/19/17 09:33	10/19/17 20:18	SKS
4-Aminobiphenyl	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
4-Bromophenyl phenyl ether	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
4-Chloroaniline	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
4-Chlorophenyl phenyl ether	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
4-Nitroaniline	01	SW8270D	<21.5 ug/L	C	21.5	1	10/19/17 09:33	10/19/17 20:18	SKS
4-Nitrophenol	01	SW8270D	<53.8 ug/L		53.8	1	10/19/17 09:33	10/19/17 20:18	SKS
5-Nitro-o-toluidine	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
7,12-Dimethylbenz (a) anthracene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Acenaphthene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Acenaphthylene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Acetophenone	01	SW8270D	<21.5 ug/L		21.5	1	10/19/17 09:33	10/19/17 20:18	SKS
Anthracene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Benzo (a) anthracene	01	SW8270D	<0.05 ug/L		0.05	1	10/19/17 09:33	10/19/17 20:18	SKS
Benzo (a) pyrene	01	SW8270D	<0.11 ug/L	C	0.11	1	10/19/17 09:33	10/19/17 20:18	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S1	Laboratory Sample ID: 17J0515-01							
Grab Date/Time:		10/16/2017 11:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (b) fluoranthene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Benzo (g,h,i) perylene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Benzo (k) fluoranthene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Benzyl alcohol	01	SW8270D	<21.5 ug/L		21.5	1	10/19/17 09:33	10/19/17 20:18	SKS
bis (2-Chloroethoxy) methane	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
bis (2-Chloroethyl) ether	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
2,2'-Oxybis (1-chloropropane)	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
Butyl benzyl phthalate	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Chlorobenzilate	01	SW8270D	<2.69 ug/L	C	2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
Chrysene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Diallate	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
Dibenz (a,h) anthracene	01	SW8270D	<10.8 ug/L	C	10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Dibenzofuran	01	SW8270D	<5.38 ug/L		5.38	1	10/19/17 09:33	10/19/17 20:18	SKS
Diethyl phthalate	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Dimethoate	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
Dimethyl phthalate	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Di-n-butyl phthalate	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Di-n-octyl phthalate	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Diphenylamine	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Disulfoton	01	SW8270D	<2.69 ug/L	C	2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
Ethyl methanesulfonate	01	SW8270D	<21.5 ug/L		21.5	1	10/19/17 09:33	10/19/17 20:18	SKS
Ethyl parathion	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
Famphur	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
Fluoranthene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Fluorene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S1	Laboratory Sample ID: 17J0515-01							
Grab Date/Time:		10/16/2017 11:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobenzene	01	SW8270D	<0.05 ug/L		0.05	1	10/19/17 09:33	10/19/17 20:18	SKS
Hexachlorobutadiene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Hexachlorocyclopentadiene	01	SW8270D	<10.8 ug/L	C	10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Hexachloroethane	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Hexachloropropene	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
Indeno (1,2,3-cd) pyrene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Isodrin	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Isophorone	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Isosafrole	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Kepone	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
m+p-Cresols	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Methaphyrlene	01	SW8270D	<10.8 ug/L	C	10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Methyl methanesulfonate	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Methyl parathion	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
Naphthalene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Nitrobenzene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
n-Nitrosodiethylamine	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
n-Nitrosodimethylamine	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
n-Nitrosodi-n-butylamine	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
n-Nitrosodi-n-propylamine	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
n-Nitrosodiphenylamine	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
n-Nitrosomethyleneethylamine	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
n-Nitrosopiperidine	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
n-Nitrosopyrrolidine	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
o,o,o-Triethyl phosphorothioate	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S1	Laboratory Sample ID: 17J0515-01							
Grab Date/Time:		10/16/2017 11:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o,o-Diethyl o-2-pyrazinyl phosphorothioate	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
o+m+p-Cresols	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
o-Cresol	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
o-Toluidine	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
p-(Dimethylamino) azobenzene	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
p-Chloro-m-cresol	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Pentachlorobenzene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Pentachloronitrobenzene (quintozone)	01	SW8270D	<1.08 ug/L		1.08	1	10/19/17 09:33	10/19/17 20:18	SKS
Phenacetin	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Phenanthrene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Phenol	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Phorate	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
p-Phenylenediamine	01	SW8270D	<10.8 ug/L	C	10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Pronamide	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Pyrene	01	SW8270D	<10.8 ug/L		10.8	1	10/19/17 09:33	10/19/17 20:18	SKS
Safrole	01	SW8270D	<2.69 ug/L		2.69	1	10/19/17 09:33	10/19/17 20:18	SKS
Surr: 2,4,6-Tribromophenol (Surr)	01	SW8270D	60.9 %		20-86		10/19/17 09:33	10/19/17 20:18	SKS
Surr: 2-Fluorobiphenyl (Surr)	01	SW8270D	42.9 %		23-87		10/19/17 09:33	10/19/17 20:18	SKS
Surr: 2-Fluorophenol (Surr)	01	SW8270D	21.4 %		10-52		10/19/17 09:33	10/19/17 20:18	SKS
Surr: Nitrobenzene-d5 (Surr)	01	SW8270D	43.3 %		10-98.5		10/19/17 09:33	10/19/17 20:18	SKS
Surr: Phenol-d5 (Surr)	01	SW8270D	18.8 %		5-33		10/19/17 09:33	10/19/17 20:18	SKS
Surr: p-Terphenyl-d14 (Surr)	01	SW8270D	63.8 %		27-133		10/19/17 09:33	10/19/17 20:18	SKS

Organochlorine Pesticides and PCBs by GC/ECD



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results		Laboratory Sample ID: 17J0515-01							
Sample I.D.	S1								
Grab Date/Time:		10/16/2017 11:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	01	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:14	LBH	
PCB as Aroclor 1221	01	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:14	LBH	
PCB as Aroclor 1232	01	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:14	LBH	
PCB as Aroclor 1242	01	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:14	LBH	
PCB as Aroclor 1248	01	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:14	LBH	
PCB as Aroclor 1254	01	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:14	LBH	
PCB as Aroclor 1260	01	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:14	LBH	
Surr: DCB	01	SW8082A	50.0 %	30-105		10/16/17 09:31	10/18/17 17:14	LBH	
Surr: TCMX	01	SW8082A	65.0 %	30-105		10/16/17 09:31	10/18/17 17:14	LBH	
4,4'-DDD	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
4,4'-DDE	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
4,4'-DDT	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
Aldrin	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
alpha-BHC	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
beta-BHC	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
Chlordane	01	SW8081B	<0.211 ug/L	0.211	1	10/17/17 09:16	10/18/17 17:14	LBH	
delta-BHC	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
Dieldrin	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
Endosulfan I	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
Endosulfan II	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
Endosulfan sulfate	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
Endrin	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
Endrin aldehyde	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
gamma-BHC (Lindane)	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
Heptachlor	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	
Heptachlor epoxide	01	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:14	LBH	



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S1	Laboratory Sample ID: 17J0515-01							
Grab Date/Time:		10/16/2017 11:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Methoxychlor	01	SW8081B	<0.053 ug/L		0.053	1	10/17/17 09:16	10/18/17 17:14	LBH
Toxaphene	01	SW8081B	<1.05 ug/L		1.05	1	10/17/17 09:16	10/18/17 17:14	LBH
Surr: TCMX	01	SW8081B	60.0 %		18-112		10/17/17 09:16	10/18/17 17:14	LBH
Surr: DCB	01	SW8081B	50.0 %		27-131		10/17/17 09:16	10/18/17 17:14	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	01	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 21:25	CVH
2,4,5-TP (Silvex)	01	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 21:25	CVH
2,4-D	01	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 21:25	CVH
Dinoseb	01	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 21:25	CVH
Pentachlorophenol	01	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 21:25	CVH
Surr: DCAA (Surr)	01	SW8151A	120 %	S	60-112		10/18/17 14:08	10/23/17 21:25	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	01	SW8011	<0.010 ug/L		0.010	1	10/17/17 15:14	10/20/17 05:41	LBH
1,2,3-Trichloropropane	01	SW8011	<0.010 ug/L		0.010	1	10/17/17 15:14	10/20/17 05:41	LBH
1,2-Dibromo-3-chloropropane (DBCP)	01	SW8011	<0.010 ug/L		0.010	1	10/17/17 15:14	10/20/17 05:41	LBH
Wet Chemistry Analysis									
Cyanide	01	SW9012B	<0.01 mg/L	Cl	0.01	1	10/19/17 16:14	10/19/17 16:14	BBP
Chromium, Hexavalent	01	SW7196A	<0.005 mg/L		0.005	1	10/17/17 09:15	10/17/17 11:30	MWL
Sulfide	01	SW9215	<1.00 mg/L		1.00	1	10/20/17 16:00	10/20/17 16:00	BBP



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S2	Laboratory Sample ID: 17J0515-02							
Grab Date/Time:		10/16/2017 12:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	02	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:59	BG
Arsenic	02	SW6010C	<0.0200 mg/L		0.0200	1	10/17/17 17:00	10/18/17 20:59	BG
Arsenic	02	SW6020A	1.1 ug/L		1.0	1	10/17/17 17:00	10/18/17 16:19	MWL
Barium	02	SW6010C	0.0378 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:59	BG
Beryllium	02	SW6010C	<0.0040 mg/L		0.0040	1	10/17/17 17:00	10/18/17 20:59	BG
Cadmium	02	SW6010C	<0.0040 mg/L		0.0040	1	10/17/17 17:00	10/18/17 20:59	BG
Cobalt	02	SW6010C	<0.0040 mg/L		0.0040	1	10/17/17 17:00	10/18/17 20:59	BG
Chromium	02	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:59	BG
Copper	02	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:59	BG
Mercury	02	SW7470A	<0.00020 mg/L		0.00020	1	10/17/17 10:30	10/17/17 15:05	RCV
Nickel	02	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:59	BG
Lead	02	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:59	BG
Antimony	02	SW6020A	<1.00 ug/L		1.00	1	10/17/17 17:00	10/18/17 16:19	MWL
Selenium	02	SW6010C	<0.0500 mg/L		0.0500	1	10/17/17 17:00	10/18/17 20:59	BG
Tin	02	SW6010C	<0.0200 mg/L		0.0200	1	10/17/17 17:00	10/18/17 20:59	BG
Thallium	02	SW6020A	<1.00 ug/L		1.00	1	10/17/17 17:00	10/18/17 16:19	MWL
Vanadium	02	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:59	BG
Zinc	02	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 20:59	BG
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	10/17/17 10:49	10/17/17 10:49	KCS
1,1,1-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,1,2,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	10/17/17 10:49	10/17/17 10:49	KCS
1,1,2-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,1-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,1-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,1-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results		Laboratory Sample ID: 17J0515-02							
Sample I.D.	S2								
Grab Date/Time:		10/16/2017 12:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,3-Trichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,2,4-Trichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,2-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,2-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,2-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,3-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,3-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
1,4-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
2,2-Dichloropropane	02	SW8260B	<2.00 ug/L		2.00	1	10/17/17 10:49	10/17/17 10:49	KCS
2-Butanone (MEK)	02	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:49	10/17/17 10:49	KCS
2-Hexanone (MBK)	02	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:49	10/17/17 10:49	KCS
4-Methyl-2-pentanone (MIBK)	02	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Acetone	02	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:49	10/17/17 10:49	KCS
Acetonitrile	02	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:49	10/17/17 10:49	KCS
Acrolein	02	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:49	10/17/17 10:49	KCS
Acrylonitrile	02	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Allyl chloride	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Benzene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Bromochloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Bromodichloromethane	02	SW8260B	<0.50 ug/L		0.50	1	10/17/17 10:49	10/17/17 10:49	KCS
Bromoform	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Bromomethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Carbon disulfide	02	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:49	10/17/17 10:49	KCS
Carbon tetrachloride	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Chlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Chloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results		Laboratory Sample ID: 17J0515-02							
Sample I.D.	S2								
Grab Date/Time:		10/16/2017 12:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloroform	02	SW8260B	<0.50 ug/L		0.50	1	10/17/17 10:49	10/17/17 10:49	KCS
Chloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Chloroprene	02	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:49	10/17/17 10:49	KCS
cis-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
cis-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Dibromochloromethane	02	SW8260B	<0.50 ug/L		0.50	1	10/17/17 10:49	10/17/17 10:49	KCS
Dibromomethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Dichlorodifluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Ethyl methacrylate	02	SW8260B	<5.00 ug/L		5.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Ethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Hexachlorobutadiene	02	SW8260B	<0.80 ug/L		0.80	1	10/17/17 10:49	10/17/17 10:49	KCS
Iodomethane	02	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:49	10/17/17 10:49	KCS
Isobutyl Alcohol	02	SW8260B	<40.0 ug/L		40.0	1	10/17/17 10:49	10/17/17 10:49	KCS
m+p-Xylenes	02	SW8260B	<2.00 ug/L		2.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Methacrylonitrile	02	SW8260B	<1.50 ug/L		1.50	1	10/17/17 10:49	10/17/17 10:49	KCS
Methyl methacrylate	02	SW8260B	<2.00 ug/L		2.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Methylene chloride	02	SW8260B	<4.00 ug/L		4.00	1	10/17/17 10:49	10/17/17 10:49	KCS
o-Xylene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Propionitrile	02	SW8260B	<40.0 ug/L		40.0	1	10/17/17 10:49	10/17/17 10:49	KCS
Styrene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Tetrachloroethylene (PCE)	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Toluene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
trans-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
trans-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS
trans-1,4-Dichloro-2-butene	02	SW8260B	<4.00 ug/L		4.00	1	10/17/17 10:49	10/17/17 10:49	KCS
Trichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49	KCS



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Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results								
Sample I.D.	S2	Laboratory Sample ID:					17J0515-02	
Grab Date/Time:		10/16/2017 12:10						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time Analyst
Volatile Organic Compounds by GCMS								
Trichlorofluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/17/17 10:49	10/17/17 10:49 KCS
Vinyl acetate	02	SW8260B	<10.0 ug/L		10.0	1	10/17/17 10:49	10/17/17 10:49 KCS
Vinyl chloride	02	SW8260B	<0.50 ug/L		0.50	1	10/17/17 10:49	10/17/17 10:49 KCS
Xylenes, Total	02	SW8260B	<3.00 ug/L		3.00	1	10/17/17 10:49	10/17/17 10:49 KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	02	SW8260B	98.6 %		70-120		10/17/17 10:49	10/17/17 10:49 KCS
Surr: 4-Bromofluorobenzene (Surr)	02	SW8260B	99.6 %		75-120		10/17/17 10:49	10/17/17 10:49 KCS
Surr: Dibromofluoromethane (Surr)	02	SW8260B	94.9 %		80-119		10/17/17 10:49	10/17/17 10:49 KCS
Surr: Toluene-d8 (Surr)	02	SW8260B	100 %		85-120		10/17/17 10:49	10/17/17 10:49 KCS
Semivolatile Organic Compounds by GCMS								
2,3,7,8-TCDD (SIM)	02	EPA625	Not Detected			1	10/19/17 09:33	10/19/17 20:50 SKS
1,2,4,5-Tetrachlorobenzene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50 SKS
1,3,5-Trinitrobenzene	02	SW8270D	<5.15 ug/L		5.15	1	10/19/17 09:33	10/19/17 20:50 SKS
1,3-Dinitrobenzene	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50 SKS
1,4-Naphthoquinone	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50 SKS
1-Naphthylamine	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50 SKS
2,3,4,6-Tetrachlorophenol	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50 SKS
2,4,5-Trichlorophenol	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50 SKS
2,4,6-Trichlorophenol	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50 SKS
2,4-Dichlorophenol	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50 SKS
2,4-Dimethylphenol	02	SW8270D	<0.52 ug/L		0.52	1	10/19/17 09:33	10/19/17 20:50 SKS
2,4-Dinitrophenol	02	SW8270D	<51.5 ug/L		51.5	1	10/19/17 09:33	10/19/17 20:50 SKS
2,4-Dinitrotoluene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50 SKS
2,6-Dichlorophenol	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50 SKS
2,6-Dinitrotoluene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50 SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S2	Laboratory Sample ID: 17J0515-02							
Grab Date/Time:		10/16/2017 12:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Acetylaminofluorene	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
2-Chloronaphthalene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
2-Chlorophenol	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
2-Methylnaphthalene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
2-Naphthylamine	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
2-Nitroaniline	02	SW8270D	<20.6 ug/L		20.6	1	10/19/17 09:33	10/19/17 20:50	SKS
2-Nitrophenol	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
3,3'-Dichlorobenzidine	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
3,3'-Dimethylbenzidine	02	SW8270D	<2.58 ug/L	C	2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
3-Methylcholanthrene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
3-Nitroaniline	02	SW8270D	<20.6 ug/L		20.6	1	10/19/17 09:33	10/19/17 20:50	SKS
4,6-Dinitro-2-methylphenol	02	SW8270D	<51.5 ug/L		51.5	1	10/19/17 09:33	10/19/17 20:50	SKS
4-Aminobiphenyl	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
4-Bromophenyl phenyl ether	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
4-Chloroaniline	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
4-Chlorophenyl phenyl ether	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
4-Nitroaniline	02	SW8270D	<20.6 ug/L	C	20.6	1	10/19/17 09:33	10/19/17 20:50	SKS
4-Nitrophenol	02	SW8270D	<51.5 ug/L		51.5	1	10/19/17 09:33	10/19/17 20:50	SKS
5-Nitro-o-toluidine	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
7,12-Dimethylbenz (a) anthracene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Acenaphthene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Acenaphthylene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Acetophenone	02	SW8270D	<20.6 ug/L		20.6	1	10/19/17 09:33	10/19/17 20:50	SKS
Anthracene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Benzo (a) anthracene	02	SW8270D	<0.05 ug/L		0.05	1	10/19/17 09:33	10/19/17 20:50	SKS
Benzo (a) pyrene	02	SW8270D	<0.10 ug/L	C	0.10	1	10/19/17 09:33	10/19/17 20:50	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S2	Laboratory Sample ID: 17J0515-02							
Grab Date/Time:		10/16/2017 12:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (b) fluoranthene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Benzo (g,h,i) perylene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Benzo (k) fluoranthene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Benzyl alcohol	02	SW8270D	<20.6 ug/L		20.6	1	10/19/17 09:33	10/19/17 20:50	SKS
bis (2-Chloroethoxy) methane	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
bis (2-Chloroethyl) ether	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
2,2'-Oxybis (1-chloropropane)	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
bis (2-Ethylhexyl) phthalate	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
Butyl benzyl phthalate	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Chlorobenzilate	02	SW8270D	<2.58 ug/L	C	2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
Chrysene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Diallate	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
Dibenz (a,h) anthracene	02	SW8270D	<10.3 ug/L	C	10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Dibenzofuran	02	SW8270D	<5.15 ug/L		5.15	1	10/19/17 09:33	10/19/17 20:50	SKS
Diethyl phthalate	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Dimethoate	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
Dimethyl phthalate	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Di-n-butyl phthalate	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Di-n-octyl phthalate	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Diphenylamine	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Disulfoton	02	SW8270D	<2.58 ug/L	C	2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
Ethyl methanesulfonate	02	SW8270D	<20.6 ug/L		20.6	1	10/19/17 09:33	10/19/17 20:50	SKS
Ethyl parathion	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
Famphur	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
Fluoranthene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Fluorene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S2	Laboratory Sample ID: 17J0515-02							
Grab Date/Time:		10/16/2017 12:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobenzene	02	SW8270D	<0.05 ug/L		0.05	1	10/19/17 09:33	10/19/17 20:50	SKS
Hexachlorobutadiene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Hexachlorocyclopentadiene	02	SW8270D	<10.3 ug/L	C	10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Hexachloroethane	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Hexachloropropene	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
Indeno (1,2,3-cd) pyrene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Isodrin	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Isophorone	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Isosafrole	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Kepone	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
m+p-Cresols	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Methaphyrlene	02	SW8270D	<10.3 ug/L	C	10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Methyl methanesulfonate	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Methyl parathion	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
Naphthalene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
Nitrobenzene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
n-Nitrosodiethylamine	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
n-Nitrosodimethylamine	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
n-Nitrosodi-n-butylamine	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
n-Nitrosodi-n-propylamine	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
n-Nitrosodiphenylamine	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
n-Nitrosomethylethylamine	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
n-Nitrosopiperidine	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS
n-Nitrosopyrrolidine	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50	SKS
o,o,o-Triethyl phosphorothioate	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50	SKS



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Certificate of Analysis

Final Report

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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results		Laboratory Sample ID: 17J0515-02						
Sample I.D.	S2							
Grab Date/Time:		10/16/2017 12:10						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time
Semivolatile Organic Compounds by GCMS								
o,o-Diethyl o-2-pyrazinyl phosphorothioate	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50
o+m+p-Cresols	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50
o-Cresol	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50
o-Toluidine	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50
p-(Dimethylamino) azobenzene	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50
p-Chloro-m-cresol	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50
Pentachlorobenzene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50
Pentachloronitrobenzene (quintozone)	02	SW8270D	<1.03 ug/L		1.03	1	10/19/17 09:33	10/19/17 20:50
Phenacetin	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50
Phenanthrene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50
Phenol	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50
Phorate	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50
p-Phenylenediamine	02	SW8270D	<10.3 ug/L	C	10.3	1	10/19/17 09:33	10/19/17 20:50
Pronamide	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50
Pyrene	02	SW8270D	<10.3 ug/L		10.3	1	10/19/17 09:33	10/19/17 20:50
Safrole	02	SW8270D	<2.58 ug/L		2.58	1	10/19/17 09:33	10/19/17 20:50
Surr: 2,4,6-Tribromophenol (Surr)	02	SW8270D	81.8 %		20-86		10/19/17 09:33	10/19/17 20:50
Surr: 2-Fluorobiphenyl (Surr)	02	SW8270D	65.5 %		23-87		10/19/17 09:33	10/19/17 20:50
Surr: 2-Fluorophenol (Surr)	02	SW8270D	26.7 %		10-52		10/19/17 09:33	10/19/17 20:50
Surr: Nitrobenzene-d5 (Surr)	02	SW8270D	71.2 %		10-98.5		10/19/17 09:33	10/19/17 20:50
Surr: Phenol-d5 (Surr)	02	SW8270D	26.2 %		5-33		10/19/17 09:33	10/19/17 20:50
Surr: p-Terphenyl-d14 (Surr)	02	SW8270D	62.3 %		27-133		10/19/17 09:33	10/19/17 20:50
Organochlorine Pesticides and PCBs by GC/ECD								



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Analytical Results		Laboratory Sample ID: 17J0515-02							
Sample I.D.	S2								
Grab Date/Time:		10/16/2017 12:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	02	SW8082A	<0.206 ug/L	0.206	1	10/16/17 09:31	10/18/17 17:32	LBH	
PCB as Aroclor 1221	02	SW8082A	<0.206 ug/L	0.206	1	10/16/17 09:31	10/18/17 17:32	LBH	
PCB as Aroclor 1232	02	SW8082A	<0.206 ug/L	0.206	1	10/16/17 09:31	10/18/17 17:32	LBH	
PCB as Aroclor 1242	02	SW8082A	<0.206 ug/L	0.206	1	10/16/17 09:31	10/18/17 17:32	LBH	
PCB as Aroclor 1248	02	SW8082A	<0.206 ug/L	0.206	1	10/16/17 09:31	10/18/17 17:32	LBH	
PCB as Aroclor 1254	02	SW8082A	<0.206 ug/L	0.206	1	10/16/17 09:31	10/18/17 17:32	LBH	
PCB as Aroclor 1260	02	SW8082A	<0.206 ug/L	0.206	1	10/16/17 09:31	10/18/17 17:32	LBH	
Surr: DCB	02	SW8082A	70.0 %	30-105		10/16/17 09:31	10/18/17 17:32	LBH	
Surr: TCMX	02	SW8082A	50.0 %	30-105		10/16/17 09:31	10/18/17 17:32	LBH	
4,4'-DDD	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
4,4'-DDE	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
4,4'-DDT	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
Aldrin	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
alpha-BHC	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
beta-BHC	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
Chlordane	02	SW8081B	<0.206 ug/L	0.206	1	10/17/17 09:16	10/18/17 17:32	LBH	
delta-BHC	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
Dieldrin	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
Endosulfan I	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
Endosulfan II	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
Endosulfan sulfate	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
Endrin	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
Endrin aldehyde	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
gamma-BHC (Lindane)	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
Heptachlor	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	
Heptachlor epoxide	02	SW8081B	<0.052 ug/L	0.052	1	10/17/17 09:16	10/18/17 17:32	LBH	



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S2	Laboratory Sample ID: 17J0515-02							
Grab Date/Time:		10/16/2017 12:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Methoxychlor	02	SW8081B	<0.052 ug/L		0.052	1	10/17/17 09:16	10/18/17 17:32	LBH
Toxaphene	02	SW8081B	<1.03 ug/L		1.03	1	10/17/17 09:16	10/18/17 17:32	LBH
Surr: TCMX	02	SW8081B	50.0 %		18-112		10/17/17 09:16	10/18/17 17:32	LBH
Surr: DCB	02	SW8081B	60.0 %		27-131		10/17/17 09:16	10/18/17 17:32	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	02	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 21:48	CVH
2,4,5-TP (Silvex)	02	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 21:48	CVH
2,4-D	02	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 21:48	CVH
Dinoseb	02	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 21:48	CVH
Pentachlorophenol	02	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 21:48	CVH
Surr: DCAA (Surr)	02	SW8151A	100 %		60-112		10/18/17 14:08	10/23/17 21:48	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	02	SW8011	<0.010 ug/L		0.010	1	10/17/17 15:14	10/20/17 06:00	LBH
1,2,3-Trichloropropane	02	SW8011	<0.010 ug/L		0.010	1	10/17/17 15:14	10/20/17 06:00	LBH
1,2-Dibromo-3-chloropropane (DBCP)	02	SW8011	<0.010 ug/L		0.010	1	10/17/17 15:14	10/20/17 06:00	LBH
Wet Chemistry Analysis									
Cyanide	02	SW9012B	<0.01 mg/L	Cl	0.01	1	10/19/17 16:17	10/19/17 16:17	BBP
Chromium, Hexavalent	02	SW7196A	<0.005 mg/L		0.005	1	10/17/17 09:15	10/17/17 11:30	MWL
Sulfide	02	SW9215	<1.00 mg/L		1.00	1	10/20/17 16:00	10/20/17 16:00	BBP



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0515-03								
Grab Date/Time:	10/16/2017 12:40								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	03	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 21:01	BG
Arsenic	03	SW6010C	<0.0200 mg/L		0.0200	1	10/17/17 17:00	10/18/17 21:01	BG
Arsenic	03	SW6020A	1.1 ug/L		1.0	1	10/17/17 17:00	10/18/17 16:23	MWL
Barium	03	SW6010C	0.0402 mg/L		0.0100	1	10/17/17 17:00	10/18/17 21:01	BG
Beryllium	03	SW6010C	<0.0040 mg/L		0.0040	1	10/17/17 17:00	10/18/17 21:01	BG
Cadmium	03	SW6010C	<0.0040 mg/L		0.0040	1	10/17/17 17:00	10/18/17 21:01	BG
Cobalt	03	SW6010C	<0.0040 mg/L		0.0040	1	10/17/17 17:00	10/18/17 21:01	BG
Chromium	03	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 21:01	BG
Copper	03	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 21:01	BG
Mercury	03	SW7470A	<0.00020 mg/L		0.00020	1	10/17/17 10:30	10/17/17 15:12	RCV
Nickel	03	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 21:01	BG
Lead	03	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 21:01	BG
Antimony	03	SW6020A	<1.00 ug/L		1.00	1	10/17/17 17:00	10/18/17 16:23	MWL
Selenium	03	SW6010C	<0.0500 mg/L		0.0500	1	10/17/17 17:00	10/18/17 21:01	BG
Tin	03	SW6010C	<0.0200 mg/L		0.0200	1	10/17/17 17:00	10/18/17 21:01	BG
Thallium	03	SW6020A	<1.00 ug/L		1.00	1	10/17/17 17:00	10/18/17 16:23	MWL
Vanadium	03	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 21:01	BG
Zinc	03	SW6010C	<0.0100 mg/L		0.0100	1	10/17/17 17:00	10/18/17 21:01	BG
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	03	SW8260B	<0.40 ug/L		0.40	1	10/17/17 11:12	10/17/17 11:12	KCS
1,1,1-Trichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,1,2,2-Tetrachloroethane	03	SW8260B	<0.40 ug/L		0.40	1	10/17/17 11:12	10/17/17 11:12	KCS
1,1,2-Trichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,1-Dichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,1-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,1-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results		Laboratory Sample ID: 17J0515-03							
Sample I.D.	S3								
Grab Date/Time:		10/16/2017 12:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,3-Trichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,2,4-Trichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,2-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,2-Dichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,2-Dichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,3-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,3-Dichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
1,4-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
2,2-Dichloropropane	03	SW8260B	<2.00 ug/L		2.00	1	10/17/17 11:12	10/17/17 11:12	KCS
2-Butanone (MEK)	03	SW8260B	<5.00 ug/L		5.00	1	10/17/17 11:12	10/17/17 11:12	KCS
2-Hexanone (MBK)	03	SW8260B	<5.00 ug/L		5.00	1	10/17/17 11:12	10/17/17 11:12	KCS
4-Methyl-2-pentanone (MIBK)	03	SW8260B	<5.00 ug/L		5.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Acetone	03	SW8260B	<10.0 ug/L		10.0	1	10/17/17 11:12	10/17/17 11:12	KCS
Acetonitrile	03	SW8260B	<10.0 ug/L		10.0	1	10/17/17 11:12	10/17/17 11:12	KCS
Acrolein	03	SW8260B	<10.0 ug/L		10.0	1	10/17/17 11:12	10/17/17 11:12	KCS
Acrylonitrile	03	SW8260B	<5.00 ug/L		5.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Allyl chloride	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Benzene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Bromochloromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Bromodichloromethane	03	SW8260B	<0.50 ug/L		0.50	1	10/17/17 11:12	10/17/17 11:12	KCS
Bromoform	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Bromomethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Carbon disulfide	03	SW8260B	<10.0 ug/L		10.0	1	10/17/17 11:12	10/17/17 11:12	KCS
Carbon tetrachloride	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Chlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Chloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results		Laboratory Sample ID: 17J0515-03							
Sample I.D.	S3								
Grab Date/Time:		10/16/2017 12:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloroform	03	SW8260B	<0.50 ug/L		0.50	1	10/17/17 11:12	10/17/17 11:12	KCS
Chloromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Chloroprene	03	SW8260B	<5.00 ug/L		5.00	1	10/17/17 11:12	10/17/17 11:12	KCS
cis-1,2-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
cis-1,3-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Dibromochloromethane	03	SW8260B	<0.50 ug/L		0.50	1	10/17/17 11:12	10/17/17 11:12	KCS
Dibromomethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Dichlorodifluoromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Ethyl methacrylate	03	SW8260B	<5.00 ug/L		5.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Ethylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Hexachlorobutadiene	03	SW8260B	<0.80 ug/L		0.80	1	10/17/17 11:12	10/17/17 11:12	KCS
Iodomethane	03	SW8260B	<10.0 ug/L		10.0	1	10/17/17 11:12	10/17/17 11:12	KCS
Isobutyl Alcohol	03	SW8260B	<40.0 ug/L		40.0	1	10/17/17 11:12	10/17/17 11:12	KCS
m+p-Xylenes	03	SW8260B	<2.00 ug/L		2.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Methacrylonitrile	03	SW8260B	<1.50 ug/L		1.50	1	10/17/17 11:12	10/17/17 11:12	KCS
Methyl methacrylate	03	SW8260B	<2.00 ug/L		2.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Methylene chloride	03	SW8260B	<4.00 ug/L		4.00	1	10/17/17 11:12	10/17/17 11:12	KCS
o-Xylene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Propionitrile	03	SW8260B	<40.0 ug/L		40.0	1	10/17/17 11:12	10/17/17 11:12	KCS
Styrene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Tetrachloroethylene (PCE)	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Toluene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
trans-1,2-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
trans-1,3-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
trans-1,4-Dichloro-2-butene	03	SW8260B	<4.00 ug/L		4.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Trichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S3	Laboratory Sample ID: 17J0515-03							
Grab Date/Time:		10/16/2017 12:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Trichlorofluoromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Vinyl acetate	03	SW8260B	<10.0 ug/L		10.0	1	10/17/17 11:12	10/17/17 11:12	KCS
Vinyl chloride	03	SW8260B	<0.50 ug/L		0.50	1	10/17/17 11:12	10/17/17 11:12	KCS
Xylenes, Total	03	SW8260B	<3.00 ug/L		3.00	1	10/17/17 11:12	10/17/17 11:12	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	03	SW8260B	95.1 %		70-120		10/17/17 11:12	10/17/17 11:12	KCS
Surr: 4-Bromofluorobenzene (Surr)	03	SW8260B	98.5 %		75-120		10/17/17 11:12	10/17/17 11:12	KCS
Surr: Dibromofluoromethane (Surr)	03	SW8260B	92.1 %		80-119		10/17/17 11:12	10/17/17 11:12	KCS
Surr: Toluene-d8 (Surr)	03	SW8260B	99.2 %		85-120		10/17/17 11:12	10/17/17 11:12	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	03	EPA625	Not Detected			1	10/19/17 09:33	10/19/17 21:23	SKS
1,2,4,5-Tetrachlorobenzene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
1,3,5-Trinitrobenzene	03	SW8270D	<5.10 ug/L		5.10	1	10/19/17 09:33	10/19/17 21:23	SKS
1,3-Dinitrobenzene	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
1,4-Naphthoquinone	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
1-Naphthylamine	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2,3,4,6-Tetrachlorophenol	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2,4,5-Trichlorophenol	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2,4,6-Trichlorophenol	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2,4-Dichlorophenol	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2,4-Dimethylphenol	03	SW8270D	<0.51 ug/L		0.51	1	10/19/17 09:33	10/19/17 21:23	SKS
2,4-Dinitrophenol	03	SW8270D	<51.0 ug/L		51.0	1	10/19/17 09:33	10/19/17 21:23	SKS
2,4-Dinitrotoluene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2,6-Dichlorophenol	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2,6-Dinitrotoluene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S3	Laboratory Sample ID: 17J0515-03							
Grab Date/Time:		10/16/2017 12:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Acetylaminofluorene	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
2-Chloronaphthalene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2-Chlorophenol	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2-Methylnaphthalene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2-Naphthylamine	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2-Nitroaniline	03	SW8270D	<20.4 ug/L		20.4	1	10/19/17 09:33	10/19/17 21:23	SKS
2-Nitrophenol	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
3,3'-Dichlorobenzidine	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
3,3'-Dimethylbenzidine	03	SW8270D	<2.55 ug/L	C	2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
3-Methylcholanthrene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
3-Nitroaniline	03	SW8270D	<20.4 ug/L		20.4	1	10/19/17 09:33	10/19/17 21:23	SKS
4,6-Dinitro-2-methylphenol	03	SW8270D	<51.0 ug/L		51.0	1	10/19/17 09:33	10/19/17 21:23	SKS
4-Aminobiphenyl	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
4-Bromophenyl phenyl ether	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
4-Chloroaniline	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
4-Chlorophenyl phenyl ether	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
4-Nitroaniline	03	SW8270D	<20.4 ug/L	C	20.4	1	10/19/17 09:33	10/19/17 21:23	SKS
4-Nitrophenol	03	SW8270D	<51.0 ug/L		51.0	1	10/19/17 09:33	10/19/17 21:23	SKS
5-Nitro-o-toluidine	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
7,12-Dimethylbenz (a) anthracene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Acenaphthene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Acenaphthylene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Acetophenone	03	SW8270D	<20.4 ug/L		20.4	1	10/19/17 09:33	10/19/17 21:23	SKS
Anthracene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Benzo (a) anthracene	03	SW8270D	<0.05 ug/L		0.05	1	10/19/17 09:33	10/19/17 21:23	SKS
Benzo (a) pyrene	03	SW8270D	<0.10 ug/L	C	0.10	1	10/19/17 09:33	10/19/17 21:23	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S3	Laboratory Sample ID: 17J0515-03							
Grab Date/Time:		10/16/2017 12:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (b) fluoranthene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Benzo (g,h,i) perylene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Benzo (k) fluoranthene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Benzyl alcohol	03	SW8270D	<20.4 ug/L		20.4	1	10/19/17 09:33	10/19/17 21:23	SKS
bis (2-Chloroethoxy) methane	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
bis (2-Chloroethyl) ether	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
2,2'-Oxybis (1-chloropropane)	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
bis (2-Ethylhexyl) phthalate	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
Butyl benzyl phthalate	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Chlorobenzilate	03	SW8270D	<2.55 ug/L	C	2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
Chrysene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Diallate	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
Dibenz (a,h) anthracene	03	SW8270D	<10.2 ug/L	C	10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Dibenzofuran	03	SW8270D	<5.10 ug/L		5.10	1	10/19/17 09:33	10/19/17 21:23	SKS
Diethyl phthalate	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Dimethoate	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
Dimethyl phthalate	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Di-n-butyl phthalate	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Di-n-octyl phthalate	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Diphenylamine	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Disulfoton	03	SW8270D	<2.55 ug/L	C	2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
Ethyl methanesulfonate	03	SW8270D	<20.4 ug/L		20.4	1	10/19/17 09:33	10/19/17 21:23	SKS
Ethyl parathion	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
Famphur	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
Fluoranthene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Fluorene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	S3	Laboratory Sample ID: 17J0515-03							
Grab Date/Time:		10/16/2017 12:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobenzene	03	SW8270D	<0.05 ug/L		0.05	1	10/19/17 09:33	10/19/17 21:23	SKS
Hexachlorobutadiene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Hexachlorocyclopentadiene	03	SW8270D	<10.2 ug/L	C	10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Hexachloroethane	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Hexachloropropene	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
Indeno (1,2,3-cd) pyrene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Isodrin	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Isophorone	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Isosafrole	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Kepone	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
m+p-Cresols	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Methaphyrlene	03	SW8270D	<10.2 ug/L	C	10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Methyl methanesulfonate	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Methyl parathion	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
Naphthalene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Nitrobenzene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
n-Nitrosodiethylamine	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
n-Nitrosodimethylamine	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
n-Nitrosodi-n-butylamine	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
n-Nitrosodi-n-propylamine	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
n-Nitrosodiphenylamine	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
n-Nitrosomethylethylamine	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
n-Nitrosopiperidine	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
n-Nitrosopyrrolidine	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
o,o,o-Triethyl phosphorothioate	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results		Laboratory Sample ID: 17J0515-03							
Sample I.D.	S3								
Grab Date/Time:		10/16/2017 12:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o,o-Diethyl o-2-pyrazinyl phosphorothioate	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
o+m+p-Cresols	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
o-Cresol	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
o-Toluidine	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
p-(Dimethylamino) azobenzene	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
p-Chloro-m-cresol	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Pentachlorobenzene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Pentachloronitrobenzene (quintozone)	03	SW8270D	<1.02 ug/L		1.02	1	10/19/17 09:33	10/19/17 21:23	SKS
Phenacetin	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Phenanthrene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Phenol	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Phorate	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
p-Phenylenediamine	03	SW8270D	<10.2 ug/L	C	10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Pronamide	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Pyrene	03	SW8270D	<10.2 ug/L		10.2	1	10/19/17 09:33	10/19/17 21:23	SKS
Safrole	03	SW8270D	<2.55 ug/L		2.55	1	10/19/17 09:33	10/19/17 21:23	SKS
Surr: 2,4,6-Tribromophenol (Surr)	03	SW8270D	84.7 %		20-86		10/19/17 09:33	10/19/17 21:23	SKS
Surr: 2-Fluorobiphenyl (Surr)	03	SW8270D	65.8 %		23-87		10/19/17 09:33	10/19/17 21:23	SKS
Surr: 2-Fluorophenol (Surr)	03	SW8270D	45.7 %		10-52		10/19/17 09:33	10/19/17 21:23	SKS
Surr: Nitrobenzene-d5 (Surr)	03	SW8270D	70.3 %		10-98.5		10/19/17 09:33	10/19/17 21:23	SKS
Surr: Phenol-d5 (Surr)	03	SW8270D	28.2 %		5-33		10/19/17 09:33	10/19/17 21:23	SKS
Surr: p-Terphenyl-d14 (Surr)	03	SW8270D	68.2 %		27-133		10/19/17 09:33	10/19/17 21:23	SKS

Organochlorine Pesticides and PCBs by GC/ECD



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results		Laboratory Sample ID: 17J0515-03							
Sample I.D.	S3								
Grab Date/Time:		10/16/2017 12:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	03	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:49	LBH	
PCB as Aroclor 1221	03	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:49	LBH	
PCB as Aroclor 1232	03	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:49	LBH	
PCB as Aroclor 1242	03	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:49	LBH	
PCB as Aroclor 1248	03	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:49	LBH	
PCB as Aroclor 1254	03	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:49	LBH	
PCB as Aroclor 1260	03	SW8082A	<0.211 ug/L	0.211	1	10/16/17 09:31	10/18/17 17:49	LBH	
Surr: DCB	03	SW8082A	70.0 %	30-105		10/16/17 09:31	10/18/17 17:49	LBH	
Surr: TCMX	03	SW8082A	65.0 %	30-105		10/16/17 09:31	10/18/17 17:49	LBH	
4,4'-DDD	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
4,4'-DDE	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
4,4'-DDT	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
Aldrin	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
alpha-BHC	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
beta-BHC	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
Chlordane	03	SW8081B	<0.211 ug/L	0.211	1	10/17/17 09:16	10/18/17 17:49	LBH	
delta-BHC	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
Dieldrin	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
Endosulfan I	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
Endosulfan II	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
Endosulfan sulfate	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
Endrin	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
Endrin aldehyde	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
gamma-BHC (Lindane)	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
Heptachlor	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	
Heptachlor epoxide	03	SW8081B	<0.053 ug/L	0.053	1	10/17/17 09:16	10/18/17 17:49	LBH	



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060

Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher

Project Number: 17-802

Client Site I.D.: CVTC

Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results

Sample I.D.	S3	Laboratory Sample ID:	17J0515-03
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Grab Date/Time:	10/16/2017 12:40
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Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Methoxychlor	03	SW8081B	<0.053 ug/L		0.053	1	10/17/17 09:16	10/18/17 17:49	LBH
Toxaphene	03	SW8081B	<1.05 ug/L		1.05	1	10/17/17 09:16	10/18/17 17:49	LBH
Surr: TCMX	03	SW8081B	60.0 %		18-112		10/17/17 09:16	10/18/17 17:49	LBH
Surr: DCB	03	SW8081B	60.0 %		27-131		10/17/17 09:16	10/18/17 17:49	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	03	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 22:10	CVH
2,4,5-TP (Silvex)	03	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 22:10	CVH
2,4-D	03	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 22:10	CVH
Dinoseb	03	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 22:10	CVH
Pentachlorophenol	03	SW8151A	<0.500 ug/L		0.500	1	10/18/17 14:08	10/23/17 22:10	CVH
Surr: DCAA (Surr)	03	SW8151A	100 %		60-112		10/18/17 14:08	10/23/17 22:10	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	03	SW8011	<0.010 ug/L		0.010	1	10/17/17 15:14	10/20/17 06:39	LBH
1,2,3-Trichloropropane	03	SW8011	<0.010 ug/L		0.010	1	10/17/17 15:14	10/20/17 06:39	LBH
1,2-Dibromo-3-chloropropane (DBCP)	03	SW8011	<0.010 ug/L		0.010	1	10/17/17 15:14	10/20/17 06:39	LBH
Wet Chemistry Analysis									
Cyanide	03	SW9012B	<0.01 mg/L	Cl	0.01	1	10/19/17 16:20	10/19/17 16:20	BBP
Chromium, Hexavalent	03	SW7196A	<0.005 mg/L		0.005	1	10/17/17 09:15	10/17/17 11:30	MWL
Sulfide	03	SW9215	<1.00 mg/L		1.00	1	10/20/17 16:00	10/20/17 16:00	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0515

Analytical Results									
Sample I.D.	Building 30								
Composite Start-End Date/Time:			10/16/2017 11:30 - 10/16/2017 11:30						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	04	SW8082A	<0.104 mg/kg dry		0.104	1	10/20/17 11:49	10/20/17 11:49	LBH
PCB as Aroclor 1221	04	SW8082A	<0.104 mg/kg dry		0.104	1	10/20/17 11:49	10/20/17 11:49	LBH
PCB as Aroclor 1232	04	SW8082A	<0.104 mg/kg dry		0.104	1	10/20/17 11:49	10/20/17 11:49	LBH
PCB as Aroclor 1242	04	SW8082A	<0.104 mg/kg dry		0.104	1	10/20/17 11:49	10/20/17 11:49	LBH
PCB as Aroclor 1248	04	SW8082A	<0.104 mg/kg dry		0.104	1	10/20/17 11:49	10/20/17 11:49	LBH
PCB as Aroclor 1254	04	SW8082A	<0.104 mg/kg dry		0.104	1	10/20/17 11:49	10/20/17 11:49	LBH
PCB as Aroclor 1260	04	SW8082A	<0.104 mg/kg dry		0.104	1	10/20/17 11:49	10/20/17 11:49	LBH
<i>Surr: DCB</i>	04	SW8082A	70.0 %		30-105		10/20/17 11:49	10/20/17 11:49	LBH
<i>Surr: TCMX</i>	04	SW8082A	60.0 %		30-105		10/20/17 11:49	10/20/17 11:49	LBH
Wet Chemistry Analysis									
Percent Solids	04	SM18 2540G	96.5 %		0.10	1	10/19/17 14:45	10/19/17 14:45	JCM



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Analytical Summary

Preparation Method:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods		Preparation Method:	EPA200.2/R2.8		
17J0515-01	50.0 mL / 50.0 mL	SW6010C	BAJ0500	SAJ0488	AJ70084
17J0515-02	50.0 mL / 50.0 mL	SW6010C	BAJ0500	SAJ0488	AJ70084
17J0515-03	50.0 mL / 50.0 mL	SW6010C	BAJ0500	SAJ0488	AJ70084
Metals (Total) by EPA 6000/7000 Series Methods		Preparation Method:	EPA200.2/R2.8		
17J0515-01	50.0 mL / 50.0 mL	SW6020A	BAJ0502	SAJ0498	AJ70085
17J0515-02	50.0 mL / 50.0 mL	SW6020A	BAJ0502	SAJ0498	AJ70085
17J0515-03	50.0 mL / 50.0 mL	SW6020A	BAJ0502	SAJ0498	AJ70085
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods		Preparation Method:	EPA200.9/R2.2		
17J0515-01	20.0 mL / 20.0 mL	SW7470A	BAJ0481	SAJ0434	AJ70077
17J0515-02	20.0 mL / 20.0 mL	SW7470A	BAJ0481	SAJ0434	AJ70077
17J0515-03	20.0 mL / 20.0 mL	SW7470A	BAJ0481	SAJ0434	AJ70077
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analysis		Preparation Method:	No Prep Wet Chem		
17J0515-01	6.00 mL / 6.00 mL	SW9012B	BAJ0594	SAJ0539	AJ70095
17J0515-02	6.00 mL / 6.00 mL	SW9012B	BAJ0594	SAJ0539	AJ70095
17J0515-03	6.00 mL / 6.00 mL	SW9012B	BAJ0594	SAJ0539	AJ70095
Wet Chemistry Analysis		Preparation Method:	No Prep Wet Chem		
17J0515-04	1.00 g / 1.00 mL	SM18 2540G	BAJ0609	SAJ0529	
Wet Chemistry Analysis		Preparation Method:	No Prep Wet Chem		
17J0515-01	6.00 mL / 6.00 mL	SW9215	BAJ0672	SAJ0580	
17J0515-02	6.00 mL / 6.00 mL	SW9215	BAJ0672	SAJ0580	
17J0515-03	6.00 mL / 6.00 mL	SW9215	BAJ0672	SAJ0580	
Wet Chemistry Analysis		Preparation Method:	No Prep Wet Chem		
17J0515-01	100 mL / 100 mL	SW7196A	BAJ0700	SAJ0611	AJ70110



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17J0515-02	100 mL / 100 mL	SW7196A	BAJ0700	SAJ0611	AJ70110
17J0515-03	100 mL / 100 mL	SW7196A	BAJ0700	SAJ0611	AJ70110
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Organochlorine Pesticides and PCBs by GC/ECD		Preparation Method:	SW3510C		
17J0515-01	950 mL / 1.00 mL	SW8081B	BAJ0439	SAJ0508	AI70117
17J0515-02	970 mL / 1.00 mL	SW8081B	BAJ0439	SAJ0508	AI70117
17J0515-03	950 mL / 1.00 mL	SW8081B	BAJ0439	SAJ0508	AI70117
17J0515-01	950 mL / 1.00 mL	SW8082A	BAJ0439	SAJ0509	AH70139
17J0515-02	970 mL / 1.00 mL	SW8082A	BAJ0439	SAJ0509	AH70139
17J0515-03	950 mL / 1.00 mL	SW8082A	BAJ0439	SAJ0509	AH70139
Organochlorine Herbicides by GC/ECD		Preparation Method:	SW3510C		
17J0515-01	900 mL / 5.00 mL	SW8151A	BAJ0544	SAJ0639	AJ70086
17J0515-02	900 mL / 5.00 mL	SW8151A	BAJ0544	SAJ0639	AJ70086
17J0515-03	900 mL / 5.00 mL	SW8151A	BAJ0544	SAJ0639	AJ70086
Semivolatile Organic Compounds by GCMS		Preparation Method:	SW3510C		
17J0515-01	930 mL / 1.00 mL	EPA625	BAJ0584	SAJ0530	AI70063
17J0515-02	970 mL / 1.00 mL	EPA625	BAJ0584	SAJ0530	AI70063
17J0515-03	980 mL / 1.00 mL	EPA625	BAJ0584	SAJ0530	AI70063
17J0515-01	930 mL / 1.00 mL	SW8270D	BAJ0584	SAJ0530	AI70063
17J0515-02	970 mL / 1.00 mL	SW8270D	BAJ0584	SAJ0530	AI70063
17J0515-03	980 mL / 1.00 mL	SW8270D	BAJ0584	SAJ0530	AI70063
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Organochlorine Pesticides and PCBs by GC/ECD		Preparation Method:	SW3550B		
17J0515-04	30.0 g / 5.00 mL	SW8082A	BAJ0611	SAJ0567	AG70131
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Compounds by GCMS		Preparation Method:	SW5030B		
17J0515-01	5.00 mL / 5.00 mL	SW8260B	BAJ0512	SAJ0449	AI70123
17J0515-02	5.00 mL / 5.00 mL	SW8260B	BAJ0512	SAJ0449	AI70123



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17J0515-03	5.00 mL / 5.00 mL	SW8260B	BAJ0512	SAJ0449	AI70123
Micro-extractables by GC/ECD					
		Preparation Method:	SW8011		
17J0515-01	60.3 mL / 2.00 mL	SW8011	BAJ0496	SAJ0437	AG70133
17J0515-02	60.6 mL / 2.00 mL	SW8011	BAJ0496	SAJ0437	AG70133
17J0515-03	60.6 mL / 2.00 mL	SW8011	BAJ0496	SAJ0437	AG70133



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0481 - EPA200.9/R2.2

<u>Blank (BAJ0481-BLK1)</u>					Prepared & Analyzed: 10/17/2017				
Mercury	<0.00020 mg/L	0.00020	mg/L						
<u>LCS (BAJ0481-BS1)</u>					Prepared & Analyzed: 10/17/2017				
Mercury	0.00269 mg/L	0.00020	mg/L	0.00250 mg/L		108	80-120		
<u>LCS Dup (BAJ0481-BSD1)</u>					Prepared & Analyzed: 10/17/2017				
Mercury	0.00272 mg/L	0.00020	mg/L	0.00250 mg/L		109	80-120	1.18	20
<u>Matrix Spike (BAJ0481-MS1)</u>		Source: 17J0515-01			Prepared & Analyzed: 10/17/2017				
Mercury	0.00259 mg/L	0.00020	mg/L	0.00250 <0.00020 mg/L		104	80-120		
<u>Matrix Spike Dup (BAJ0481-MSD1)</u>		Source: 17J0515-01			Prepared & Analyzed: 10/17/2017				
Mercury	0.00264 mg/L	0.00020	mg/L	0.00250 <0.00020 mg/L		106	80-120	1.99	20

Batch BAJ0500 - EPA200.2/R2.8

<u>Blank (BAJ0500-BLK1)</u>					Prepared: 10/17/2017 Analyzed: 10/18/2017				
Arsenic	<0.0200 mg/L	0.0200	mg/L						
Barium	<0.0100 mg/L	0.0100	mg/L						
Beryllium	<0.0040 mg/L	0.0040	mg/L						
Cadmium	<0.0040 mg/L	0.0040	mg/L						
Chromium	<0.0100 mg/L	0.0100	mg/L						
Cobalt	<0.0040 mg/L	0.0040	mg/L						
Copper	<0.0100 mg/L	0.0100	mg/L						
Lead	<0.0100 mg/L	0.0100	mg/L						
Nickel	<0.0100 mg/L	0.0100	mg/L						
Selenium	<0.0500 mg/L	0.0500	mg/L						
Silver	<0.0100 mg/L	0.0100	mg/L						
Tin	<0.0200 mg/L	0.0200	mg/L						
Vanadium	<0.0100 mg/L	0.0100	mg/L						
Zinc	<0.0100 mg/L	0.0100	mg/L						



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Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/24/2017 16:07
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0500 - EPA200.2/R2.8

Blank (BAJ0500-BLK2)		Prepared: 10/17/2017 Analyzed: 10/19/2017						
Lead	<0.0100 mg/L	0.0100	mg/L					
Silver	<0.0100 mg/L	0.0100	mg/L					
Vanadium	<0.0100 mg/L	0.0100	mg/L					

LCS (BAJ0500-BS1)		Prepared: 10/17/2017 Analyzed: 10/18/2017						
Arsenic	0.547 mg/L	0.0200	mg/L	0.500 mg/L	109	80-120		
Barium	0.572 mg/L	0.0100	mg/L	0.500 mg/L	114	80-120		
Beryllium	0.542 mg/L	0.0040	mg/L	0.500 mg/L	108	80-120		
Cadmium	0.545 mg/L	0.0040	mg/L	0.500 mg/L	109	80-120		
Chromium	0.542 mg/L	0.0100	mg/L	0.500 mg/L	108	80-120		
Cobalt	0.553 mg/L	0.0040	mg/L	0.500 mg/L	111	80-120		
Copper	0.546 mg/L	0.0100	mg/L	0.500 mg/L	109	80-120		
Lead	0.552 mg/L	0.0100	mg/L	0.500 mg/L	110	80-120		
Nickel	0.5487 mg/L	0.0100	mg/L	0.500 mg/L	110	80-120		
Selenium	0.545 mg/L	0.0500	mg/L	0.500 mg/L	109	80-120		
Silver	0.117 mg/L	0.0100	mg/L	0.100 mg/L	117	80-120	E	
Tin	0.117 mg/L	0.0200	mg/L	0.100 mg/L	117	80-120		
Vanadium	0.534 mg/L	0.0100	mg/L	0.500 mg/L	107	80-120		
Zinc	0.539 mg/L	0.0100	mg/L	0.500 mg/L	108	80-120		

LCS (BAJ0500-BS2)		Prepared: 10/17/2017 Analyzed: 10/19/2017						
Lead	0.524 mg/L	0.0100	mg/L	0.500 mg/L	105	80-120		
Silver	0.117 mg/L	0.0100	mg/L	0.100 mg/L	117	80-120		
Vanadium	0.529 mg/L	0.0100	mg/L	0.500 mg/L	106	80-120		

LCS Dup (BAJ0500-BSD1)		Prepared: 10/17/2017 Analyzed: 10/18/2017						
Arsenic	0.530 mg/L	0.0200	mg/L	0.500 mg/L	106	80-120	3.27	20
Barium	0.527 mg/L	0.0100	mg/L	0.500 mg/L	105	80-120	8.21	20
Beryllium	0.530 mg/L	0.0040	mg/L	0.500 mg/L	106	80-120	2.11	20
Cadmium	0.535 mg/L	0.0040	mg/L	0.500 mg/L	107	80-120	1.92	20
Chromium	0.532 mg/L	0.0100	mg/L	0.500 mg/L	106	80-120	1.87	20
Cobalt	0.539 mg/L	0.0040	mg/L	0.500 mg/L	108	80-120	2.56	20
Copper	0.534 mg/L	0.0100	mg/L	0.500 mg/L	107	80-120	2.25	20



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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0500 - EPA200.2/R2.8

LCS Dup (BAJ0500-BSD1)		Prepared: 10/17/2017 Analyzed: 10/18/2017							
Lead	0.542 mg/L	0.0100	mg/L	0.500 mg/L	108	80-120	1.98	20	
Nickel	0.5354 mg/L	0.0100	mg/L	0.500 mg/L	107	80-120	2.45	20	
Selenium	0.538 mg/L	0.0500	mg/L	0.500 mg/L	108	80-120	1.28	20	
Silver	0.108 mg/L	0.0100	mg/L	0.100 mg/L	108	80-120	8.05	20	E
Tin	0.113 mg/L	0.0200	mg/L	0.100 mg/L	113	80-120	3.59	20	
Vanadium	0.523 mg/L	0.0100	mg/L	0.500 mg/L	105	80-120	1.99	20	
Zinc	0.526 mg/L	0.0100	mg/L	0.500 mg/L	105	80-120	2.52	20	

LCS Dup (BAJ0500-BSD2)		Prepared: 10/17/2017 Analyzed: 10/19/2017							
Lead	0.513 mg/L	0.0100	mg/L	0.500 mg/L	103	80-120	2.06	20	
Silver	0.110 mg/L	0.0100	mg/L	0.100 mg/L	110	80-120	6.34	20	E
Vanadium	0.520 mg/L	0.0100	mg/L	0.500 mg/L	104	80-120	1.64	20	

Matrix Spike (BAJ0500-MS1)		Source: 17J0486-22 Prepared: 10/17/2017 Analyzed: 10/18/2017							
Arsenic	0.531 mg/L	0.0200	mg/L	0.500 <0.0200 mg/L	106	75-125			
Barium	0.576 mg/L	0.0100	mg/L	0.500 0.0408 mg/L	107	75-125			
Beryllium	0.533 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	107	75-125			
Cadmium	0.532 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	106	75-125			
Chromium	0.530 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125			
Cobalt	0.531 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	106	75-125			
Copper	0.536 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	107	75-125			
Lead	0.531 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125			
Nickel	0.5258 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125			
Selenium	0.553 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	106	75-125			
Silver	0.113 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	113	75-125			E
Tin	0.118 mg/L	0.0200	mg/L	0.100 <0.0200 mg/L	118	75-125			
Vanadium	0.525 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125			
Zinc	0.524 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125			



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0500 - EPA200.2/R2.8

Matrix Spike (BAJ0500-MS2)		Source: 17J0515-01		Prepared: 10/17/2017 Analyzed: 10/18/2017			
Arsenic	0.544 mg/L	0.0200	mg/L	0.500 <0.0200 mg/L	109	75-125	
Barium	0.581 mg/L	0.0100	mg/L	0.500 0.0406 mg/L	108	75-125	
Beryllium	0.558 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	112	75-125	
Cadmium	0.557 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	111	75-125	
Chromium	0.559 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	112	75-125	
Cobalt	0.562 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	112	75-125	
Copper	0.566 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	113	75-125	
Lead	0.564 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	113	75-125	
Nickel	0.5602 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	112	75-125	
Selenium	0.551 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	110	75-125	
Silver	0.111 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	111	75-125	E
Tin	0.111 mg/L	0.0200	mg/L	0.100 <0.0200 mg/L	111	75-125	
Vanadium	0.554 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	111	75-125	
Zinc	0.545 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	109	75-125	

Matrix Spike (BAJ0500-MS3)		Source: 17J0486-22		Prepared: 10/17/2017 Analyzed: 10/19/2017			
Lead	0.522 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	104	75-125	
Silver	0.111 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	111	75-125	E
Vanadium	0.530 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125	

Matrix Spike (BAJ0500-MS4)		Source: 17J0515-01		Prepared: 10/17/2017 Analyzed: 10/19/2017			
Lead	0.531 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125	
Silver	0.110 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	110	75-125	E
Vanadium	0.538 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	108	75-125	

Matrix Spike Dup (BAJ0500-MSD1)		Source: 17J0486-22		Prepared: 10/17/2017 Analyzed: 10/18/2017			
Arsenic	0.544 mg/L	0.0200	mg/L	0.500 <0.0200 mg/L	109	75-125	2.37
Barium	0.596 mg/L	0.0100	mg/L	0.500 0.0408 mg/L	111	75-125	3.36
Beryllium	0.536 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	107	75-125	0.617
Cadmium	0.534 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	107	75-125	0.333
Chromium	0.533 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	107	75-125	0.605
Cobalt	0.534 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	107	75-125	0.720
Copper	0.539 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	108	75-125	0.657



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/24/2017 16:07
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0500 - EPA200.2/R2.8

Matrix Spike Dup (BAJ0500-MSD1)		Source: 17J0486-22		Prepared: 10/17/2017 Analyzed: 10/18/2017					
Lead	0.534 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	107	75-125	0.606	20	
Nickel	0.5289 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125	0.589	20	
Selenium	0.554 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	106	75-125	0.278	20	
Silver	0.115 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	115	75-125	1.59	20	E
Tin	0.115 mg/L	0.0200	mg/L	0.100 <0.0200 mg/L	115	75-125	2.36	20	
Vanadium	0.527 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125	0.345	20	
Zinc	0.528 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125	0.760	20	

Matrix Spike Dup (BAJ0500-MSD2)		Source: 17J0515-01		Prepared: 10/17/2017 Analyzed: 10/18/2017					
Arsenic	0.514 mg/L	0.0200	mg/L	0.500 <0.0200 mg/L	103	75-125	5.68	20	
Barium	0.546 mg/L	0.0100	mg/L	0.500 0.0406 mg/L	101	75-125	6.19	20	
Beryllium	0.522 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	104	75-125	6.67	20	
Cadmium	0.521 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	104	75-125	6.71	20	
Chromium	0.524 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125	6.37	20	
Cobalt	0.523 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	105	75-125	7.20	20	
Copper	0.528 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125	6.88	20	
Lead	0.525 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125	7.10	20	
Nickel	0.5209 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	104	75-125	7.28	20	
Selenium	0.521 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	104	75-125	5.54	20	
Silver	0.105 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	105	75-125	4.86	20	E
Tin	0.105 mg/L	0.0200	mg/L	0.100 <0.0200 mg/L	105	75-125	5.84	20	
Vanadium	0.517 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	103	75-125	6.93	20	
Zinc	0.519 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	104	75-125	4.81	20	

Matrix Spike Dup (BAJ0500-MSD3)		Source: 17J0486-22		Prepared: 10/17/2017 Analyzed: 10/19/2017					
Lead	0.520 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	104	75-125	0.351	20	
Silver	0.117 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	117	75-125	5.13	20	E
Vanadium	0.528 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125	0.308	20	



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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0500 - EPA200.2/R2.8

Matrix Spike Dup (BAJ0500-MSD4)		Source: 17J0515-01		Prepared: 10/17/2017 Analyzed: 10/19/2017					
Lead	0.499 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	99.9	75-125	6.16	20
Silver	0.105 mg/L	0.0100	mg/L	0.100	<0.0100 mg/L	105	75-125	4.83	20
Vanadium	0.505 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	101	75-125	6.39	20

Batch BAJ0502 - EPA200.2/R2.8

Blank (BAJ0502-BLK1)		Prepared: 10/17/2017 Analyzed: 10/18/2017					
Antimony	<1.00 ug/L	1.00	ug/L				
Arsenic	<1.0 ug/L	1.0	ug/L				
Thallium	<1.00 ug/L	1.00	ug/L				

LCS (BAJ0502-BS1)		Prepared: 10/17/2017 Analyzed: 10/18/2017					
Antimony	53.2 ug/L	1.00	ug/L	50.0	ug/L	106	80-120
Arsenic	50 ug/L	1.0	ug/L	50.0	ug/L	100	80-120
Thallium	48.9 ug/L	1.00	ug/L	50.0	ug/L	97.8	80-120

LCS Dup (BAJ0502-BSD1)		Prepared: 10/17/2017 Analyzed: 10/18/2017					
Antimony	53.0 ug/L	1.00	ug/L	50.0	ug/L	106	80-120
Arsenic	50 ug/L	1.0	ug/L	50.0	ug/L	101	80-120
Thallium	49.2 ug/L	1.00	ug/L	50.0	ug/L	98.5	80-120

Matrix Spike (BAJ0502-MS1)		Source: 17J0486-22 Prepared: 10/17/2017 Analyzed: 10/18/2017					
Antimony	53.9 ug/L	1.00	ug/L	50.0	<1.00 ug/L	108	75-125
Arsenic	53 ug/L	1.0	ug/L	50.0	<1.0 ug/L	106	75-125
Thallium	46.7 ug/L	1.00	ug/L	50.0	<1.00 ug/L	93.5	75-125

Matrix Spike (BAJ0502-MS2)		Source: 17J0515-01 Prepared: 10/17/2017 Analyzed: 10/18/2017					
Antimony	48.8 ug/L	1.00	ug/L	50.0	<1.00 ug/L	97.6	75-125
Arsenic	51 ug/L	1.0	ug/L	50.0	1.2 ug/L	99.0	75-125
Thallium	46.7 ug/L	1.00	ug/L	50.0	<1.00 ug/L	93.4	75-125



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0502 - EPA200.2/R2.8

Matrix Spike Dup (BAJ0502-MSD1)		Source: 17J0486-22		Prepared: 10/17/2017 Analyzed: 10/18/2017						
Antimony	53.6 ug/L	1.00	ug/L	50.0 <1.00 ug/L	107	75-125	0.457	20		
Arsenic	51 ug/L	1.0	ug/L	50.0 <1.0 ug/L	101	75-125	4.28	20		
Thallium	46.7 ug/L	1.00	ug/L	50.0 <1.00 ug/L	93.4	75-125	0.121	20		
Matrix Spike Dup (BAJ0502-MSD2)		Source: 17J0515-01		Prepared: 10/17/2017 Analyzed: 10/18/2017						
Antimony	50.0 ug/L	1.00	ug/L	50.0 <1.00 ug/L	100	75-125	2.44	20		
Arsenic	50 ug/L	1.0	ug/L	50.0 1.2 ug/L	98.0	75-125	1.06	20		
Thallium	46.0 ug/L	1.00	ug/L	50.0 <1.00 ug/L	92.0	75-125	1.52	20		



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0512 - SW5030B

Blank (BAJ0512-BLK1) Prepared & Analyzed: 10/17/2017

1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L						
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L						
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L						
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L						
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L						
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L						
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L						
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L						
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L						
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L						
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L						
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L						
2-Butanone (MEK)	<5.00 ug/L	5.00	ug/L						
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L						
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L						
Acetone	<10.0 ug/L	10.0	ug/L						
Acetonitrile	<10.0 ug/L	10.0	ug/L						
Acrolein	<10.0 ug/L	10.0	ug/L						
Acrylonitrile	<5.00 ug/L	5.00	ug/L						
Allyl chloride	<1.00 ug/L	1.00	ug/L						
Benzene	<1.00 ug/L	1.00	ug/L						
Bromochloromethane	<1.00 ug/L	1.00	ug/L						
Bromodichloromethane	<0.50 ug/L	0.50	ug/L						
Bromoform	<1.00 ug/L	1.00	ug/L						
Bromomethane	<1.00 ug/L	1.00	ug/L						
Carbon disulfide	<10.0 ug/L	10.0	ug/L						
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L						



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0512 - SW5030B

Blank (BAJ0512-BLK1) Prepared & Analyzed: 10/17/2017

Chlorobenzene	<1.00 ug/L	1.00	ug/L
Chloroethane	<1.00 ug/L	1.00	ug/L
Chloroform	<0.50 ug/L	0.50	ug/L
Chloromethane	<1.00 ug/L	1.00	ug/L
Chloroprene	<5.00 ug/L	5.00	ug/L
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L
Dibromochloromethane	<0.50 ug/L	0.50	ug/L
Dibromomethane	<1.00 ug/L	1.00	ug/L
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L
Ethyl methacrylate	<5.00 ug/L	5.00	ug/L
Ethylbenzene	<1.00 ug/L	1.00	ug/L
Hexachlorobutadiene	<0.80 ug/L	0.80	ug/L
Iodomethane	<10.0 ug/L	10.0	ug/L
Isobutyl Alcohol	<40.0 ug/L	40.0	ug/L
m+p-Xylenes	<2.00 ug/L	2.00	ug/L
Methacrylonitrile	<1.50 ug/L	1.50	ug/L
Methyl methacrylate	<2.00 ug/L	2.00	ug/L
Methylene chloride	<4.00 ug/L	4.00	ug/L
o-Xylene	<1.00 ug/L	1.00	ug/L
Propionitrile	<40.0 ug/L	40.0	ug/L
Styrene	<1.00 ug/L	1.00	ug/L
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L
Toluene	<1.00 ug/L	1.00	ug/L
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L
trans-1,4-Dichloro-2-butene	<4.00 ug/L	4.00	ug/L
Trichloroethylene	<1.00 ug/L	1.00	ug/L
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L
Vinyl acetate	<10.0 ug/L	10.0	ug/L
Vinyl chloride	<0.50 ug/L	0.50	ug/L



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0512 - SW5030B

Blank (BAJ0512-BLK1)							Prepared & Analyzed: 10/17/2017			
Xylenes, Total	<3.00 ug/L	3.00	ug/L							
Surr: 1,2-Dichloroethane-d4 (Surr)	50.6		ug/L	50.0		101	70-120			
Surr: 4-Bromofluorobenzene (Surr)	49.7		ug/L	50.0		99.4	75-120			
Surr: Dibromofluoromethane (Surr)	49.5		ug/L	50.0		98.9	80-119			
Surr: Toluene-d8 (Surr)	49.9		ug/L	50.0		99.9	85-120			
LCS (BAJ0512-BS1)							Prepared & Analyzed: 10/17/2017			
1,1,1,2-Tetrachloroethane	50.6 ug/L	0.4	ug/L	50.0	ug/L	101	80-130			
1,1,1-Trichloroethane	48.7 ug/L	1	ug/L	50.0	ug/L	97.4	65-130			
1,1,2,2-Tetrachloroethane	47.7 ug/L	0.4	ug/L	50.0	ug/L	95.5	65-130			
1,1,2-Trichloroethane	50.0 ug/L	1	ug/L	50.0	ug/L	100	75-125			
1,1-Dichloroethane	50.3 ug/L	1	ug/L	50.0	ug/L	101	70-135			
1,1-Dichloroethylene	48.5 ug/L	1	ug/L	50.0	ug/L	97.0	70-130			
1,1-Dichloropropene	49.7 ug/L	1	ug/L	50.0	ug/L	99.5	75-135			
1,2,3-Trichloropropane	47.5 ug/L	1	ug/L	50.0	ug/L	95.0	75-125			
1,2,4-Trichlorobenzene	52.8 ug/L	1	ug/L	50.0	ug/L	106	65-135			
1,2-Dichlorobenzene	50.6 ug/L	1	ug/L	50.0	ug/L	101	70-120			
1,2-Dichloroethane	47.4 ug/L	1	ug/L	50.0	ug/L	94.7	70-130			
1,2-Dichloropropane	47.4 ug/L	1	ug/L	50.0	ug/L	94.8	75-125			
1,3-Dichlorobenzene	51.9 ug/L	1	ug/L	50.0	ug/L	104	75-125			
1,3-Dichloropropane	47.9 ug/L	1	ug/L	50.0	ug/L	95.9	75-125			
1,4-Dichlorobenzene	51.3 ug/L	1	ug/L	50.0	ug/L	103	75-125			
2,2-Dichloropropane	50.5 ug/L	2	ug/L	50.0	ug/L	101	70-135			
2-Butanone (MEK)	49.4 ug/L	5	ug/L	50.0	ug/L	98.8	30-150			
2-Hexanone (MBK)	48.3 ug/L	5	ug/L	50.0	ug/L	96.6	55-130			
4-Methyl-2-pentanone (MIBK)	49.7 ug/L	5	ug/L	50.0	ug/L	99.3	60-135			
Acetone	42.3 ug/L	10	ug/L	50.0	ug/L	84.6	40-140			
Acrylonitrile	236 ug/L	5	ug/L	250	ug/L	94.4	70-130			
Benzene	49.6 ug/L	1	ug/L	50.0	ug/L	99.1	80-120			
Bromochloromethane	52.1 ug/L	1	ug/L	50.0	ug/L	104	65-130			
Bromodichloromethane	49.1 ug/L	0.5	ug/L	50.0	ug/L	98.2	75-120			



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0512 - SW5030B

LCS (BAJ0512-BS1)							Prepared & Analyzed: 10/17/2017		
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual	
Bromoform	43.5 ug/L	1	ug/L	50.0	ug/L	87.0	70-130		
Bromomethane	42.0 ug/L	1	ug/L	50.0	ug/L	84.0	30-145		
Carbon disulfide	43.6 ug/L	10	ug/L	50.0	ug/L	87.2	35-160		
Carbon tetrachloride	46.8 ug/L	1	ug/L	50.0	ug/L	93.7	65-140		
Chlorobenzene	50.1 ug/L	1	ug/L	50.0	ug/L	100	80-120		
Chloroethane	42.2 ug/L	1	ug/L	50.0	ug/L	84.3	60-135		
Chloroform	45.4 ug/L	0.5	ug/L	50.0	ug/L	90.8	65-135		
Chloromethane	34.4 ug/L	1	ug/L	50.0	ug/L	68.7	40-125		
cis-1,2-Dichloroethylene	48.7 ug/L	1	ug/L	50.0	ug/L	97.4	70-125		
cis-1,3-Dichloropropene	44.6 ug/L	1	ug/L	50.0	ug/L	89.2	70-130		
Dibromochloromethane	45.4 ug/L	0.5	ug/L	50.0	ug/L	90.7	60-135		
Dibromomethane	50.6 ug/L	1	ug/L	50.0	ug/L	101	75-125		
Dichlorodifluoromethane	40.2 ug/L	1	ug/L	50.0	ug/L	80.3	30-155		
Ethylbenzene	48.5 ug/L	1	ug/L	50.0	ug/L	96.9	75-125		
Hexachlorobutadiene	52.6 ug/L	0.8	ug/L	50.0	ug/L	105	50-140		
m+p-Xylenes	101 ug/L	2	ug/L	100	ug/L	101	75-130		
Methylene chloride	45.7 ug/L	4	ug/L	50.0	ug/L	91.5	55-140		
o-Xylene	49.3 ug/L	1	ug/L	50.0	ug/L	98.5	80-120		
Styrene	51.1 ug/L	1	ug/L	50.0	ug/L	102	65-135		
Tetrachloroethylene (PCE)	71.3 ug/L	1	ug/L	50.0	ug/L	143	45-150		
Toluene	49.9 ug/L	1	ug/L	50.0	ug/L	99.7	75-120		
trans-1,2-Dichloroethylene	51.2 ug/L	1	ug/L	50.0	ug/L	102	60-140		
trans-1,3-Dichloropropene	48.2 ug/L	1	ug/L	50.0	ug/L	96.4	55-140		
Trichloroethylene	50.4 ug/L	1	ug/L	50.0	ug/L	101	70-125		
Trichlorofluoromethane	42.9 ug/L	1	ug/L	50.0	ug/L	85.8	60-145		
Vinyl chloride	37.6 ug/L	0.5	ug/L	50.0	ug/L	75.1	50-145		
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	49.6		ug/L	50.0	ug/L	99.3	70-120		
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	49.0		ug/L	50.0	ug/L	98.0	75-120		
<i>Surr: Dibromofluoromethane (Surr)</i>	49.9		ug/L	50.0	ug/L	99.7	80-119		
<i>Surr: Toluene-d8 (Surr)</i>	49.2		ug/L	50.0	ug/L	98.4	85-120		



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0512 - SW5030B

Duplicate (BAJ0512-DUP1)	Source: 17J0515-01			Prepared & Analyzed: 10/17/2017				
1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L	<0.40 ug/L		NA	30	
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L	<0.40 ug/L		NA	30	
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L	<2.00 ug/L		NA	30	
2-Butanone (MEK)	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Acetone	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
Acetonitrile	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
Acrolein	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
Acrylonitrile	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Allyl chloride	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Benzene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Bromochloromethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Bromodichloromethane	<0.50 ug/L	0.50	ug/L	<0.50 ug/L		NA	30	
Bromoform	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Bromomethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Carbon disulfide	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0512 - SW5030B

Duplicate (BAJ0512-DUP1)	Source: 17J0515-01			Prepared & Analyzed: 10/17/2017				
Chlorobenzene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Chloroethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Chloroform	<0.50 ug/L	0.50	ug/L	<0.50 ug/L		NA	30	
Chloromethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Chloroprene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Dibromochloromethane	<0.50 ug/L	0.50	ug/L	<0.50 ug/L		NA	30	
Dibromomethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Ethyl methacrylate	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Ethylbenzene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Hexachlorobutadiene	<0.80 ug/L	0.80	ug/L	<0.80 ug/L		NA	30	
Iodomethane	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
Isobutyl Alcohol	<40.0 ug/L	40.0	ug/L	<40.0 ug/L		NA	30	
m+p-Xylenes	<2.00 ug/L	2.00	ug/L	<2.00 ug/L		NA	30	
Methacrylonitrile	<1.50 ug/L	1.50	ug/L	<1.50 ug/L		NA	30	
Methyl methacrylate	<2.00 ug/L	2.00	ug/L	<2.00 ug/L		NA	30	
Methylene chloride	<4.00 ug/L	4.00	ug/L	<4.00 ug/L		NA	30	
o-Xylene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Propionitrile	<40.0 ug/L	40.0	ug/L	<40.0 ug/L		NA	30	
Styrene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Toluene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
trans-1,4-Dichloro-2-butene	<4.00 ug/L	4.00	ug/L	<4.00 ug/L		NA	30	
Trichloroethylene	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		NA	30	
Vinyl acetate	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
Vinyl chloride	<0.50 ug/L	0.50	ug/L	<0.50 ug/L		NA	30	



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201 Church Street
Blacksburg VA, 24060

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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0512 - SW5030B

Duplicate (BAJ0512-DUP1)		Source: 17J0515-01		Prepared & Analyzed: 10/17/2017					
Xylenes, Total	<3.00 ug/L	3.00	ug/L	<3.00 ug/L			NA	30	
Surr: 1,2-Dichloroethane-d4 (Surr)	51.6		ug/L	50.0	ug/L	103	70-120		
Surr: 4-Bromofluorobenzene (Surr)	49.6		ug/L	50.0	ug/L	99.3	75-120		
Surr: Dibromofluoromethane (Surr)	49.4		ug/L	50.0	ug/L	98.9	80-119		
Surr: Toluene-d8 (Surr)	50.1		ug/L	50.0	ug/L	100	85-120		
Matrix Spike (BAJ0512-MS1)		Source: 17J0515-03		Prepared & Analyzed: 10/17/2017					
1,1,1,2-Tetrachloroethane	50.2 ug/L	0.4	ug/L	50.0	<0.4 ug/L	100	80-130		
1,1,1-Trichloroethane	48.5 ug/L	1	ug/L	50.0	<1 ug/L	96.9	65-130		
1,1,2,2-Tetrachloroethane	49.4 ug/L	0.4	ug/L	50.0	<0.4 ug/L	98.9	65-130		
1,1,2-Trichloroethane	49.9 ug/L	1	ug/L	50.0	<1 ug/L	99.7	75-125		
1,1-Dichloroethane	48.8 ug/L	1	ug/L	50.0	<1 ug/L	97.6	70-135		
1,1-Dichloroethylene	51.1 ug/L	1	ug/L	50.0	<1 ug/L	102	70-130		
1,1-Dichloropropene	51.2 ug/L	1	ug/L	50.0	<1 ug/L	102	75-135		
1,2,3-Trichloropropane	48.1 ug/L	1	ug/L	50.0	<1 ug/L	96.2	75-125		
1,2,4-Trichlorobenzene	50.3 ug/L	1	ug/L	50.0	<1 ug/L	101	65-135		
1,2-Dichlorobenzene	50.2 ug/L	1	ug/L	50.0	<1 ug/L	100	70-120		
1,2-Dichloroethane	45.2 ug/L	1	ug/L	50.0	<1 ug/L	90.4	70-130		
1,2-Dichloropropane	47.3 ug/L	1	ug/L	50.0	<1 ug/L	94.6	75-125		
1,3-Dichlorobenzene	51.3 ug/L	1	ug/L	50.0	<1 ug/L	102	75-125		
1,3-Dichloropropane	47.7 ug/L	1	ug/L	50.0	<1 ug/L	95.5	75-125		
1,4-Dichlorobenzene	49.3 ug/L	1	ug/L	50.0	<1 ug/L	98.5	75-125		
2,2-Dichloropropane	49.6 ug/L	2	ug/L	50.0	<2 ug/L	99.3	70-135		
2-Butanone (MEK)	44.3 ug/L	5	ug/L	50.0	<5 ug/L	88.7	30-150		
2-Hexanone (MBK)	47.3 ug/L	5	ug/L	50.0	<5 ug/L	94.7	55-130		
4-Methyl-2-pentanone (MIBK)	48.6 ug/L	5	ug/L	50.0	<5 ug/L	97.2	60-135		
Acetone	40.5 ug/L	10	ug/L	50.0	<10 ug/L	76.8	40-140		
Acrylonitrile	221 ug/L	5	ug/L	250	<5 ug/L	88.4	70-130		
Benzene	49.5 ug/L	1	ug/L	50.0	<1 ug/L	99.0	80-120		
Bromochloromethane	49.3 ug/L	1	ug/L	50.0	<1 ug/L	98.6	65-130		
Bromodichloromethane	49.6 ug/L	0.5	ug/L	50.0	<0.5 ug/L	99.1	75-120		



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Certificate of Analysis

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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0512 - SW5030B

Matrix Spike (BAJ0512-MS1)	Source: 17J0515-03		Prepared & Analyzed: 10/17/2017				
Bromoform	42.8 ug/L	1	ug/L	50.0 <1 ug/L	85.7	70-130	
Bromomethane	37.3 ug/L	1	ug/L	50.0 <1 ug/L	74.7	30-145	
Carbon disulfide	43.4 ug/L	10	ug/L	50.0 <10 ug/L	86.5	35-160	
Carbon tetrachloride	48.6 ug/L	1	ug/L	50.0 <1 ug/L	97.2	65-140	
Chlorobenzene	50.1 ug/L	1	ug/L	50.0 <1 ug/L	100	80-120	
Chloroethane	42.8 ug/L	1	ug/L	50.0 <1 ug/L	85.6	60-135	
Chloroform	44.2 ug/L	0.5	ug/L	50.0 <0.5 ug/L	88.4	65-135	
Chloromethane	35.1 ug/L	1	ug/L	50.0 <1 ug/L	70.1	40-125	
cis-1,2-Dichloroethylene	47.7 ug/L	1	ug/L	50.0 <1 ug/L	95.4	70-125	
cis-1,3-Dichloropropene	43.6 ug/L	1	ug/L	50.0 <1 ug/L	87.2	70-130	
Dibromochloromethane	44.5 ug/L	0.5	ug/L	50.0 <0.5 ug/L	89.0	60-135	
Dibromomethane	49.8 ug/L	1	ug/L	50.0 <1 ug/L	99.6	75-125	
Dichlorodifluoromethane	42.3 ug/L	1	ug/L	50.0 <1 ug/L	84.6	30-155	
Ethylbenzene	48.9 ug/L	1	ug/L	50.0 <1 ug/L	97.7	75-125	
Hexachlorobutadiene	56.3 ug/L	0.8	ug/L	50.0 <0.8 ug/L	113	50-140	
m+p-Xylenes	101 ug/L	2	ug/L	100 <2 ug/L	101	75-130	
Methylene chloride	44.4 ug/L	4	ug/L	50.0 <4 ug/L	88.9	55-140	
o-Xylene	50.0 ug/L	1	ug/L	50.0 <1 ug/L	99.9	80-120	
Styrene	51.4 ug/L	1	ug/L	50.0 <1 ug/L	103	65-135	
Tetrachloroethylene (PCE)	72.8 ug/L	1	ug/L	50.0 <1 ug/L	146	45-150	
Toluene	49.6 ug/L	1	ug/L	50.0 <1 ug/L	99.2	75-120	
trans-1,2-Dichloroethylene	44.7 ug/L	1	ug/L	50.0 <1 ug/L	89.4	60-140	
trans-1,3-Dichloropropene	47.3 ug/L	1	ug/L	50.0 <1 ug/L	94.6	55-140	
Trichloroethylene	51.0 ug/L	1	ug/L	50.0 <1 ug/L	102	70-125	
Trichlorofluoromethane	44.3 ug/L	1	ug/L	50.0 <1 ug/L	88.7	60-145	
Vinyl chloride	40.2 ug/L	0.5	ug/L	50.0 <0.5 ug/L	80.4	50-145	
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	47.7		ug/L	50.0 ug/L	95.4	70-120	
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	49.3		ug/L	50.0 ug/L	98.6	75-120	
<i>Surr: Dibromofluoromethane (Surr)</i>	47.3		ug/L	50.0 ug/L	94.5	80-119	
<i>Surr: Toluene-d8 (Surr)</i>	49.2		ug/L	50.0 ug/L	98.4	85-120	



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0584 - SW3510C

Blank (BAJ0584-BLK1) Prepared & Analyzed: 10/19/2017

2,3,7,8-TCDD (SIM)	Not Detected -	-							
1,2,4,5-Tetrachlorobenzene	<10.0 ug/L	10.0	ug/L						
1,3,5-Trinitrobenzene	<5.00 ug/L	5.00	ug/L						
1,3-Dinitrobenzene	<2.50 ug/L	2.50	ug/L						
1,4-Naphthoquinone	<10.0 ug/L	10.0	ug/L						
1-Naphthylamine	<10.0 ug/L	10.0	ug/L						
2,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L						
2,4,5-Trichlorophenol	<10.0 ug/L	10.0	ug/L						
2,4,6-Trichlorophenol	<10.0 ug/L	10.0	ug/L						
2,4-Dichlorophenol	<10.0 ug/L	10.0	ug/L						
2,4-Dimethylphenol	<0.50 ug/L	0.50	ug/L						
2,4-Dinitrophenol	<50.0 ug/L	50.0	ug/L						
2,4-Dinitrotoluene	<10.0 ug/L	10.0	ug/L						
2,6-Dichlorophenol	<10.0 ug/L	10.0	ug/L						
2,6-Dinitrotoluene	<10.0 ug/L	10.0	ug/L						
2-Acetylaminofluorene	<2.50 ug/L	2.50	ug/L						
2-Chloronaphthalene	<10.0 ug/L	10.0	ug/L						
2-Chlorophenol	<10.0 ug/L	10.0	ug/L						
2-Methylnaphthalene	<10.0 ug/L	10.0	ug/L						
2-Naphthylamine	<10.0 ug/L	10.0	ug/L						
2-Nitroaniline	<20.0 ug/L	20.0	ug/L						
2-Nitrophenol	<10.0 ug/L	10.0	ug/L						
3,3'-Dichlorobenzidine	<10.0 ug/L	10.0	ug/L						
3,3'-Dimethylbenzidine	<2.50 ug/L	2.50	ug/L						
3-Methylcholanthrene	<10.0 ug/L	10.0	ug/L						
3-Nitroaniline	<20.0 ug/L	20.0	ug/L						
4,6-Dinitro-2-methylphenol	<50.0 ug/L	50.0	ug/L						
4-Aminobiphenyl	<10.0 ug/L	10.0	ug/L						
4-Bromophenyl phenyl ether	<10.0 ug/L	10.0	ug/L						
4-Chloroaniline	<10.0 ug/L	10.0	ug/L						
4-Chlorophenyl phenyl ether	<10.0 ug/L	10.0	ug/L						



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0584 - SW3510C

Blank (BAJ0584-BLK1) Prepared & Analyzed: 10/19/2017

4-Nitroaniline	<20.0 ug/L	20.0	ug/L						
4-Nitrophenol	<50.0 ug/L	50.0	ug/L						
5-Nitro-o-toluidine	<10.0 ug/L	10.0	ug/L						
7,12-Dimethylbenz (a) anthracene	<10.0 ug/L	10.0	ug/L						
Acenaphthene	<10.0 ug/L	10.0	ug/L						
Acenaphthylene	<10.0 ug/L	10.0	ug/L						
Acetophenone	<20.0 ug/L	20.0	ug/L						
Anthracene	<10.0 ug/L	10.0	ug/L						
Benzo (a) anthracene	<0.05 ug/L	0.05	ug/L						
Benzo (a) pyrene	<0.10 ug/L	0.10	ug/L						
Benzo (b) fluoranthene	<10.0 ug/L	10.0	ug/L						
Benzo (g,h,i) perylene	<10.0 ug/L	10.0	ug/L						
Benzo (k) fluoranthene	<10.0 ug/L	10.0	ug/L						
Benzyl alcohol	<20.0 ug/L	20.0	ug/L						
bis (2-Chloroethoxy) methane	<10.0 ug/L	10.0	ug/L						
bis (2-Chloroethyl) ether	<10.0 ug/L	10.0	ug/L						
2,2'-Oxybis (1-chloropropane)	<10.0 ug/L	10.0	ug/L						
bis (2-Ethylhexyl) phthalate	<2.50 ug/L	2.50	ug/L						
Butyl benzyl phthalate	<10.0 ug/L	10.0	ug/L						
Chlorobenzilate	<2.50 ug/L	2.50	ug/L						
Chrysene	<10.0 ug/L	10.0	ug/L						
Diallate	<2.50 ug/L	2.50	ug/L						
Dibenz (a,h) anthracene	<10.0 ug/L	10.0	ug/L						
Dibenzo furan	<5.00 ug/L	5.00	ug/L						
Diethyl phthalate	<10.0 ug/L	10.0	ug/L						
Dimethoate	<2.50 ug/L	2.50	ug/L						
Dimethyl phthalate	<10.0 ug/L	10.0	ug/L						
Di-n-butyl phthalate	<10.0 ug/L	10.0	ug/L						
Di-n-octyl phthalate	<10.0 ug/L	10.0	ug/L						
Diphenylamine	<10.0 ug/L	10.0	ug/L						
Disulfoton	<2.50 ug/L	2.50	ug/L						



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/24/2017 16:07
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0584 - SW3510C

Blank (BAJ0584-BLK1) Prepared & Analyzed: 10/19/2017

Ethyl methanesulfonate	<20.0 ug/L	20.0	ug/L
Ethyl parathion	<2.50 ug/L	2.50	ug/L
Famphur	<2.50 ug/L	2.50	ug/L
Fluoranthene	<10.0 ug/L	10.0	ug/L
Fluorene	<10.0 ug/L	10.0	ug/L
Hexachlorobenzene	<0.05 ug/L	0.05	ug/L
Hexachlorobutadiene	<10.0 ug/L	10.0	ug/L
Hexachlorocyclopentadiene	<10.0 ug/L	10.0	ug/L
Hexachloroethane	<10.0 ug/L	10.0	ug/L
Hexachloropropene	<2.50 ug/L	2.50	ug/L
Indeno (1,2,3-cd) pyrene	<10.0 ug/L	10.0	ug/L
Isodrin	<10.0 ug/L	10.0	ug/L
Isophorone	<10.0 ug/L	10.0	ug/L
Isosafrole	<10.0 ug/L	10.0	ug/L
Kepone	<2.50 ug/L	2.50	ug/L
m+p-Cresols	<10.0 ug/L	10.0	ug/L
Methapyrilene	<10.0 ug/L	10.0	ug/L
Methyl methanesulfonate	<10.0 ug/L	10.0	ug/L
Methyl parathion	<2.50 ug/L	2.50	ug/L
Naphthalene	<10.0 ug/L	10.0	ug/L
Nitrobenzene	<10.0 ug/L	10.0	ug/L
n-Nitrosodiethylamine	<2.50 ug/L	2.50	ug/L
n-Nitrosodimethylamine	<10.0 ug/L	10.0	ug/L
n-Nitrosodi-n-butylamine	<10.0 ug/L	10.0	ug/L
n-Nitrosodi-n-propylamine	<10.0 ug/L	10.0	ug/L
n-Nitrosodiphenylamine	<10.0 ug/L	10.0	ug/L
n-Nitrosomethylalkylamine	<2.50 ug/L	2.50	ug/L
n-Nitrosopiperidine	<10.0 ug/L	10.0	ug/L
n-Nitrosopyrrolidine	<2.50 ug/L	2.50	ug/L
o,o,o-Triethyl phosphorothioate	<10.0 ug/L	10.0	ug/L
o,o-Diethyl o-2-pyrazinyl phosphorothioate	<10.0 ug/L	10.0	ug/L



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Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0584 - SW3510C

Blank (BAJ0584-BLK1)		Prepared & Analyzed: 10/19/2017						
o+m+p-Cresols	<10.0 ug/L	10.0	ug/L					
o-Cresol	<10.0 ug/L	10.0	ug/L					
o-Toluidine	<2.50 ug/L	2.50	ug/L					
p-(Dimethylamino) azobenzene	<2.50 ug/L	2.50	ug/L					
p-Chloro-m-cresol	<10.0 ug/L	10.0	ug/L					
Pentachlorobenzene	<10.0 ug/L	10.0	ug/L					
Pentachloronitrobenzene (quintozone)	<1.00 ug/L	1.00	ug/L					
Phenacetin	<10.0 ug/L	10.0	ug/L					
Phanthrene	<10.0 ug/L	10.0	ug/L					
Phenol	<10.0 ug/L	10.0	ug/L					
Phorate	<2.50 ug/L	2.50	ug/L					
p-Phenylenediamine	<10.0 ug/L	10.0	ug/L					
Pronamide	<10.0 ug/L	10.0	ug/L					
Pyrene	<10.0 ug/L	10.0	ug/L					
Safrole	<2.50 ug/L	2.50	ug/L					
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	40.9	ug/L	100		40.9	20-86		
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	19.4	ug/L	50.0		38.9	23-87		
<i>Surr: 2-Fluorophenol (Surr)</i>	30.6	ug/L	100		30.6	10-52		
<i>Surr: Nitrobenzene-d5 (Surr)</i>	20.3	ug/L	50.0		40.6	10-98.5		
<i>Surr: Phenol-d5 (Surr)</i>	20.7	ug/L	100		20.7	5-33		
<i>Surr: p-Terphenyl-d14 (Surr)</i>	29.2	ug/L	50.0		58.3	27-133		

LCS (BAJ0584-BS1)		Prepared & Analyzed: 10/19/2017					
1,2,4-Trichlorobenzene	33.0 ug/L	10.0	ug/L	100	ug/L	33.0	21.8-66.7
1,2-Dichlorobenzene	33.9 ug/L	10.0	ug/L	100	ug/L	33.9	22-60
1,3-Dichlorobenzene	30.1 ug/L	10.0	ug/L	100	ug/L	30.1	22-60
1,4-Dichlorobenzene	31.2 ug/L	10.0	ug/L	100	ug/L	31.2	13-68
1-Chloronaphthalene	36.5 ug/L	10.0	ug/L		ug/L		0-200
2,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L		ug/L		0-200
2,4,6-Trichlorophenol	38.2 ug/L	10.0	ug/L	100	ug/L	38.2	50-115
2,4-Dichlorophenol	38.2 ug/L	10.0	ug/L	100	ug/L	38.2	50-105



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0584 - SW3510C

LCS (BAJ0584-BS1)	Prepared & Analyzed: 10/19/2017						
2,4-Dimethylphenol	36.0 ug/L	0.50	ug/L	100	ug/L	36.0	30-110
2,4-Dinitrophenol	64.6 ug/L	50.0	ug/L	100	ug/L	64.6	15-140
2,6-Dinitrotoluene	74.2 ug/L	10.0	ug/L	100	ug/L	74.2	15-140
2-Chloronaphthalene	36.8 ug/L	10.0	ug/L	100	ug/L	36.8	45-105
2-Chlorophenol	34.0 ug/L	10.0	ug/L	100	ug/L	34.0	15-74
2-Nitrophenol	39.4 ug/L	10.0	ug/L	100	ug/L	39.4	40-115
3,3'-Dichlorobenzidine	55.8 ug/L	10.0	ug/L	100	ug/L	55.8	20-110
4,6-Dinitro-2-methylphenol	63.6 ug/L	50.0	ug/L	100	ug/L	63.6	40-130
4-Bromophenyl phenyl ether	54.5 ug/L	10.0	ug/L	100	ug/L	54.5	15-110
4-Chlorophenyl phenyl ether	42.4 ug/L	10.0	ug/L	100	ug/L	42.4	15-110
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	ug/L	25.8	0-125
Acenaphthene	39.5 ug/L	10.0	ug/L	100	ug/L	39.5	27.7-85.5
Acenaphthylene	41.9 ug/L	10.0	ug/L	100	ug/L	41.9	50-105
Acetophenone	33.7 ug/L	20.0	ug/L	100	ug/L	33.7	0-200
alpha-Terpineol	41.1 ug/L	2.50	ug/L	100	ug/L	41.1	0-200
Anthracene	57.6 ug/L	10.0	ug/L	100	ug/L	57.6	55-110
Benzo (a) anthracene	57.6 ug/L	0.05	ug/L	100	ug/L	57.6	55-110
Benzo (a) pyrene	56.7 ug/L	0.10	ug/L	100	ug/L	56.7	55-110
Benzo (b) fluoranthene	64.7 ug/L	10.0	ug/L	100	ug/L	64.7	45-120
Benzo (g,h,i) perylene	49.6 ug/L	10.0	ug/L	100	ug/L	49.6	40-125
Benzo (k) fluoranthene	57.2 ug/L	10.0	ug/L	100	ug/L	57.2	45-125
bis (2-Chloroethoxy) methane	40.2 ug/L	10.0	ug/L	100	ug/L	40.2	40-125
bis (2-Chloroethyl) ether	36.3 ug/L	10.0	ug/L	100	ug/L	36.3	40-125
2,2'-Oxybis (1-chloropropane)	31.0 ug/L	10.0	ug/L	100	ug/L	31.0	40-125
bis (2-Ethylhexyl) phthalate	50.0 ug/L	2.50	ug/L	100	ug/L	50.0	40-125
Butyl benzyl phthalate	49.7 ug/L	10.0	ug/L	100	ug/L	49.7	45-115
Carbazole	82.8 ug/L	2.50	ug/L	100	ug/L	82.8	0-200
Chrysene	56.9 ug/L	10.0	ug/L	100	ug/L	56.9	55-110
Dibenz (a,h) anthracene	50.8 ug/L	10.0	ug/L	100	ug/L	50.8	40-125
Diethyl phthalate	50.1 ug/L	10.0	ug/L	100	ug/L	50.1	40-120
Dimethyl phthalate	45.2 ug/L	10.0	ug/L	100	ug/L	45.2	25-125



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Blacksburg VA, 24060

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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0584 - SW3510C

LCS (BAJ0584-BS1)

	Prepared & Analyzed: 10/19/2017						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit
Di-n-butyl phthalate	68.2 ug/L	10.0	ug/L	100	ug/L	68.2	55-115
Di-n-octyl phthalate	54.5 ug/L	10.0	ug/L	100	ug/L	54.5	35-135
Fluoranthene	65.4 ug/L	10.0	ug/L	100	ug/L	65.4	55-115
Fluorene	44.9 ug/L	10.0	ug/L	100	ug/L	44.9	50-110
Hexachlorobenzene	60.0 ug/L	0.05	ug/L	100	ug/L	60.0	25-125
Hexachlorobutadiene	35.5 ug/L	10.0	ug/L	100	ug/L	35.5	25-125
Hexachlorocyclopentadiene	20.0 ug/L	10.0	ug/L	100	ug/L	20.0	25-125
Hexachloroethane	31.9 ug/L	10.0	ug/L	100	ug/L	31.9	25-125
Indeno (1,2,3-cd) pyrene	50.7 ug/L	10.0	ug/L	100	ug/L	50.7	45-125
Isophorone	37.0 ug/L	10.0	ug/L	100	ug/L	37.0	10-110
Naphthalene	34.8 ug/L	10.0	ug/L	100	ug/L	34.8	40-100
Nitrobenzene	34.8 ug/L	10.0	ug/L	100	ug/L	34.8	40-100
n-Nitrosodimethylamine	23.5 ug/L	10.0	ug/L	100	ug/L	23.5	25-110
n-Nitrosodi-n-propylamine	36.4 ug/L	10.0	ug/L	100	ug/L	36.4	12-97
n-Nitrosodiphenylamine	42.2 ug/L	10.0	ug/L	100	ug/L	42.2	12-97
p-Chloro-m-cresol	37.7 ug/L	10.0	ug/L	100	ug/L	37.7	10-91
Pentachlorophenol	59.8 ug/L	20.0	ug/L	100	ug/L	59.8	30-109
Phenanthrene	58.1 ug/L	10.0	ug/L	100	ug/L	58.1	50-115
Phenol	18.7 ug/L	10.0	ug/L	101	ug/L	18.5	0-115
Pyrene	50.2 ug/L	10.0	ug/L	100	ug/L	50.2	27-110
Pyridine	22.1 ug/L	10.0	ug/L	100	ug/L	22.1	0-200
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	62.0		ug/L	100	ug/L	62.0	20-86
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	17.0		ug/L	50.0	ug/L	34.1	23-87
<i>Surr: 2-Fluorophenol (Surr)</i>	25.5		ug/L	100	ug/L	25.5	10-52
<i>Surr: Nitrobenzene-d5 (Surr)</i>	17.4		ug/L	50.0	ug/L	34.7	10-98.5
<i>Surr: Phenol-d5 (Surr)</i>	18.1		ug/L	100	ug/L	18.1	5-33
<i>Surr: p-Terphenyl-d14 (Surr)</i>	24.8		ug/L	50.0	ug/L	49.6	27-133



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0584 - SW3510C

Matrix Spike (BAJ0584-MS1)	Source: 17J0575-02		Prepared & Analyzed: 10/19/2017						
1,2,4-Trichlorobenzene	54.7 ug/L	10.0	ug/L	100	<10.0 ug/L	54.7	21.8-66.7		
1,2-Dichlorobenzene	56.5 ug/L	10.0	ug/L	100	<10.0 ug/L	56.5	22-60		
1,3-Dichlorobenzene	50.6 ug/L	10.0	ug/L	100	<10.0 ug/L	50.6	22-60		
1,4-Dichlorobenzene	52.1 ug/L	10.0	ug/L	100	<10.0 ug/L	52.1	22-60		
1-Chloronaphthalene	60.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200		
2,4,6-Trichlorophenol	65.0 ug/L	10.0	ug/L	100	<10.0 ug/L	65.0	50-115		
2,4-Dichlorophenol	66.7 ug/L	10.0	ug/L	100	<10.0 ug/L	66.7	50-105		
2,4-Dimethylphenol	63.0 ug/L	0.50	ug/L	100	<0.50 ug/L	63.0	30-110		
2,4-Dinitrophenol	82.8 ug/L	50.0	ug/L	100	<50.0 ug/L	82.8	15-140		
2,4-Dinitrotoluene	65.9 ug/L	10.0	ug/L	100	<10.0 ug/L	65.9	17-111		
2,6-Dinitrotoluene	85.8 ug/L	10.0	ug/L	100	<10.0 ug/L	85.8	15-140		
2-Chloronaphthalene	60.8 ug/L	10.0	ug/L	100	<10.0 ug/L	60.8	45-105		
2-Chlorophenol	57.3 ug/L	10.0	ug/L	100	<10.0 ug/L	57.3	19-64		
2-Nitrophenol	68.2 ug/L	10.0	ug/L	100	<10.0 ug/L	68.2	40-115		
3,3'-Dichlorobenzidine	52.3 ug/L	10.0	ug/L	100	<10.0 ug/L	52.3	20-110		
4,6-Dinitro-2-methylphenol	76.1 ug/L	50.0	ug/L	100	<50.0 ug/L	76.1	40-130		
4-Bromophenyl phenyl ether	66.7 ug/L	10.0	ug/L	100	<10.0 ug/L	66.7	15-110		
4-Chlorophenyl phenyl ether	61.6 ug/L	10.0	ug/L	100	<10.0 ug/L	61.6	15-110		
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	<50.0 ug/L	27.1	0-125		
Acenaphthene	63.1 ug/L	10.0	ug/L	100	<10.0 ug/L	63.1	24-90		
Acenaphthylene	67.5 ug/L	10.0	ug/L	100	<10.0 ug/L	67.5	50-105		
Acetophenone	55.0 ug/L	20.0	ug/L	100	<20.0 ug/L	55.0	0-200		
alpha-Terpineol	71.7 ug/L	2.50	ug/L	100	<2.50 ug/L	71.7	0-200		
Anthracene	65.7 ug/L	10.0	ug/L	100	<10.0 ug/L	65.7	55-110		
Benzo (a) anthracene	63.4 ug/L	0.05	ug/L	100	<0.05 ug/L	63.4	55-110		
Benzo (a) pyrene	63.2 ug/L	0.10	ug/L	100	<0.10 ug/L	63.2	55-110		
Benzo (b) fluoranthene	72.8 ug/L	10.0	ug/L	100	<10.0 ug/L	72.8	45-120		
Benzo (g,h,i) perylene	52.0 ug/L	10.0	ug/L	100	<10.0 ug/L	52.0	40-125		
Benzo (k) fluoranthene	65.2 ug/L	10.0	ug/L	100	<10.0 ug/L	65.2	45-125		
bis (2-Chloroethoxy) methane	72.0 ug/L	10.0	ug/L	100	<10.0 ug/L	72.0	40-125		
bis (2-Chloroethyl) ether	61.8 ug/L	10.0	ug/L	100	<10.0 ug/L	61.8	40-125		



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Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0584 - SW3510C

Matrix Spike (BAJ0584-MS1)	Source: 17J0575-02		Prepared & Analyzed: 10/19/2017					
2,2'-Oxybis (1-chloropropane)	52.6 ug/L	10.0	ug/L	100	<10.0 ug/L	52.6	40-125	
bis (2-Ethylhexyl) phthalate	54.4 ug/L	2.50	ug/L	100	<2.50 ug/L	54.4	40-125	
Butyl benzyl phthalate	54.7 ug/L	10.0	ug/L	100	<10.0 ug/L	54.7	45-115	
Carbazole	93.1 ug/L	2.50	ug/L	100	<2.50 ug/L	93.1	0-200	
Chrysene	63.9 ug/L	10.0	ug/L	100	<10.0 ug/L	63.9	55-110	
Dibenz (a,h) anthracene	53.1 ug/L	10.0	ug/L	100	<10.0 ug/L	53.1	40-125	
Diethyl phthalate	58.6 ug/L	10.0	ug/L	100	<10.0 ug/L	58.6	40-120	
Dimethyl phthalate	59.5 ug/L	10.0	ug/L	100	<10.0 ug/L	59.5	25-125	
Di-n-butyl phthalate	75.6 ug/L	10.0	ug/L	100	<10.0 ug/L	75.6	55-115	
Di-n-octyl phthalate	65.2 ug/L	10.0	ug/L	100	<10.0 ug/L	65.2	35-135	
Fluoranthene	72.6 ug/L	10.0	ug/L	100	<10.0 ug/L	72.6	55-115	
Fluorene	62.2 ug/L	10.0	ug/L	100	<10.0 ug/L	62.2	50-110	
Hexachlorobenzene	67.9 ug/L	0.05	ug/L	100	<0.05 ug/L	67.9	25-125	
Hexachlorobutadiene	59.4 ug/L	10.0	ug/L	100	<10.0 ug/L	59.4	25-125	
Hexachlorocyclopentadiene	40.0 ug/L	10.0	ug/L	100	<10.0 ug/L	40.0	25-125	
Hexachloroethane	52.9 ug/L	10.0	ug/L	100	<10.0 ug/L	52.9	25-125	
Indeno (1,2,3-cd) pyrene	53.9 ug/L	10.0	ug/L	100	<10.0 ug/L	53.9	45-125	
Isophorone	64.8 ug/L	10.0	ug/L	100	<10.0 ug/L	64.8	10-110	
Naphthalene	55.7 ug/L	10.0	ug/L	100	<10.0 ug/L	55.7	40-100	
Nitrobenzene	58.2 ug/L	10.0	ug/L	100	<10.0 ug/L	58.2	40-100	
n-Nitrosodimethylamine	49.0 ug/L	10.0	ug/L	100	<10.0 ug/L	49.0	25-110	
n-Nitrosodi-n-propylamine	63.0 ug/L	10.0	ug/L	100	<10.0 ug/L	63.0	12-97	
n-Nitrosodiphenylamine	51.0 ug/L	10.0	ug/L	100	<10.0 ug/L	51.0	12-97	
p-Chloro-m-cresol	63.6 ug/L	10.0	ug/L	100	<10.0 ug/L	63.6	10-91	
Pentachlorophenol	74.4 ug/L	20.0	ug/L	100	<20.0 ug/L	74.4	27-109	
Phenanthrene	66.4 ug/L	10.0	ug/L	100	<10.0 ug/L	66.4	50-115	
Phenol	24.9 ug/L	10.0	ug/L	101	<10.0 ug/L	24.6	0-115	
Pyrene	54.1 ug/L	10.0	ug/L	100	<10.0 ug/L	54.1	23-110	
Pyridine	44.3 ug/L	10.0	ug/L	100	<10.0 ug/L	44.3	0-200	
<i>Sur: 2,4,6-Tribromophenol (Sur)</i>	74.9		ug/L	100	ug/L	74.9	20-86	
<i>Sur: 2-Fluorobiphenyl (Sur)</i>	29.2		ug/L	50.0	ug/L	58.4	23-87	



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/24/2017 16:07
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0584 - SW3510C

Matrix Spike (BAJ0584-MS1)	Source: 17J0575-02		Prepared & Analyzed: 10/19/2017					
Surr: 2-Fluorophenol (Surr)	40.8		ug/L	100	ug/L	40.8	10-52	
Surr: Nitrobenzene-d5 (Surr)	29.6		ug/L	50.0	ug/L	59.1	10-98.5	
Surr: Phenol-d5 (Surr)	24.9		ug/L	100	ug/L	24.9	5-33	
Surr: p-Terphenyl-d14 (Surr)	27.1		ug/L	50.0	ug/L	54.3	27-133	

Matrix Spike Dup (BAJ0584-MSD1)	Source: 17J0575-02		Prepared & Analyzed: 10/19/2017					
1,2,4-Trichlorobenzene	52.7 ug/L	10.0	ug/L	100	<10.0 ug/L	52.7	21.8-66.7	3.63
1,2-Dichlorobenzene	48.3 ug/L	10.0	ug/L	100	<10.0 ug/L	48.3	22-60	15.6
1,3-Dichlorobenzene	43.5 ug/L	10.0	ug/L	100	<10.0 ug/L	43.5	22-60	15.1
1,4-Dichlorobenzene	44.4 ug/L	10.0	ug/L	100	<10.0 ug/L	44.4	22-60	15.8
1-Chloronaphthalene	61.3 ug/L	10.0	ug/L		<10.0 ug/L		0-200	2.11
2,4,6-Trichlorophenol	66.4 ug/L	10.0	ug/L	100	<10.0 ug/L	66.4	50-115	1.99
2,4-Dichlorophenol	66.2 ug/L	10.0	ug/L	100	<10.0 ug/L	66.2	50-105	0.752
2,4-Dimethylphenol	63.2 ug/L	0.50	ug/L	100	<0.50 ug/L	63.2	30-110	0.428
2,4-Dinitrophenol	90.2 ug/L	50.0	ug/L	100	<50.0 ug/L	90.2	15-140	8.57
2,4-Dinitrotoluene	70.2 ug/L	10.0	ug/L	100	<10.0 ug/L	70.2	17-111	6.42
2,6-Dinitrotoluene	91.5 ug/L	10.0	ug/L	100	<10.0 ug/L	91.5	15-140	6.49
2-Chloronaphthalene	62.1 ug/L	10.0	ug/L	100	<10.0 ug/L	62.1	45-105	2.11
2-Chlorophenol	51.4 ug/L	10.0	ug/L	100	<10.0 ug/L	51.4	19-64	10.8
2-Nitrophenol	66.7 ug/L	10.0	ug/L	100	<10.0 ug/L	66.7	40-115	2.15
3,3'-Dichlorobenzidine	59.6 ug/L	10.0	ug/L	100	<10.0 ug/L	59.6	20-110	13.0
4,6-Dinitro-2-methylphenol	84.4 ug/L	50.0	ug/L	100	<50.0 ug/L	84.4	40-130	10.4
4-Bromophenyl phenyl ether	69.3 ug/L	10.0	ug/L	100	<10.0 ug/L	69.3	15-110	3.81
4-Chlorophenyl phenyl ether	63.1 ug/L	10.0	ug/L	100	<10.0 ug/L	63.1	15-110	2.47
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	<50.0 ug/L	29.0	0-125	6.81
Acenaphthene	64.7 ug/L	10.0	ug/L	100	<10.0 ug/L	64.7	24-90	2.60
Acenaphthylene	68.3 ug/L	10.0	ug/L	100	<10.0 ug/L	68.3	50-105	1.10
Acetophenone	52.0 ug/L	20.0	ug/L	100	<20.0 ug/L	52.0	0-200	5.42
alpha-Terpineol	72.9 ug/L	2.50	ug/L	100	<2.50 ug/L	72.9	0-200	1.66
Anthracene	69.5 ug/L	10.0	ug/L	100	<10.0 ug/L	69.5	55-110	5.64
Benzo (a) anthracene	70.3 ug/L	0.05	ug/L	100	<0.05 ug/L	70.3	55-110	10.3



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0584 - SW3510C

Matrix Spike Dup (BAJ0584-MSD1)	Source: 17J0575-02			Prepared & Analyzed: 10/19/2017					
Benzo (a) pyrene	69.3 ug/L	0.10	ug/L	100	<0.10 ug/L	69.3	55-110	9.28	20
Benzo (b) fluoranthene	78.4 ug/L	10.0	ug/L	100	<10.0 ug/L	78.4	45-120	7.44	20
Benzo (g,h,i) perylene	56.8 ug/L	10.0	ug/L	100	<10.0 ug/L	56.8	40-125	8.79	20
Benzo (k) fluoranthene	72.8 ug/L	10.0	ug/L	100	<10.0 ug/L	72.8	45-125	11.1	20
bis (2-Chloroethoxy) methane	69.4 ug/L	10.0	ug/L	100	<10.0 ug/L	69.4	40-125	3.63	20
bis (2-Chloroethyl) ether	55.5 ug/L	10.0	ug/L	100	<10.0 ug/L	55.5	40-125	10.6	20
2,2'-Oxybis (1-chloropropane)	49.3 ug/L	10.0	ug/L	100	<10.0 ug/L	49.3	40-125	6.40	20
bis (2-Ethylhexyl) phthalate	60.6 ug/L	2.50	ug/L	100	<2.50 ug/L	60.6	40-125	10.8	20
Butyl benzyl phthalate	60.3 ug/L	10.0	ug/L	100	<10.0 ug/L	60.3	45-115	9.64	20
Carbazole	101 ug/L	2.50	ug/L	100	<2.50 ug/L	101	0-200	8.16	20
Chrysene	71.7 ug/L	10.0	ug/L	100	<10.0 ug/L	71.7	55-110	11.5	20
Dibenz (a,h) anthracene	58.6 ug/L	10.0	ug/L	100	<10.0 ug/L	58.6	40-125	9.86	20
Diethyl phthalate	61.1 ug/L	10.0	ug/L	100	<10.0 ug/L	61.1	40-120	4.13	20
Dimethyl phthalate	61.4 ug/L	10.0	ug/L	100	<10.0 ug/L	61.4	25-125	3.08	20
Di-n-butyl phthalate	87.6 ug/L	10.0	ug/L	100	<10.0 ug/L	87.6	55-115	14.7	20
Di-n-octyl phthalate	70.7 ug/L	10.0	ug/L	100	<10.0 ug/L	70.7	35-135	8.20	20
Fluoranthene	79.1 ug/L	10.0	ug/L	100	<10.0 ug/L	79.1	55-115	8.58	20
Fluorene	64.8 ug/L	10.0	ug/L	100	<10.0 ug/L	64.8	50-110	4.22	20
Hexachlorobenzene	71.9 ug/L	0.05	ug/L	100	<0.05 ug/L	71.9	25-125	5.75	20
Hexachlorobutadiene	56.7 ug/L	10.0	ug/L	100	<10.0 ug/L	56.7	25-125	4.63	20
Hexachlorocyclopentadiene	41.6 ug/L	10.0	ug/L	100	<10.0 ug/L	41.6	25-125	3.97	20
Hexachloroethane	47.0 ug/L	10.0	ug/L	100	<10.0 ug/L	47.0	25-125	11.9	20
Indeno (1,2,3-cd) pyrene	59.2 ug/L	10.0	ug/L	100	<10.0 ug/L	59.2	45-125	9.39	20
Isophorone	64.9 ug/L	10.0	ug/L	100	<10.0 ug/L	64.9	10-110	0.0771	20
Naphthalene	54.8 ug/L	10.0	ug/L	100	<10.0 ug/L	54.8	40-100	1.61	20
Nitrobenzene	55.7 ug/L	10.0	ug/L	100	<10.0 ug/L	55.7	40-100	4.39	20
n-Nitrosodimethylamine	28.4 ug/L	10.0	ug/L	100	<10.0 ug/L	28.4	25-110	53.4	20
n-Nitrosodi-n-propylamine	60.4 ug/L	10.0	ug/L	100	<10.0 ug/L	60.4	12-97	4.31	20
n-Nitrosodiphenylamine	53.4 ug/L	10.0	ug/L	100	<10.0 ug/L	53.4	12-97	4.56	20
p-Chloro-m-cresol	65.7 ug/L	10.0	ug/L	100	<10.0 ug/L	65.7	10-91	3.19	20
Pentachlorophenol	81.2 ug/L	20.0	ug/L	100	<20.0 ug/L	81.2	27-109	8.80	20



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0584 - SW3510C

Matrix Spike Dup (BAJ0584-MSD1)	Source: 17J0575-02			Prepared & Analyzed: 10/19/2017						
Phenanthrene	70.6 ug/L	10.0	ug/L	100	<10.0 ug/L	70.6	50-115	6.19	20	
Phenol	23.8 ug/L	10.0	ug/L	101	<10.0 ug/L	23.6	0-115	4.19	20	
Pyrene	61.2 ug/L	10.0	ug/L	100	<10.0 ug/L	61.2	23-110	12.4	20	
Pyridine	28.1 ug/L	10.0	ug/L	100	<10.0 ug/L	28.1	0-200	44.9	20	P
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	80.1		ug/L	100	ug/L	80.1	20-86			
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	29.9		ug/L	50.0	ug/L	59.8	23-87			
<i>Surr: 2-Fluorophenol (Surr)</i>	23.2		ug/L	100	ug/L	23.2	10-52			
<i>Surr: Nitrobenzene-d5 (Surr)</i>	28.6		ug/L	50.0	ug/L	57.1	10-98.5			
<i>Surr: Phenol-d5 (Surr)</i>	23.9		ug/L	100	ug/L	23.9	5-33			
<i>Surr: p-Terphenyl-d14 (Surr)</i>	29.2		ug/L	50.0	ug/L	58.4	27-133			



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Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0439 - SW3510C

Blank (BAJ0439-BLK1)	Prepared & Analyzed: 10/18/2017					
PCB as Aroclor 1016	<0.200 ug/L	0.200	ug/L			
4,4'-DDD	<0.050 ug/L	0.050	ug/L			
PCB as Aroclor 1221	<0.200 ug/L	0.200	ug/L			
PCB as Aroclor 1232	<0.200 ug/L	0.200	ug/L			
4,4'-DDE	<0.050 ug/L	0.050	ug/L			
PCB as Aroclor 1242	<0.200 ug/L	0.200	ug/L			
4,4'-DDT	<0.050 ug/L	0.050	ug/L			
PCB as Aroclor 1248	<0.200 ug/L	0.200	ug/L			
PCB as Aroclor 1254	<0.200 ug/L	0.200	ug/L			
PCB as Aroclor 1260	<0.200 ug/L	0.200	ug/L			
Aldrin	<0.050 ug/L	0.050	ug/L			
alpha-BHC	<0.050 ug/L	0.050	ug/L			
beta-BHC	<0.050 ug/L	0.050	ug/L			
Chlordane	<0.200 ug/L	0.200	ug/L			
delta-BHC	<0.050 ug/L	0.050	ug/L			
Dieldrin	<0.050 ug/L	0.050	ug/L			
Endosulfan I	<0.050 ug/L	0.050	ug/L			
Endosulfan II	<0.050 ug/L	0.050	ug/L			
Endosulfan sulfate	<0.050 ug/L	0.050	ug/L			
Endrin	<0.050 ug/L	0.050	ug/L			
Endrin aldehyde	<0.050 ug/L	0.050	ug/L			
gamma-BHC (Lindane)	<0.050 ug/L	0.050	ug/L			
Heptachlor	<0.050 ug/L	0.050	ug/L			
Heptachlor epoxide	<0.050 ug/L	0.050	ug/L			
Methoxychlor	<0.050 ug/L	0.050	ug/L			
Toxaphene	<1.00 ug/L	1.00	ug/L			
<i>Surr: DCB</i>	0.160	ug/L	0.200		80.0	30-105
<i>Surr: TCMX</i>	0.140	ug/L	0.200		70.0	18-112
<i>Surr: TCMX</i>	0.140	ug/L	0.200		70.0	30-105
<i>Surr: DCB</i>	0.170	ug/L	0.200		85.0	27-131



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Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0439 - SW3510C

LCS (BAJ0439-BS1)							Prepared & Analyzed: 10/18/2017		
4,4'-DDD	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134			
4,4'-DDE	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134			
4,4'-DDT	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134			
Aldrin	0.060 ug/L	0.050	ug/L	0.100 ug/L	60.0	23-134			
alpha-BHC	0.070 ug/L	0.050	ug/L	0.100 ug/L	70.0	23-134			
beta-BHC	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134			
delta-BHC	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134			
Dieldrin	0.070 ug/L	0.050	ug/L	0.100 ug/L	70.0	23-134			
Endosulfan I	0.060 ug/L	0.050	ug/L	0.100 ug/L	60.0	23-134			
Endosulfan II	0.070 ug/L	0.050	ug/L	0.100 ug/L	70.0	23-134			
Endosulfan sulfate	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134			
Endrin	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134			
Endrin aldehyde	0.060 ug/L	0.050	ug/L	0.100 ug/L	60.0	23-134			
gamma-BHC (Lindane)	0.070 ug/L	0.050	ug/L	0.100 ug/L	70.0	23-134			
Heptachlor	0.060 ug/L	0.050	ug/L	0.100 ug/L	60.0	23-134			
Heptachlor epoxide	0.070 ug/L	0.050	ug/L	0.100 ug/L	70.0	23-134			
Methoxychlor	0.090 ug/L	0.050	ug/L	0.100 ug/L	90.0	23-134			
Mirex	0.070 ug/L	0.050	ug/L	0.100 ug/L	70.0	23-134			
Surr: TCMX	0.130		ug/L	0.200 ug/L	65.0	18-112			
Surr: DCB	0.150		ug/L	0.200 ug/L	75.0	27-131			

LCS (BAJ0439-BS2)							Prepared & Analyzed: 10/18/2017		
PCB as Aroclor 1016	0.730 ug/L	0.200	ug/L	1.00 ug/L	73.0	40-90			
PCB as Aroclor 1260	0.740 ug/L	0.200	ug/L	1.00 ug/L	74.0	40-90			
Surr: DCB	0.160		ug/L	0.200 ug/L	80.0	30-105			
Surr: TCMX	0.120		ug/L	0.200 ug/L	60.0	30-105			

LCS (BAJ0439-BS3)							Prepared & Analyzed: 10/18/2017		
Toxaphene	1.80 ug/L	1.00	ug/L	2.50 ug/L	72.0	23-134			
Surr: TCMX	0.120		ug/L	0.200 ug/L	60.0	18-112			
Surr: DCB	0.120		ug/L	0.200 ug/L	60.0	27-131			



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Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0439 - SW3510C

LCS (BAJ0439-BS4)						
Prepared & Analyzed: 10/18/2017						
Chlordane	1.42 ug/L	0.200	ug/L	2.50 ug/L	56.8	23-134
Surr: TCMX	0.100		ug/L	0.200 ug/L	50.0	18-112
Surr: DCB	0.100		ug/L	0.200 ug/L	50.0	27-131
Matrix Spike (BAJ0439-MS1)						
Source: 17J0486-18				Prepared & Analyzed: 10/18/2017		
4,4'-DDD	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134
4,4'-DDE	0.080 ug/L	0.050	ug/L	0.100 <0.050 ug/L	80.0	23-134
4,4'-DDT	0.080 ug/L	0.050	ug/L	0.100 <0.050 ug/L	80.0	23-134
Aldrin	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134
alpha-BHC	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134
beta-BHC	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134
delta-BHC	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134
Dieldrin	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134
Endosulfan I	0.050 ug/L	0.050	ug/L	0.100 <0.050 ug/L	50.0	23-134
Endosulfan II	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134
Endosulfan sulfate	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134
Endrin	0.090 ug/L	0.050	ug/L	0.100 <0.050 ug/L	90.0	23-134
Endrin aldehyde	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134
gamma-BHC (Lindane)	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134
Heptachlor	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134
Heptachlor epoxide	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134
Methoxychlor	0.090 ug/L	0.050	ug/L	0.100 <0.050 ug/L	90.0	23-134
Mirex	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134
Surr: TCMX	0.120		ug/L	0.200 ug/L	60.0	18-112
Surr: DCB	0.180		ug/L	0.200 ug/L	90.0	27-131

Matrix Spike Dup (BAJ0439-MSD1)						
Source: 17J0486-18						Prepared & Analyzed: 10/18/2017
4,4'-DDD	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134 0.00 20
4,4'-DDE	0.080 ug/L	0.050	ug/L	0.100 <0.050 ug/L	80.0	23-134 0.00 20
4,4'-DDT	0.080 ug/L	0.050	ug/L	0.100 <0.050 ug/L	80.0	23-134 0.00 20
Aldrin	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134 15.4 20
alpha-BHC	0.080 ug/L	0.050	ug/L	0.100 <0.050 ug/L	80.0	23-134 28.6 20 P



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Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0439 - SW3510C

Matrix Spike Dup (BAJ0439-MSD1)	Source: 17J0486-18			Prepared & Analyzed: 10/18/2017					
beta-BHC	0.090 ug/L	0.050	ug/L	0.100 <0.050 ug/L	90.0	23-134	25.0	20	P
delta-BHC	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134	0.00	20	
Dieldrin	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134	15.4	20	
Endosulfan I	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134	18.2	20	
Endosulfan II	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134	0.00	20	
Endosulfan sulfate	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134	0.00	20	
Endrin	0.090 ug/L	0.050	ug/L	0.100 <0.050 ug/L	90.0	23-134	0.00	20	
Endrin aldehyde	0.050 ug/L	0.050	ug/L	0.100 <0.050 ug/L	50.0	23-134	18.2	20	
gamma-BHC (Lindane)	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134	0.00	20	
Heptachlor	0.060 ug/L	0.050	ug/L	0.100 <0.050 ug/L	60.0	23-134	0.00	20	
Heptachlor epoxide	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134	15.4	20	
Methoxychlor	0.090 ug/L	0.050	ug/L	0.100 <0.050 ug/L	90.0	23-134	0.00	20	
Mirex	0.070 ug/L	0.050	ug/L	0.100 <0.050 ug/L	70.0	23-134	15.4	20	
<i>Surr: TCMX</i>	0.130		ug/L	0.200 ug/L	65.0	18-112			
<i>Surr: DCB</i>	0.180		ug/L	0.200 ug/L	90.0	27-131			

Batch BAJ0611 - SW3550B

Blank (BAJ0611-BLK1)	Prepared & Analyzed: 10/20/2017					
PCB as Aroclor 1016	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1221	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1232	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1242	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1248	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1254	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1260	<0.100 mg/kg wet	0.100	mg/kg wet			
<i>Surr: DCB</i>	0.0300		mg/kg wet	0.0333	90.0	30-105
<i>Surr: TCMX</i>	0.0233		mg/kg wet	0.0333	70.0	30-105



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Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/24/2017 16:07
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0611 - SW3550B

LCS (BAJ0611-BS1)								Prepared & Analyzed: 10/20/2017		
PCB as Aroclor 1016	0.288 mg/kg wet	0.100	mg/kg wet	0.167	mg/kg wet	173	60-140			L
PCB as Aroclor 1260	0.270 mg/kg wet	0.100	mg/kg wet	0.167	mg/kg wet	162	60-140			L
Surr: DCB	0.0300		mg/kg wet	0.0333	mg/kg wet	90.0	30-105			
Surr: TCMX	0.0283		mg/kg wet	0.0333	mg/kg wet	85.0	30-105			
Matrix Spike (BAJ0611-MS1)								Source: 17J0518-01 Prepared & Analyzed: 10/20/2017		
PCB as Aroclor 1016	0.289 mg/kg dry	0.135	mg/kg dry	0.226	<0.135 mg/kg dry	128	60-140			
PCB as Aroclor 1260	0.307 mg/kg dry	0.135	mg/kg dry	0.226	<0.135 mg/kg dry	136	60-140			
Surr: DCB	0.0406		mg/kg dry	0.0451	mg/kg dry	90.0	30-105			
Surr: TCMX	0.0338		mg/kg dry	0.0451	mg/kg dry	75.0	30-105			
Matrix Spike Dup (BAJ0611-MSD1)								Source: 17J0518-01 Prepared & Analyzed: 10/20/2017		
PCB as Aroclor 1016	0.310 mg/kg dry	0.136	mg/kg dry	0.226	<0.136 mg/kg dry	137	60-140	7.12	20	
PCB as Aroclor 1260	0.324 mg/kg dry	0.136	mg/kg dry	0.226	<0.136 mg/kg dry	143	60-140	5.35	20	M
Surr: DCB	0.0385		mg/kg dry	0.0453	mg/kg dry	85.0	30-105			
Surr: TCMX	0.0317		mg/kg dry	0.0453	mg/kg dry	70.0	30-105			



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Organochlorine Herbicides by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0544 - SW3510C

Blank (BAJ0544-BLK1)	Prepared: 10/18/2017 Analyzed: 10/23/2017						
2,4,5-T	<0.500 ug/L	0.500	ug/L				
2,4,5-TP (Silvex)	<0.500 ug/L	0.500	ug/L				
2,4-D	<0.500 ug/L	0.500	ug/L				
Dinoseb	<0.500 ug/L	0.500	ug/L				
Pentachlorophenol	<0.500 ug/L	0.500	ug/L				
Surr: DCAA (Surr)	1.00		ug/L	1.11		90.0	60-112

LCS (BAJ0544-BS1)	Prepared: 10/18/2017 Analyzed: 10/23/2017						
2,4,5-T	0.556 ug/L	0.500	ug/L	0.556 ug/L	100	53-144	
2,4,5-TP (Silvex)	0.500 ug/L	0.500	ug/L	0.556 ug/L	90.0	52-129	
2,4-D	0.500 ug/L	0.500	ug/L	0.556 ug/L	90.0	53-126	
Dinoseb	<0.500 ug/L	0.500	ug/L	0.556 ug/L	60.0	60-137	L
Pentachlorophenol	<0.500 ug/L	0.500	ug/L	0.556 ug/L	80.0	52-124	
Surr: DCAA (Surr)	1.11		ug/L	1.11 ug/L	100	60-112	

Matrix Spike (BAJ0544-MS1)	Source: 17J0486-18 Prepared: 10/18/2017 Analyzed: 10/23/2017						
2,4,5-T	0.500 ug/L	0.500	ug/L	0.556 <0.500 ug/L	90.0	53-144	
2,4,5-TP (Silvex)	0.500 ug/L	0.500	ug/L	0.556 <0.500 ug/L	90.0	52-129	
2,4-D	<0.500 ug/L	0.500	ug/L	0.556 <0.500 ug/L	70.0	53-126	
Dinoseb	<0.500 ug/L	0.500	ug/L	0.556 <0.500 ug/L	60.0	60-137	M
Pentachlorophenol	<0.500 ug/L	0.500	ug/L	0.556 <0.500 ug/L	80.0	52-124	
Surr: DCAA (Surr)	1.06		ug/L	1.11 ug/L	95.0	60-112	

Matrix Spike Dup (BAJ0544-MSD1)	Source: 17J0486-18 Prepared: 10/18/2017 Analyzed: 10/23/2017						
2,4,5-T	0.556 ug/L	0.500	ug/L	0.556 <0.500 ug/L	100	53-144	10.5
2,4,5-TP (Silvex)	0.500 ug/L	0.500	ug/L	0.556 <0.500 ug/L	90.0	52-129	0.00
2,4-D	<0.500 ug/L	0.500	ug/L	0.556 <0.500 ug/L	60.0	53-126	15.4
Dinoseb	<0.500 ug/L	0.500	ug/L	0.556 <0.500 ug/L	60.0	60-137	0.00
Pentachlorophenol	<0.500 ug/L	0.500	ug/L	0.556 <0.500 ug/L	80.0	52-124	0.00
Surr: DCAA (Surr)	1.00		ug/L	1.11 ug/L	90.0	60-112	20



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Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Micro-extractables by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0496 - SW8011

<u>Blank (BAJ0496-BLK1)</u> Prepared: 10/17/2017 Analyzed: 10/19/2017									
1,2-Dibromoethane (EDB)	<0.010 ug/L	0.010	ug/L						
1,2,3-Trichloropropane	<0.010 ug/L	0.010	ug/L						
1,2-Dibromo-3-chloropropane (DBCP)	<0.010 ug/L	0.010	ug/L						
<u>LCS (BAJ0496-BS1)</u> Prepared: 10/17/2017 Analyzed: 10/20/2017									
1,2-Dibromoethane (EDB)	0.237 ug/L	0.010	ug/L	0.250	ug/L	94.9	65-135		
1,2,3-Trichloropropane	0.268 ug/L	0.010	ug/L	0.250	ug/L	107	65-135		
1,2-Dibromo-3-chloropropane (DBCP)	0.236 ug/L	0.010	ug/L	0.250	ug/L	94.3	65-135		
<u>LCS Dup (BAJ0496-BSD1)</u> Prepared: 10/17/2017 Analyzed: 10/20/2017									
1,2-Dibromoethane (EDB)	0.309 ug/L	0.010	ug/L	0.250	ug/L	123	65-135	26.2	P
1,2,3-Trichloropropane	0.302 ug/L	0.010	ug/L	0.250	ug/L	121	65-135	12.1	20
1,2-Dibromo-3-chloropropane (DBCP)	0.301 ug/L	0.010	ug/L	0.250	ug/L	120	65-135	24.2	20
<u>Duplicate (BAJ0496-DUP1)</u> Source: 17J0515-02 Prepared: 10/17/2017 Analyzed: 10/20/2017									
1,2-Dibromoethane (EDB)	<0.010 ug/L	0.010	ug/L	<0.010 ug/L			NA	20	
1,2,3-Trichloropropane	<0.010 ug/L	0.010	ug/L	<0.010 ug/L			NA	20	
1,2-Dibromo-3-chloropropane (DBCP)	<0.010 ug/L	0.010	ug/L	<0.010 ug/L			NA	20	
<u>Matrix Spike (BAJ0496-MS1)</u> Source: 17J0515-03 Prepared: 10/17/2017 Analyzed: 10/20/2017									
1,2-Dibromoethane (EDB)	0.172 ug/L	0.010	ug/L	0.253	<0.010 ug/L	67.9	65-135		
1,2,3-Trichloropropane	0.177 ug/L	0.010	ug/L	0.253	<0.010 ug/L	70.2	65-135		
1,2-Dibromo-3-chloropropane (DBCP)	0.177 ug/L	0.010	ug/L	0.253	<0.010 ug/L	69.9	65-135		



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0594 - No Prep Wet Chem

Blank (BAJ0594-BLK1)									Prepared & Analyzed: 10/19/2017
Cyanide	<0.01 mg/L	0.01	mg/L						
LCS (BAJ0594-BS1)									Prepared & Analyzed: 10/19/2017
Cyanide	0.22 mg/L	0.01	mg/L	0.250	mg/L	89.6	80-120		
LCS Dup (BAJ0594-BSD1)									Prepared & Analyzed: 10/19/2017
Cyanide	0.22 mg/L	0.01	mg/L	0.250	mg/L	88.1	80-120	1.67	20
Matrix Spike (BAJ0594-MS1)		Source: 17J0582-01							Prepared & Analyzed: 10/19/2017
Cyanide	0.23 mg/L	0.01	mg/L	0.250	<0.01 mg/L	91.2	80-120		
Matrix Spike (BAJ0594-MS2)		Source: 17J0423-02							Prepared & Analyzed: 10/19/2017
Cyanide	0.23 mg/L	0.01	mg/L	0.250	<0.01 mg/L	92.4	80-120		
Matrix Spike Dup (BAJ0594-MSD1)		Source: 17J0582-01							Prepared & Analyzed: 10/19/2017
Cyanide	0.23 mg/L	0.01	mg/L	0.250	<0.01 mg/L	91.7	80-120	0.481	20
Matrix Spike Dup (BAJ0594-MSD2)		Source: 17J0423-02							Prepared & Analyzed: 10/19/2017
Cyanide	0.25 mg/L	0.01	mg/L	0.250	<0.01 mg/L	98.8	80-120	6.61	20

Batch BAJ0609 - No Prep Wet Chem

Blank (BAJ0609-BLK1)									Prepared & Analyzed: 10/19/2017
Percent Solids	100 %	0.10	%						
Duplicate (BAJ0609-DUP1)		Source: 17J0622-03							Prepared & Analyzed: 10/19/2017
Percent Solids	13.3 %	0.10	%		13.5 %			1.63	20



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Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0672 - No Prep Wet Chem

Blank (BAJ0672-BLK1)									Prepared & Analyzed: 10/20/2017
Sulfide	<1.00 mg/L	1.00	mg/L						
LCS (BAJ0672-BS1)									Prepared & Analyzed: 10/20/2017
Sulfide	4.95 mg/L	1	mg/L	5.00	mg/L	99.0	80-120		
LCS Dup (BAJ0672-BSD1)									Prepared & Analyzed: 10/20/2017
Sulfide	4.96 mg/L	1	mg/L	5.00	mg/L	99.2	80-120	0.202	20
Matrix Spike (BAJ0672-MS1)					Source: 17J0575-02				Prepared & Analyzed: 10/20/2017
Sulfide	3.80 mg/L	1.00	mg/L	5.00	<1.00 mg/L	76.0	75-125		
Matrix Spike (BAJ0672-MS2)					Source: 17J0590-19				Prepared & Analyzed: 10/20/2017
Sulfide	4.80 mg/L	1.00	mg/L	5.00	<1.00 mg/L	96.0	75-125		
Matrix Spike Dup (BAJ0672-MSD1)					Source: 17J0575-02				Prepared & Analyzed: 10/20/2017
Sulfide	3.65 mg/L	1.00	mg/L	5.00	<1.00 mg/L	73.0	75-125	4.03	20 M
Matrix Spike Dup (BAJ0672-MSD2)					Source: 17J0590-19				Prepared & Analyzed: 10/20/2017
Sulfide	4.83 mg/L	1.00	mg/L	5.00	<1.00 mg/L	96.6	75-125	0.623	20

Batch BAJ0700 - No Prep Wet Chem

Blank (BAJ0700-BLK1)									Prepared & Analyzed: 10/17/2017
Chromium, Hexavalent	<0.005 mg/L	0.005	mg/L						
LCS (BAJ0700-BS1)									Prepared & Analyzed: 10/17/2017
Chromium, Hexavalent	0.101 mg/L	0.005	mg/L	0.100	mg/L	101	80-120		



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0700 - No Prep Wet Chem

Matrix Spike (BAJ0700-MS1)	Source: 17J0515-01	Prepared & Analyzed: 10/17/2017							
Chromium, Hexavalent	0.104 mg/L	0.005	mg/L	0.100 <0.005 mg/L	104	80-120			
Matrix Spike (BAJ0700-MS2)	Source: 17J0560-01	Prepared & Analyzed: 10/17/2017							M
Chromium, Hexavalent	0.013 mg/L	0.005	mg/L	0.100 <0.005 mg/L	13.0	80-120			
Matrix Spike (BAJ0700-MS3)	Source: 17J0560-08	Prepared & Analyzed: 10/23/2017							M
Chromium, Hexavalent	0.010 mg/L	0.005	mg/L	0.100 <0.005 mg/L	10.0	80-120			
Matrix Spike Dup (BAJ0700-MSD1)	Source: 17J0515-01	Prepared & Analyzed: 10/17/2017							
Chromium, Hexavalent	0.102 mg/L	0.005	mg/L	0.100 <0.005 mg/L	102	80-120	1.94	20	
Matrix Spike Dup (BAJ0700-MSD2)	Source: 17J0560-01	Prepared & Analyzed: 10/17/2017							M
Chromium, Hexavalent	0.015 mg/L	0.005	mg/L	0.100 <0.005 mg/L	15.0	80-120	14.3	20	
Matrix Spike Dup (BAJ0700-MSD3)	Source: 17J0560-08	Prepared & Analyzed: 10/23/2017							M
Chromium, Hexavalent	0.011 mg/L	0.005	mg/L	0.100 <0.005 mg/L	11.0	80-120	9.52	20	



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Certified Analyses included in this Report

Analyte	Certifications
<i>SW6010C in Non-Potable Water</i>	
Arsenic	VELAP,WVDEP
Barium	VELAP,WVDEP
Beryllium	VELAP,WVDEP
Cadmium	VELAP,WVDEP
Chromium	VELAP,WVDEP
Cobalt	VELAP,WVDEP
Copper	VELAP,WVDEP
Lead	VELAP,WVDEP
Nickel	VELAP,WVDEP
Selenium	VELAP,WVDEP
Silver	VELAP,WVDEP
Tin	VELAP,WVDEP
Vanadium	VELAP,WVDEP
Zinc	VELAP,WVDEP
<i>SW6020A in Non-Potable Water</i>	
Antimony	VELAP,NC,WVDEP
Arsenic	VELAP,WVDEP
Thallium	VELAP,WVDEP
<i>SW7196A in Non-Potable Water</i>	
Chromium, Hexavalent	VELAP
<i>SW7470A in Non-Potable Water</i>	
Mercury	VELAP,NC,WVDEP
<i>SW8011 in Non-Potable Water</i>	
1,2-Dibromoethane (EDB)	VELAP,NC
1,2,3-Trichloropropane	VELAP,NC
1,2-Dibromo-3-chloropropane (DBCP)	VELAP,NC
<i>SW8081B in Non-Potable Water</i>	
4,4'-DDD	NC,VELAP,WVDEP
4,4'-DDE	NC,VELAP,WVDEP
4,4'-DDT	NC,VELAP,WVDEP
Aldrin	NC,VELAP,WVDEP
alpha-BHC	NC,VELAP,WVDEP
beta-BHC	NC,VELAP,WVDEP
Chlordane	NC,VELAP,WVDEP
delta-BHC	NC,VELAP,WVDEP



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Final Report

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Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Certified Analyses included in this Report

Analyte	Certifications
Dieldrin	NC,VELAP,WVDEP
Endosulfan I	NC,VELAP,WVDEP
Endosulfan II	NC,VELAP,WVDEP
Endosulfan sulfate	NC,VELAP,WVDEP
Endrin	NC,VELAP,WVDEP
Endrin aldehyde	NC,VELAP,WVDEP
gamma-BHC (Lindane)	NC,VELAP,WVDEP
Heptachlor	NC,VELAP,WVDEP
Heptachlor epoxide	NC,VELAP,WVDEP
Methoxychlor	NC,VELAP,WVDEP
Toxaphene	NC,VELAP,WVDEP
SW8082A in Non-Potable Water	
PCB as Aroclor 1016	VELAP,NC,WVDEP
PCB as Aroclor 1221	VELAP,NC,WVDEP
PCB as Aroclor 1232	VELAP,NC,WVDEP
PCB as Aroclor 1242	VELAP,NC,WVDEP
PCB as Aroclor 1248	VELAP,NC,WVDEP
PCB as Aroclor 1254	VELAP,NC,WVDEP
PCB as Aroclor 1260	VELAP,NC,WVDEP
SW8082A in Solids	
PCB as Aroclor 1016	VELAP,NC
PCB as Aroclor 1221	VELAP,NC
PCB as Aroclor 1232	VELAP,NC
PCB as Aroclor 1242	VELAP,NC
PCB as Aroclor 1248	VELAP,NC
PCB as Aroclor 1254	VELAP,NC
PCB as Aroclor 1260	VELAP,NC
SW8151A in Non-Potable Water	
2,4,5-T	VELAP,NC
2,4,5-TP (Silvex)	VELAP,NC
2,4-D	VELAP,NC
Dinoseb	VELAP,NC
Pentachlorophenol	VELAP,NC
SW8260B in Non-Potable Water	
1,1,1,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,1-Trichloroethane	NC,VELAP,WVDEP
1,1,2,2-Tetrachloroethane	NC,VELAP,WVDEP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Certified Analyses included in this Report

Analyte	Certifications
1,1,2-Trichloroethane	NC, VELAP, WVDEP
1,1-Dichloroethane	NC, VELAP, WVDEP
1,1-Dichloroethylene	NC, VELAP, WVDEP
1,1-Dichloropropene	NC, VELAP, WVDEP
1,2,3-Trichloropropane	NC, VELAP, WVDEP
1,2,4-Trichlorobenzene	NC, VELAP, WVDEP
1,2-Dichlorobenzene	NC, VELAP, WVDEP
1,2-Dichloroethane	NC, VELAP, WVDEP
1,2-Dichloropropane	NC, VELAP, WVDEP
1,3-Dichlorobenzene	NC, VELAP, WVDEP
1,3-Dichloropropane	NC, VELAP, WVDEP
1,4-Dichlorobenzene	NC, VELAP, WVDEP
2,2-Dichloropropane	NC, VELAP, WVDEP
2-Butanone (MEK)	NC, VELAP, WVDEP
2-Hexanone (MBK)	NC, VELAP, WVDEP
4-Methyl-2-pentanone (MIBK)	NC, VELAP, WVDEP
Acetone	NC, VELAP, WVDEP
Acetonitrile	NC, VELAP, WVDEP
Acrolein	NC, VELAP, WVDEP
Acrylonitrile	NC, VELAP, WVDEP
Allyl chloride	NC, VELAP, WVDEP
Benzene	NC, VELAP, WVDEP
Bromochloromethane	NC, VELAP, WVDEP
Bromodichloromethane	NC, VELAP, WVDEP
Bromoform	NC, VELAP, WVDEP
Bromomethane	NC, VELAP, WVDEP
Carbon disulfide	NC, VELAP, WVDEP
Carbon tetrachloride	NC, VELAP, WVDEP
Chlorobenzene	NC, VELAP, WVDEP
Chloroethane	NC, VELAP, WVDEP
Chloroform	NC, VELAP, WVDEP
Chloromethane	NC, VELAP, WVDEP
Chloroprene	NC, VELAP, WVDEP
cis-1,2-Dichloroethylene	NC, VELAP, WVDEP
cis-1,3-Dichloropropene	NC, VELAP, WVDEP
Dibromochloromethane	NC, VELAP, WVDEP
Dibromomethane	NC, VELAP, WVDEP
Dichlorodifluoromethane	NC, VELAP, WVDEP



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Certified Analyses included in this Report

Analyte	Certifications
Ethyl methacrylate	NC, VELAP, WVDEP
Ethylbenzene	NC, VELAP, WVDEP
Hexachlorobutadiene	NC, VELAP, WVDEP
Iodomethane	NC, VELAP, WVDEP
Isobutyl Alcohol	NC, VELAP, WVDEP
m+p-Xylenes	NC, VELAP, WVDEP
Methacrylonitrile	NC, VELAP, WVDEP
Methyl methacrylate	NC, VELAP, WVDEP
Methylene chloride	NC, VELAP, WVDEP
o-Xylene	NC, VELAP, WVDEP
Propionitrile	NC, VELAP, WVDEP
Styrene	NC, VELAP, WVDEP
Tetrachloroethylene (PCE)	NC, VELAP, WVDEP
Toluene	NC, VELAP, WVDEP
trans-1,2-Dichloroethylene	NC, VELAP, WVDEP
trans-1,3-Dichloropropene	NC, VELAP, WVDEP
trans-1,4-Dichloro-2-butene	NC, VELAP, WVDEP
Trichloroethylene	NC, VELAP, WVDEP
Trichlorofluoromethane	NC, VELAP, WVDEP
Vinyl acetate	NC, VELAP, WVDEP
Vinyl chloride	NC, VELAP, WVDEP
Xylenes, Total	NC, VELAP, WVDEP
SW8270D in Non-Potable Water	
1,2,4,5-Tetrachlorobenzene	NC, VELAP, WVDEP
1,3,5-Trinitrobenzene	NC, VELAP, WVDEP
1,3-Dinitrobenzene	NC, VELAP, WVDEP
1,4-Naphthoquinone	NC, VELAP, WVDEP
1-Naphthylamine	NC, VELAP, WVDEP
2,3,4,6-Tetrachlorophenol	NC, VELAP, WVDEP
2,4,5-Trichlorophenol	NC, VELAP, WVDEP
2,4,6-Trichlorophenol	NC, VELAP, WVDEP
2,4-Dichlorophenol	NC, VELAP, WVDEP
2,4-Dimethylphenol	NC, VELAP, WVDEP
2,4-Dinitrophenol	NC, VELAP, WVDEP
2,4-Dinitrotoluene	NC, VELAP, WVDEP
2,6-Dichlorophenol	NC, VELAP, WVDEP
2,6-Dinitrotoluene	NC, VELAP, WVDEP



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Certified Analyses included in this Report

Analyte	Certifications
2-Acetylaminofluorene	NC, VELAP, WVDEP
2-Chloronaphthalene	NC, VELAP, WVDEP
2-Chlorophenol	NC, VELAP, WVDEP
2-Methylnaphthalene	NC, VELAP, WVDEP
2-Naphthylamine	NC, VELAP, WVDEP
2-Nitroaniline	NC, VELAP, WVDEP
2-Nitrophenol	NC, VELAP, WVDEP
3,3'-Dichlorobenzidine	NC, VELAP, WVDEP
3,3'-Dimethylbenzidine	NC, VELAP, WVDEP
3-Methylcholanthrene	NC, VELAP, WVDEP
3-Nitroaniline	NC, VELAP, WVDEP
4,6-Dinitro-2-methylphenol	NC, VELAP, WVDEP
4-Aminobiphenyl	NC, VELAP, WVDEP
4-Bromophenyl phenyl ether	NC, VELAP, WVDEP
4-Chloroaniline	NC, VELAP, WVDEP
4-Chlorophenyl phenyl ether	NC, VELAP, WVDEP
4-Nitroaniline	NC, VELAP, WVDEP
4-Nitrophenol	NC, VELAP, WVDEP
5-Nitro-o-toluidine	NC, VELAP, WVDEP
7,12-Dimethylbenz (a) anthracene	NC, VELAP, WVDEP
Acenaphthene	NC, VELAP, WVDEP
Acenaphthylene	NC, VELAP, WVDEP
Acetophenone	NC, VELAP, WVDEP
Anthracene	NC, VELAP, WVDEP
Benzo (a) anthracene	NC, VELAP, WVDEP
Benzo (a) pyrene	NC, VELAP, WVDEP
Benzo (b) fluoranthene	NC, VELAP, WVDEP
Benzo (g,h,i) perylene	NC, VELAP, WVDEP
Benzo (k) fluoranthene	NC, VELAP, WVDEP
Benzyl alcohol	NC, VELAP, WVDEP
bis (2-Chloroethoxy) methane	NC, VELAP, WVDEP
bis (2-Chloroethyl) ether	NC, VELAP, WVDEP
2,2'-Oxybis (1-chloropropane)	NC, VELAP, WVDEP
bis (2-Ethylhexyl) phthalate	NC, VELAP, WVDEP
Butyl benzyl phthalate	NC, VELAP, WVDEP
Chlorobenzilate	NC, VELAP, WVDEP
Chrysene	NC, VELAP, WVDEP
Diallate	NC, VELAP, WVDEP



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Certified Analyses included in this Report

Analyte	Certifications
Dibenz (a,h) anthracene	NC, VELAP, WVDEP
Dibenzofuran	NC, VELAP, WVDEP
Diethyl phthalate	NC, VELAP, WVDEP
Dimethoate	NC, VELAP, WVDEP
Dimethyl phthalate	NC, VELAP, WVDEP
Di-n-butyl phthalate	NC, VELAP, WVDEP
Di-n-octyl phthalate	NC, VELAP, WVDEP
Diphenylamine	NC, VELAP, WVDEP
Disulfoton	NC, VELAP, WVDEP
Ethyl methanesulfonate	NC, VELAP, WVDEP
Ethyl parathion	NC, VELAP, WVDEP
Famphur	NC, VELAP, WVDEP
Fluoranthene	NC, VELAP, WVDEP
Fluorene	NC, VELAP, WVDEP
Hexachlorobenzene	NC, VELAP, WVDEP
Hexachlorobutadiene	NC, VELAP, WVDEP
Hexachlorocyclopentadiene	NC, VELAP, WVDEP
Hexachloroethane	NC, VELAP, WVDEP
Hexachloropropene	NC, VELAP, WVDEP
Indeno (1,2,3-cd) pyrene	NC, VELAP, WVDEP
Isodrin	NC, VELAP, WVDEP
Isophorone	NC, VELAP, WVDEP
Isosafrole	NC, VELAP, WVDEP
Kepone	NC, VELAP, WVDEP
m+p-Cresols	NC, VELAP, WVDEP
Methapyrilene	NC, VELAP, WVDEP
Methyl methanesulfonate	NC, VELAP, WVDEP
Methyl parathion	NC, VELAP, WVDEP
Naphthalene	NC, VELAP, WVDEP
Nitrobenzene	NC, VELAP, WVDEP
n-Nitrosodiethylamine	NC, VELAP, WVDEP
n-Nitrosodimethylamine	NC, VELAP, WVDEP
n-Nitrosodi-n-butylamine	NC, VELAP, WVDEP
n-Nitrosodi-n-propylamine	NC, VELAP, WVDEP
n-Nitrosodiphenylamine	NC, VELAP, WVDEP
n-Nitrosomethylalkylamine	NC, VELAP, WVDEP
n-Nitrosopiperidine	NC, VELAP, WVDEP
n-Nitrosopyrrolidine	NC, VELAP, WVDEP



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/24/2017 16:07

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Certified Analyses included in this Report

Analyte	Certifications
o,o,o-Triethyl phosphorothioate	NC, VELAP, WVDEP
o,o-Diethyl o-2-pyrazinyl phosphorothioate	NC, VELAP, WVDEP
o+m+p-Cresols	VELAP, WVDEP
o-Cresol	NC, VELAP, WVDEP
o-Toluidine	NC, VELAP, WVDEP
p-(Dimethylamino) azobenzene	NC, VELAP, WVDEP
p-Chloro-m-cresol	NC, VELAP, WVDEP
Pentachlorobenzene	NC, VELAP, WVDEP
Pentachloronitrobenzene (quintozene)	NC, VELAP, WVDEP
Phenacetin	NC, VELAP, WVDEP
Phenanthrone	NC, VELAP, WVDEP
Phenol	NC, VELAP, WVDEP
Phorate	NC, VELAP, WVDEP
p-Phenylenediamine	NC, VELAP, WVDEP
Pronamide	NC, VELAP, WVDEP
Pyrene	NC, VELAP, WVDEP
Safrole	NC, VELAP, WVDEP

SW9012B in Non-Potable Water

Cyanide VELAP

SW9215 in Non-Potable Water

Sulfide VELAP

Code	Description	Lab Number	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2017
NC	North Carolina DENR	495	12/31/2017
PADEP	NELAC-Pennsylvania	001	10/31/2017
VELAP	NELAC-Virginia Certificate #9439	460021	06/14/2018
WVDEP	West Virginia DEP	350	11/30/2017



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Certificate of Analysis

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Submitted To:	Jeff Fisher	Project Number:	17-802
Client Site I.D.:	CVTC	Purchase Order:	CVTC 17-802

Summary of Data Qualifiers

- C Continuing calibration verification response for this analyte is outside specifications.
- CI Residual Chlorine or other oxidizing agent was detected in the container used to analyze this sample.
- DND Not Detected
- E Estimated concentration, outside calibration range
- L LCS recovery is outside of established acceptance limits
- M Matrix spike recovery is outside established acceptance limits
- P Duplicate analysis does not meet the acceptance criteria for precision
- S Surrogate recovery was outside acceptance criteria
- RPD Relative Percent Difference
- Qual Qualifiers
- RE Denotes sample was re-analyzed
- D.F. Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.
- TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library . A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.

PCBs, Total Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.

Project: CVTC, madison Heights, VA

EEE Consulting
201 church Street
Blacksburg VA 24060

Aws
1941 Raymet Rd
Richmond VA 23237

Turnaround time: 5 days

ID:

S1 10/16 @ 11:55am, Grab,
surface water

VSWMR Apx II Tbl 3.1 B

VOC 8260

2,3,7,8 - TCDD SIM

DRO

GRO

Cr VI

RCKA metals

S2 10/16 @ 12:10, Grab,
surface water

SAME ↑

S3 10/16 @ 12:40, Grab,
surface water

same ↑

Building 30 11:30, composite

PCB

Relinquished:

10/14/17
Longfellow 10/14/17

RECEIVED: *JH* 17 OCT 2017 8:00

NO SEAL *JH* ON ICE 3.2°C

EEE-Blacksburg 17J0515
CVTC

Recd: 10/17/2017 Due: 10/24 Page 81 of 83

v130325002

Order ID 17J0515

Sample Preservation Log

Sample Preservation Log
Form #: F1301
Rev # 7.0
Effective: Feb 21, 2017
Page 1 of 1

Date Performed: 17 Oct 2017Analyst Performing Check: TJ

Sample ID	Container ID	Metals		Cyanide		Sulfide		Ammonia		TKN		Phos, Tot		NO3+NO2		DRO		Pesticide (8081/608/508)		SVOC (525.2/8270/625)		CrVI*											
		pH as Received		pH as Received		pH as Received		pH as Received		pH as Received		pH as Received		pH as Received		pH as Received		Res.Cl as Received		Res.Cl as Received		pH as Received		Adjusted final pH		pH as Received		pH as Received					
		< 2	Other	Final pH (If adjust.)	> 12	Other	Final pH (If adjust.)	> 9	Other	Final pH (If adjust.)	< 2	Other	Final pH (If adjust.)	< 2	Other	Final pH (If adjust.)	< 2	Other	Final pH (If adjust.)	Present	Absent	Res.Cl P/A (If adjust.)	Present	Absent	Res.Cl P/A (If adjust.)	Present	Other	Final pH (If adjust.)	Other	Final pH (If adjust.)	Other		
01	A																																
01	B																																
01	C																																
01	F																																
01	G																																
02	A																																
02	B																																
02	E																																
02	F																																
02	G																																
03	A																																
03	B																																
03	E																																
03	F																																
03	G																																

NaOH ID: _____

HNO3 ID: _____

CrVI preserved date/time: _____ Analyst Initials: _____

H2SO4 ID: _____

Na2S2O3 ID: _____

* pH must be adjusted between 9.3 - 9.7

Buffer Sol'n ID: _____

HCl ID: 1400031

Na2SO3 ID: _____

1N NaOH ID: _____

5N NaOH: _____

THIS DOCUMENT IS UNCONTROLLED WHEN PRINTED
F1301 Sample Preservation Log 7_0.xls



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Certificate of Analysis

Final Report

Client Name:	EEE Consulting (Blacksburg, VA) 201 Church Street Blacksburg VA, 24060	Date Issued:	10/24/2017 16:07
Submitted To:	Jeff Fisher	Project Number:	17-802
Client Site I.D.:	CVTC	Purchase Order:	CVTC 17-802

Sample Conditions Checklist

Samples Received at:	3.20°C
How were samples received?	Courier
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	Yes
Are all volatile organic and TOX containers free of headspace?	Yes
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	Yes
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	No

For Trip Blank see Lab ID 17J0112. MMB 10/17/17 14:37 As per Jeff Fisher, cancel DRO and GRO analyses on S1, S2, S3. MMB 10/18/17 11:54



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Certificate of Analysis

Final Report

Sample Delivery Group ID CVTC GW 10317

Client Name: EEE Consulting (Blacksburg, VA)	Date Issued:	10/12/2017 17:19
201 Church Street	Project Number:	17-802
Blacksburg, VA 24060	Purchase Order:	

Submitted To: Jeff Fisher

Client Site I.D.: CVTC

Enclosed are the results of analyses for samples received by the laboratory in sample delivery group CVTC GW 10317 . Work orders included in the sample delivery group:

17J0020	10/3/2017 8:00
17J0112	10/4/2017 8:00
17J0155	10/5/2017 8:00

Ted Soyars

Laboratory Manager

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.





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Certificate of Analysis

Final Report

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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order:

ANALYTICAL REPORT FOR SAMPLES

Laboratory Order ID 17J0020

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
30-2	17J0020-01	Ground Water	10/02/2017 14:30	10/03/2017 08:00
30-1	17J0020-02	Ground Water	10/02/2017 15:40	10/03/2017 08:00

Laboratory Order ID 17J0112

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
10-1	17J0112-01	Non-Potable Water	10/02/2017 16:40	10/04/2017 08:00
10-2	17J0112-02	Non-Potable Water	10/02/2017 17:40	10/04/2017 08:00
10-3	17J0112-03	Non-Potable Water	10/02/2017 18:30	10/04/2017 08:00
14-1	17J0112-04	Non-Potable Water	10/03/2017 09:18	10/04/2017 08:00
14-2	17J0112-05	Non-Potable Water	10/03/2017 10:32	10/04/2017 08:00
14-3	17J0112-06	Non-Potable Water	10/03/2017 11:59	10/04/2017 08:00
15-1	17J0112-07	Non-Potable Water	10/03/2017 13:39	10/04/2017 08:00
16-1	17J0112-08	Non-Potable Water	10/03/2017 15:41	10/04/2017 08:00
Trip Blank	17J0112-09	Non-Potable Water	09/08/2017 14:00	10/04/2017 08:00

Laboratory Order ID 17J0155

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
16-2	17J0155-01	Ground Water	10/03/2017 17:31	10/05/2017 08:00
16-3	17J0155-02	Ground Water	10/03/2017 18:30	10/05/2017 08:00
16-4	17J0155-03	Ground Water	10/04/2017 11:10	10/05/2017 08:00
16-5	17J0155-04	Ground Water	10/04/2017 12:25	10/05/2017 08:00
13-1	17J0155-05	Ground Water	10/04/2017 15:15	10/05/2017 08:00
13-2	17J0155-06	Ground Water	10/04/2017 16:05	10/05/2017 08:00



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0020

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0020-01								
Grab Date/Time:	10/02/2017 14:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	01	SW8015C	<0.10 mg/L		0.10	1	10/03/17 11:26	10/03/17 11:26	CL
Surr: 2,5-Dibromotoluene (FID)	01	SW8015C	83.9 %		80-120		10/03/17 11:26	10/03/17 11:26	CL
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	10/03/17 11:18	10/03/17 11:18	KCS
1,1,1-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,1,2,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	10/03/17 11:18	10/03/17 11:18	KCS
1,1,2-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,1-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,1-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,1-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,2,3-Trichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,2,3-Trichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,2,4-Trichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,2,4-Trimethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,2-Dibromo-3-chloropropane (DBCP)	01	SW8260B	<4.00 ug/L		4.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,2-Dibromoethane (EDB)	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,2-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,2-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,2-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,3,5-Trimethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,3-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,3-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
1,4-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
2,2-Dichloropropane	01	SW8260B	<2.00 ug/L		2.00	1	10/03/17 11:18	10/03/17 11:18	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0020

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0020-01								
Grab Date/Time:	10/02/2017 14:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
2-Butanone (MEK)	01	SW8260B	<10.0 ug/L		10.0	1	10/03/17 11:18	10/03/17 11:18	KCS
2-Chlorotoluene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
2-Hexanone (MBK)	01	SW8260B	<5.00 ug/L		5.00	1	10/03/17 11:18	10/03/17 11:18	KCS
4-Chlorotoluene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
4-Isopropyltoluene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
4-Methyl-2-pentanone (MIBK)	01	SW8260B	<5.00 ug/L		5.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Acetone	01	SW8260B	<10.0 ug/L		10.0	1	10/03/17 11:18	10/03/17 11:18	KCS
Benzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Bromobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Bromoform	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Bromochloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Bromodichloromethane	01	SW8260B	<0.50 ug/L		0.50	1	10/03/17 11:18	10/03/17 11:18	KCS
Bromoform	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Bromomethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Carbon disulfide	01	SW8260B	<10.0 ug/L		10.0	1	10/03/17 11:18	10/03/17 11:18	KCS
Carbon tetrachloride	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Chlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Chloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Chloroform	01	SW8260B	<0.50 ug/L		0.50	1	10/03/17 11:18	10/03/17 11:18	KCS
Chloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
cis-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
cis-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Dibromochloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Dibromomethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Dichlorodifluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Di-isopropyl ether (DIPE)	01	SW8260B	<5.00 ug/L		5.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Ethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0020

Analytical Results

Sample I.D. 30-2 Laboratory Sample ID: 17J0020-01

Grab Date/Time: 10/02/2017 14:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Hexachlorobutadiene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Iodomethane	01	SW8260B	<10.0 ug/L		10.0	1	10/03/17 11:18	10/03/17 11:18	KCS
Isopropylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
m+p-Xylenes	01	SW8260B	<2.00 ug/L		2.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Methylene chloride	01	SW8260B	<4.00 ug/L		4.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Methyl-t-butyl ether (MTBE)	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Naphthalene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
n-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
n-Propylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
o-Xylene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
sec-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Styrene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
tert-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Tetrachloroethylene (PCE)	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Toluene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
trans-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
trans-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Trichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Trichlorofluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Vinyl acetate	01	SW8260B	<10.0 ug/L		10.0	1	10/03/17 11:18	10/03/17 11:18	KCS
Vinyl chloride	01	SW8260B	<0.50 ug/L		0.50	1	10/03/17 11:18	10/03/17 11:18	KCS
Xylenes, Total	01	SW8260B	<3.00 ug/L		3.00	1	10/03/17 11:18	10/03/17 11:18	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	01	SW8260B	91.2 %		70-120		10/03/17 11:18	10/03/17 11:18	KCS
Surr: 4-Bromofluorobenzene (Surr)	01	SW8260B	94.0 %		75-120		10/03/17 11:18	10/03/17 11:18	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0020

Analytical Results								
Sample I.D.	30-2	Laboratory Sample ID:						17J0020-01
Grab Date/Time:		10/02/2017 14:30						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time Analyst
Volatile Organic Compounds by GCMS								
Surr: Dibromofluoromethane (Surr)	01	SW8260B	100 %		80-119		10/03/17 11:18	10/03/17 11:18 KCS
Surr: Toluene-d8 (Surr)	01	SW8260B	100 %		85-120		10/03/17 11:18	10/03/17 11:18 KCS
Semivolatile Hydrocarbons by GC								
TPH-Semi-Volatiles (DRO)	01	SW8015C	<0.538 mg/L		0.538	1	10/03/17 14:22	10/03/17 21:30 CVH
Surr: Pentacosane (Surr)	01	SW8015C	46.5 %		40-160		10/03/17 14:22	10/03/17 21:30 CVH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0020

Analytical Results		Laboratory Sample ID: 17J0020-02							
Sample I.D.	30-1								
Grab Date/Time:		10/02/2017 15:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst

Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	02	SW8015C	0.10 mg/L		0.10	1	10/03/17 11:49	10/03/17 11:49	CL
Surr: 2,5-Dibromotoluene (FID)	02	SW8015C	85.5 %		80-120		10/03/17 11:49	10/03/17 11:49	CL

Volatile Organic Compounds by GCMS

1,1,1,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	10/03/17 11:42	10/03/17 11:42	KCS
1,1,1-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,1,2,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	10/03/17 11:42	10/03/17 11:42	KCS
1,1,2-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,1-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,1-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,1-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,2,3-Trichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,2,3-Trichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,2,4-Trichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,2,4-Trimethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,2-Dibromo-3-chloropropane (DBCP)	02	SW8260B	<4.00 ug/L		4.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,2-Dibromoethane (EDB)	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,2-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,2-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,2-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,3,5-Trimethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,3-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,3-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
1,4-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
2,2-Dichloropropane	02	SW8260B	<2.00 ug/L		2.00	1	10/03/17 11:42	10/03/17 11:42	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0020

Analytical Results		Laboratory Sample ID: 17J0020-02						
Sample I.D.	30-1							
Grab Date/Time:		10/02/2017 15:40						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time
Volatile Organic Compounds by GCMS								
2-Butanone (MEK)	02	SW8260B	<10.0 ug/L		10.0	1	10/03/17 11:42	10/03/17 11:42
2-Chlorotoluene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
2-Hexanone (MBK)	02	SW8260B	<5.00 ug/L		5.00	1	10/03/17 11:42	10/03/17 11:42
4-Chlorotoluene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
4-Isopropyltoluene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
4-Methyl-2-pentanone (MIBK)	02	SW8260B	<5.00 ug/L		5.00	1	10/03/17 11:42	10/03/17 11:42
Acetone	02	SW8260B	<10.0 ug/L		10.0	1	10/03/17 11:42	10/03/17 11:42
Benzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Bromobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Bromoform	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Bromomethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Carbon disulfide	02	SW8260B	<10.0 ug/L		10.0	1	10/03/17 11:42	10/03/17 11:42
Carbon tetrachloride	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Chlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Chloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Chloroform	02	SW8260B	<0.50 ug/L		0.50	1	10/03/17 11:42	10/03/17 11:42
Chloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
cis-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
cis-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Dibromochloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Dibromomethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Dichlorodifluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42
Di-isopropyl ether (DIPE)	02	SW8260B	<5.00 ug/L		5.00	1	10/03/17 11:42	10/03/17 11:42
Ethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0020

Analytical Results

Sample I.D. 30-1 Laboratory Sample ID: 17J0020-02

Grab Date/Time: 10/02/2017 15:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Hexachlorobutadiene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
Iodomethane	02	SW8260B	<10.0 ug/L		10.0	1	10/03/17 11:42	10/03/17 11:42	KCS
Isopropylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
m+p-Xylenes	02	SW8260B	<2.00 ug/L		2.00	1	10/03/17 11:42	10/03/17 11:42	KCS
Methylene chloride	02	SW8260B	<4.00 ug/L		4.00	1	10/03/17 11:42	10/03/17 11:42	KCS
Methyl-t-butyl ether (MTBE)	02	SW8260B	26.4 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
Naphthalene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
n-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
n-Propylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
o-Xylene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
sec-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
Styrene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
tert-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
Tetrachloroethylene (PCE)	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
Toluene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
trans-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
trans-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
Trichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
Trichlorofluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/03/17 11:42	10/03/17 11:42	KCS
Vinyl acetate	02	SW8260B	<10.0 ug/L		10.0	1	10/03/17 11:42	10/03/17 11:42	KCS
Vinyl chloride	02	SW8260B	<0.50 ug/L		0.50	1	10/03/17 11:42	10/03/17 11:42	KCS
Xylenes, Total	02	SW8260B	<3.00 ug/L		3.00	1	10/03/17 11:42	10/03/17 11:42	KCS
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	02	SW8260B	97.9 %		70-120		10/03/17 11:42	10/03/17 11:42	KCS
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	02	SW8260B	92.8 %		75-120		10/03/17 11:42	10/03/17 11:42	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0020

Analytical Results								
Sample I.D.	30-1	Laboratory Sample ID:						17J0020-02
Grab Date/Time:		10/02/2017 15:40						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time Analyst
Volatile Organic Compounds by GCMS								
Surr: Dibromofluoromethane (Surr)	02	SW8260B	98.8 %		80-119		10/03/17 11:42	10/03/17 11:42 KCS
Surr: Toluene-d8 (Surr)	02	SW8260B	101 %		85-120		10/03/17 11:42	10/03/17 11:42 KCS
Semivolatile Hydrocarbons by GC								
TPH-Semi-Volatiles (DRO)	02	SW8015C	<0.538 mg/L		0.538	1	10/03/17 14:22	10/03/17 21:55 CVH
Surr: Pentacosane (Surr)	02	SW8015C	55.2 %		40-160		10/03/17 14:22	10/03/17 21:55 CVH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-01								
Grab Date/Time:	10/02/2017 16:40								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	01RE1	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/06/17 13:35	CWO
Arsenic	01	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 08:40	10/05/17 15:28	CWO
Barium	01	SW6010C	0.168 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:28	CWO
Cadmium	01	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 15:28	CWO
Chromium	01	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:28	CWO
Mercury	01	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 11:34	RCV
Lead	01	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:28	CWO
Selenium	01	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 08:40	10/05/17 15:28	CWO
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	01	SW8015C	<0.10 mg/L		0.10	1	10/05/17 12:05	10/05/17 12:05	LAO
<i>Surr: 2,5-Dibromotoluene (FID)</i>	01	SW8015C	83.7 %		80-120		10/05/17 12:05	10/05/17 12:05	LAO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	10/04/17 18:12	10/04/17 18:12	KCS
1,1,1-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,1,2,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	10/04/17 18:12	10/04/17 18:12	KCS
1,1,2-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,1-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,1-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,1-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,2,3-Trichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,2,3-Trichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,2,4-Trichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,2,4-Trimethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,2-Dibromo-3-chloropropane (DBCP)	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-01								
Grab Date/Time:	10/02/2017 16:40								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2-Dibromoethane (EDB)	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,2-Dichlorobenzene	01	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:12	10/04/17 18:12	KCS
1,2-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,2-Dichloropropane	01	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:12	10/04/17 18:12	KCS
1,3,5-Trimethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,3-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,3-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
1,4-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
2,2-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
2-Butanone (MEK)	01	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:12	10/04/17 18:12	KCS
2-Chlorotoluene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
2-Hexanone (MBK)	01	SW8260B	<5.00 ug/L		5.00	1	10/04/17 18:12	10/04/17 18:12	KCS
4-Chlorotoluene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
4-Isopropyltoluene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
4-Methyl-2-pentanone (MIBK)	01	SW8260B	<5.00 ug/L		5.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Acetone	01	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:12	10/04/17 18:12	KCS
Benzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Bromobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Bromochloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Bromodichloromethane	01	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:12	10/04/17 18:12	KCS
Bromoform	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Bromomethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Carbon disulfide	01	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:12	10/04/17 18:12	KCS
Carbon tetrachloride	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Chlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Chloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-01								
Grab Date/Time:	10/02/2017 16:40								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloroform	01	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:12	10/04/17 18:12	KCS
Chloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
cis-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
cis-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Dibromochloromethane	01	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:12	10/04/17 18:12	KCS
Dibromomethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Dichlorodifluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Di-isopropyl ether (DIPE)	01	SW8260B	<5.00 ug/L		5.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Ethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Hexachlorobutadiene	01	SW8260B	<0.80 ug/L		0.80	1	10/04/17 18:12	10/04/17 18:12	KCS
Iodomethane	01	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:12	10/04/17 18:12	KCS
Isopropylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
m+p-Xylenes	01	SW8260B	<2.00 ug/L		2.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Methylene chloride	01	SW8260B	<4.00 ug/L		4.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Methyl-t-butyl ether (MTBE)	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Naphthalene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
n-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
n-Propylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
o-Xylene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
sec-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Styrene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
tert-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Tetrachloroethylene (PCE)	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Toluene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
trans-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
trans-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-01								
Grab Date/Time:		10/02/2017 16:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Trichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Trichlorofluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:12	10/04/17 18:12	KCS
Vinyl acetate	01	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:12	10/04/17 18:12	KCS
Vinyl chloride	01	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:12	10/04/17 18:12	KCS
Xylenes, Total	01	SW8260B	<3.00 ug/L		3.00	1	10/04/17 18:12	10/04/17 18:12	KCS
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	01	SW8260B	95.0 %		70-120		10/04/17 18:12	10/04/17 18:12	KCS
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	01	SW8260B	96.8 %		75-120		10/04/17 18:12	10/04/17 18:12	KCS
<i>Surr: Dibromofluoromethane (Surr)</i>	01	SW8260B	90.6 %		80-119		10/04/17 18:12	10/04/17 18:12	KCS
<i>Surr: Toluene-d8 (Surr)</i>	01	SW8260B	100 %		85-120		10/04/17 18:12	10/04/17 18:12	KCS
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	01	SW8015C	<0.543 mg/L		0.543	1	10/09/17 14:11	10/09/17 17:30	CVH
<i>Surr: Pentacosane (Surr)</i>	01	SW8015C	76.9 %		40-160		10/09/17 14:11	10/09/17 17:30	CVH
Wet Chemistry Analysis									
Chromium, Hexavalent	01	SW7196A	<0.005 mg/L	H	0.005	1	10/05/17 08:00	10/05/17 10:00	MWL



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results

Sample I.D. 10-2 Laboratory Sample ID: 17J0112-02

Grab Date/Time: 10/02/2017 17:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	02RE1	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/06/17 13:44	CWO
Arsenic	02	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 08:40	10/05/17 15:30	CWO
Barium	02	SW6010C	0.105 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:30	CWO
Cadmium	02	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 15:30	CWO
Chromium	02	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:30	CWO
Mercury	02	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 11:36	RCV
Lead	02	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:30	CWO
Selenium	02	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 08:40	10/05/17 15:30	CWO

Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	02	SW8015C	<0.10 mg/L		0.10	1	10/05/17 12:27	10/05/17 12:27	LAO
<i>Surr: 2,5-Dibromotoluene (FID)</i>	02	SW8015C	81.3 %		80-120		10/05/17 12:27	10/05/17 12:27	LAO

Volatile Organic Compounds by GCMS

1,1,1,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	10/04/17 18:35	10/04/17 18:35	KCS
1,1,1-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,1,2,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	10/04/17 18:35	10/04/17 18:35	KCS
1,1,2-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,1-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,1-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,1-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,2,3-Trichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,2,3-Trichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,2,4-Trichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,2,4-Trimethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,2-Dibromo-3-chloropropane (DBCP)	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-02								
Grab Date/Time:	10/02/2017 17:40								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2-Dibromoethane (EDB)	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,2-Dichlorobenzene	02	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:35	10/04/17 18:35	KCS
1,2-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,2-Dichloropropane	02	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:35	10/04/17 18:35	KCS
1,3,5-Trimethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,3-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,3-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
1,4-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
2,2-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
2-Butanone (MEK)	02	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:35	10/04/17 18:35	KCS
2-Chlorotoluene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
2-Hexanone (MBK)	02	SW8260B	<5.00 ug/L		5.00	1	10/04/17 18:35	10/04/17 18:35	KCS
4-Chlorotoluene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
4-Isopropyltoluene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
4-Methyl-2-pentanone (MIBK)	02	SW8260B	<5.00 ug/L		5.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Acetone	02	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:35	10/04/17 18:35	KCS
Benzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Bromobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Bromochloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Bromodichloromethane	02	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:35	10/04/17 18:35	KCS
Bromoform	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Bromomethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Carbon disulfide	02	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:35	10/04/17 18:35	KCS
Carbon tetrachloride	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Chlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Chloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-02								
Grab Date/Time:	10/02/2017 17:40								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloroform	02	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:35	10/04/17 18:35	KCS
Chloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
cis-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
cis-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Dibromochloromethane	02	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:35	10/04/17 18:35	KCS
Dibromomethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Dichlorodifluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Di-isopropyl ether (DIPE)	02	SW8260B	<5.00 ug/L		5.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Ethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Hexachlorobutadiene	02	SW8260B	<0.80 ug/L		0.80	1	10/04/17 18:35	10/04/17 18:35	KCS
Iodomethane	02	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:35	10/04/17 18:35	KCS
Isopropylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
m+p-Xylenes	02	SW8260B	<2.00 ug/L		2.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Methylene chloride	02	SW8260B	<4.00 ug/L		4.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Methyl-t-butyl ether (MTBE)	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Naphthalene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
n-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
n-Propylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
o-Xylene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
sec-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Styrene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
tert-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Tetrachloroethylene (PCE)	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Toluene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
trans-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
trans-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-02								
Grab Date/Time:		10/02/2017 17:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Trichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Trichlorofluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:35	10/04/17 18:35	KCS
Vinyl acetate	02	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:35	10/04/17 18:35	KCS
Vinyl chloride	02	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:35	10/04/17 18:35	KCS
Xylenes, Total	02	SW8260B	<3.00 ug/L		3.00	1	10/04/17 18:35	10/04/17 18:35	KCS
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	02	SW8260B	98.8 %		70-120		10/04/17 18:35	10/04/17 18:35	KCS
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	02	SW8260B	96.6 %		75-120		10/04/17 18:35	10/04/17 18:35	KCS
<i>Surr: Dibromofluoromethane (Surr)</i>	02	SW8260B	91.1 %		80-119		10/04/17 18:35	10/04/17 18:35	KCS
<i>Surr: Toluene-d8 (Surr)</i>	02	SW8260B	98.0 %		85-120		10/04/17 18:35	10/04/17 18:35	KCS
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	02	SW8015C	<0.549 mg/L		0.549	1	10/09/17 14:11	10/09/17 17:56	CVH
<i>Surr: Pentacosane (Surr)</i>	02	SW8015C	94.1 %		40-160		10/09/17 14:11	10/09/17 17:56	CVH
Wet Chemistry Analysis									
Chromium, Hexavalent	02	SW7196A	<0.005 mg/L	H	0.005	1	10/05/17 08:00	10/05/17 10:00	MWL



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-03								
Grab Date/Time:	10/02/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	03RE1	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/06/17 13:46	CWO
Arsenic	03	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 08:40	10/05/17 15:32	CWO
Barium	03	SW6010C	0.385 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:32	CWO
Cadmium	03	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 15:32	CWO
Chromium	03	SW6010C	0.0246 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:32	CWO
Mercury	03	SW7470A	0.00036 mg/L		0.00020	1	10/09/17 08:30	10/10/17 11:38	RCV
Lead	03RE1	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/06/17 13:47	CWO
Selenium	03	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 08:40	10/05/17 15:32	CWO
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	03	SW8015C	<0.10 mg/L		0.10	1	10/05/17 12:51	10/05/17 12:51	LAO
Surr: 2,5-Dibromotoluene (FID)	03	SW8015C	82.5 %		80-120		10/05/17 12:51	10/05/17 12:51	LAO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	03	SW8260B	<0.40 ug/L		0.40	1	10/04/17 18:59	10/04/17 18:59	KCS
1,1,1-Trichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,1,2,2-Tetrachloroethane	03	SW8260B	<0.40 ug/L		0.40	1	10/04/17 18:59	10/04/17 18:59	KCS
1,1,2-Trichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,1-Dichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,1-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,1-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,2,3-Trichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,2,3-Trichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,2,4-Trichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,2,4-Trimethylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,2-Dibromo-3-chloropropane (DBCP)	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-03								
Grab Date/Time:	10/02/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2-Dibromoethane (EDB)	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,2-Dichlorobenzene	03	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:59	10/04/17 18:59	KCS
1,2-Dichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,2-Dichloropropane	03	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:59	10/04/17 18:59	KCS
1,3,5-Trimethylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,3-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,3-Dichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
1,4-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
2,2-Dichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
2-Butanone (MEK)	03	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:59	10/04/17 18:59	KCS
2-Chlorotoluene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
2-Hexanone (MBK)	03	SW8260B	<5.00 ug/L		5.00	1	10/04/17 18:59	10/04/17 18:59	KCS
4-Chlorotoluene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
4-Isopropyltoluene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
4-Methyl-2-pentanone (MIBK)	03	SW8260B	<5.00 ug/L		5.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Acetone	03	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:59	10/04/17 18:59	KCS
Benzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Bromobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Bromochloromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Bromodichloromethane	03	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:59	10/04/17 18:59	KCS
Bromoform	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Bromomethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Carbon disulfide	03	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:59	10/04/17 18:59	KCS
Carbon tetrachloride	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Chlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Chloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-03								
Grab Date/Time:	10/02/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloroform	03	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:59	10/04/17 18:59	KCS
Chloromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
cis-1,2-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
cis-1,3-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Dibromochloromethane	03	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:59	10/04/17 18:59	KCS
Dibromomethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Dichlorodifluoromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Di-isopropyl ether (DIPE)	03	SW8260B	<5.00 ug/L		5.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Ethylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Hexachlorobutadiene	03	SW8260B	<0.80 ug/L		0.80	1	10/04/17 18:59	10/04/17 18:59	KCS
Iodomethane	03	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:59	10/04/17 18:59	KCS
Isopropylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
m+p-Xylenes	03	SW8260B	<2.00 ug/L		2.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Methylene chloride	03	SW8260B	<4.00 ug/L		4.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Methyl-t-butyl ether (MTBE)	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Naphthalene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
n-Butylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
n-Propylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
o-Xylene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
sec-Butylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Styrene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
tert-Butylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Tetrachloroethylene (PCE)	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Toluene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
trans-1,2-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
trans-1,3-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-03								
Grab Date/Time:	10/02/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Trichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Trichlorofluoromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/04/17 18:59	10/04/17 18:59	KCS
Vinyl acetate	03	SW8260B	<10.0 ug/L		10.0	1	10/04/17 18:59	10/04/17 18:59	KCS
Vinyl chloride	03	SW8260B	<0.50 ug/L		0.50	1	10/04/17 18:59	10/04/17 18:59	KCS
Xylenes, Total	03	SW8260B	<3.00 ug/L		3.00	1	10/04/17 18:59	10/04/17 18:59	KCS
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	03	SW8260B	100 %		70-120		10/04/17 18:59	10/04/17 18:59	KCS
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	03	SW8260B	97.6 %		75-120		10/04/17 18:59	10/04/17 18:59	KCS
<i>Surr: Dibromofluoromethane (Surr)</i>	03	SW8260B	90.3 %		80-119		10/04/17 18:59	10/04/17 18:59	KCS
<i>Surr: Toluene-d8 (Surr)</i>	03	SW8260B	97.8 %		85-120		10/04/17 18:59	10/04/17 18:59	KCS
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	03	SW8015C	<0.549 mg/L		0.549	1	10/09/17 14:11	10/09/17 18:23	CVH
<i>Surr: Pentacosane (Surr)</i>	03	SW8015C	68.4 %		40-160		10/09/17 14:11	10/09/17 18:23	CVH
Wet Chemistry Analysis									
Chromium, Hexavalent	03	SW7196A	<0.005 mg/L	H	0.005	1	10/05/17 08:00	10/05/17 10:00	MWL



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results								
Sample I.D.	14-1	Laboratory Sample ID:					17J0112-04	
Grab Date/Time:		10/03/2017 09:18						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time Analyst

Metals (Total) by EPA 6000/7000 Series Methods

Silver	04RE1	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/06/17 13:48 CWO
Arsenic	04	SW6020A	1.4 ug/L		1.0	1	10/05/17 08:40	10/06/17 16:05 BG
Barium	04	SW6010C	0.0505 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:34 CWO
Beryllium	04	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 15:33 CWO
Cadmium	04	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 15:34 CWO
Cobalt	04	SW6010C	0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 15:34 CWO
Chromium	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:34 CWO
Copper	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:33 CWO
Mercury	04	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 11:40 RCV
Nickel	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:34 CWO
Lead	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:34 CWO
Antimony	04	SW6020A	<1.00 ug/L		1.00	1	10/05/17 08:40	10/06/17 16:05 BG
Selenium	04	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 08:40	10/05/17 15:34 CWO
Tin	04	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 08:40	10/05/17 15:34 CWO
Thallium	04	SW6020A	<1.00 ug/L		1.00	1	10/05/17 08:40	10/06/17 16:05 BG
Vanadium	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:33 CWO
Zinc	04	SW6010C	0.0129 mg/L		0.0100	1	10/05/17 08:40	10/05/17 15:34 CWO

Volatile Organic Compounds by GCMS

1,1,1,2-Tetrachloroethane	04	SW8260B	<0.40 ug/L		0.40	1	10/04/17 15:51	10/04/17 15:51 KCS
1,1,1-Trichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51 KCS
1,1,2,2-Tetrachloroethane	04	SW8260B	<0.40 ug/L		0.40	1	10/04/17 15:51	10/04/17 15:51 KCS
1,1,2-Trichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51 KCS
1,1-Dichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51 KCS
1,1-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51 KCS
1,1-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51 KCS
1,2,3-Trichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51 KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results

Sample I.D. 14-1 Laboratory Sample ID: 17J0112-04

Grab Date/Time: 10/03/2017 09:18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Organic Compounds by GCMS

1,2,4-Trichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
1,2-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
1,2-Dichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
1,2-Dichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
1,3-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
1,3-Dichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
1,4-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
2,2-Dichloropropane	04	SW8260B	<2.00 ug/L		2.00	1	10/04/17 15:51	10/04/17 15:51	KCS
2-Butanone (MEK)	04	SW8260B	<5.00 ug/L		5.00	1	10/04/17 15:51	10/04/17 15:51	KCS
2-Hexanone (MBK)	04	SW8260B	<5.00 ug/L		5.00	1	10/04/17 15:51	10/04/17 15:51	KCS
4-Methyl-2-pentanone (MIBK)	04	SW8260B	<5.00 ug/L		5.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Acetone	04	SW8260B	<10.0 ug/L		10.0	1	10/04/17 15:51	10/04/17 15:51	KCS
Acetonitrile	04	SW8260B	<10.0 ug/L		10.0	1	10/04/17 15:51	10/04/17 15:51	KCS
Acrolein	04	SW8260B	<10.0 ug/L		10.0	1	10/04/17 15:51	10/04/17 15:51	KCS
Acrylonitrile	04	SW8260B	<5.00 ug/L		5.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Allyl chloride	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Benzene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Bromochloromethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Bromodichloromethane	04	SW8260B	<0.50 ug/L		0.50	1	10/04/17 15:51	10/04/17 15:51	KCS
Bromoform	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Bromomethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Carbon disulfide	04	SW8260B	<10.0 ug/L		10.0	1	10/04/17 15:51	10/04/17 15:51	KCS
Carbon tetrachloride	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Chlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Chloroethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Chloroform	04	SW8260B	<0.50 ug/L		0.50	1	10/04/17 15:51	10/04/17 15:51	KCS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-04								
Grab Date/Time:	10/03/2017 09:18								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloromethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Chloroprene	04	SW8260B	<5.00 ug/L		5.00	1	10/04/17 15:51	10/04/17 15:51	KCS
cis-1,2-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
cis-1,3-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Dibromochloromethane	04	SW8260B	<0.50 ug/L		0.50	1	10/04/17 15:51	10/04/17 15:51	KCS
Dibromomethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Dichlorodifluoromethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Ethyl methacrylate	04	SW8260B	<5.00 ug/L		5.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Ethylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Hexachlorobutadiene	04	SW8260B	<0.80 ug/L		0.80	1	10/04/17 15:51	10/04/17 15:51	KCS
Iodomethane	04	SW8260B	<10.0 ug/L		10.0	1	10/04/17 15:51	10/04/17 15:51	KCS
Isobutyl Alcohol	04	SW8260B	<40.0 ug/L		40.0	1	10/04/17 15:51	10/04/17 15:51	KCS
m+p-Xylenes	04	SW8260B	<2.00 ug/L		2.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Methacrylonitrile	04	SW8260B	<1.50 ug/L		1.50	1	10/04/17 15:51	10/04/17 15:51	KCS
Methyl methacrylate	04	SW8260B	<2.00 ug/L		2.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Methylene chloride	04	SW8260B	<4.00 ug/L		4.00	1	10/04/17 15:51	10/04/17 15:51	KCS
o-Xylene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Propionitrile	04	SW8260B	<40.0 ug/L		40.0	1	10/04/17 15:51	10/04/17 15:51	KCS
Styrene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Tetrachloroethylene (PCE)	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Toluene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
trans-1,2-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
trans-1,3-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
trans-1,4-Dichloro-2-butene	04	SW8260B	<4.00 ug/L		4.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Trichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Trichlorofluoromethane	04	SW8260B	<1.00 ug/L		1.00	1	10/04/17 15:51	10/04/17 15:51	KCS



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-04								
Grab Date/Time:	10/03/2017 09:18								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Vinyl acetate	04	SW8260B	<10.0 ug/L		10.0	1	10/04/17 15:51	10/04/17 15:51	KCS
Vinyl chloride	04	SW8260B	<0.50 ug/L		0.50	1	10/04/17 15:51	10/04/17 15:51	KCS
Xylenes, Total	04	SW8260B	<3.00 ug/L		3.00	1	10/04/17 15:51	10/04/17 15:51	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	04	SW8260B	95.4 %		70-120		10/04/17 15:51	10/04/17 15:51	KCS
Surr: 4-Bromofluorobenzene (Surr)	04	SW8260B	95.8 %		75-120		10/04/17 15:51	10/04/17 15:51	KCS
Surr: Dibromofluoromethane (Surr)	04	SW8260B	90.8 %		80-119		10/04/17 15:51	10/04/17 15:51	KCS
Surr: Toluene-d8 (Surr)	04	SW8260B	98.0 %		85-120		10/04/17 15:51	10/04/17 15:51	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	04	EPA625	Not Detected			1	10/05/17 09:40	10/05/17 20:03	SKS
1,2,4,5-Tetrachlorobenzene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
1,3,5-Trinitrobenzene	04	SW8270D	<5.21 ug/L		5.21	1	10/05/17 09:40	10/05/17 20:03	SKS
1,3-Dinitrobenzene	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
1,4-Naphthoquinone	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
1-Naphthylamine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2,3,4,6-Tetrachlorophenol	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2,4,5-Trichlorophenol	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2,4,6-Trichlorophenol	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2,4-Dichlorophenol	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2,4-Dimethylphenol	04	SW8270D	<0.52 ug/L		0.52	1	10/05/17 09:40	10/05/17 20:03	SKS
2,4-Dinitrophenol	04	SW8270D	<52.1 ug/L		52.1	1	10/05/17 09:40	10/05/17 20:03	SKS
2,4-Dinitrotoluene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2,6-Dichlorophenol	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2,6-Dinitrotoluene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2-Acetylaminofluorene	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS



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Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-04								
Grab Date/Time:	10/03/2017 09:18								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2-Chlorophenol	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2-Methylnaphthalene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2-Naphthylamine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2-Nitroaniline	04	SW8270D	<20.8 ug/L		20.8	1	10/05/17 09:40	10/05/17 20:03	SKS
2-Nitrophenol	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
3,3'-Dichlorobenzidine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
3,3'-Dimethylbenzidine	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
3-Methylcholanthrene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
3-Nitroaniline	04	SW8270D	<20.8 ug/L		20.8	1	10/05/17 09:40	10/05/17 20:03	SKS
4,6-Dinitro-2-methylphenol	04	SW8270D	<52.1 ug/L		52.1	1	10/05/17 09:40	10/05/17 20:03	SKS
4-Aminobiphenyl	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
4-Bromophenyl phenyl ether	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
4-Chloroaniline	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
4-Chlorophenyl phenyl ether	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
4-Nitroaniline	04	SW8270D	<20.8 ug/L		20.8	1	10/05/17 09:40	10/05/17 20:03	SKS
4-Nitrophenol	04	SW8270D	<52.1 ug/L		52.1	1	10/05/17 09:40	10/05/17 20:03	SKS
5-Nitro-o-toluidine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
7,12-Dimethylbenz (a) anthracene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Acenaphthene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Acenaphthylene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Acetophenone	04	SW8270D	<20.8 ug/L		20.8	1	10/05/17 09:40	10/05/17 20:03	SKS
Anthracene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Benzo (a) anthracene	04	SW8270D	<0.05 ug/L		0.05	1	10/05/17 09:40	10/05/17 20:03	SKS
Benzo (a) pyrene	04	SW8270D	<0.10 ug/L		0.10	1	10/05/17 09:40	10/05/17 20:03	SKS
Benzo (b) fluoranthene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results

Sample I.D. 14-1 Laboratory Sample ID: 17J0112-04

Grab Date/Time: 10/03/2017 09:18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Benzo (k) fluoranthene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Benzyl alcohol	04	SW8270D	<20.8 ug/L		20.8	1	10/05/17 09:40	10/05/17 20:03	SKS
bis (2-Chloroethoxy) methane	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
bis (2-Chloroethyl) ether	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
2,2'-Oxybis (1-chloropropane)	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
bis (2-Ethylhexyl) phthalate	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
Butyl benzyl phthalate	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Chlorobenzilate	04	SW8270D	<2.60 ug/L	C	2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
Chrysene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Diallate	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
Dibenz (a,h) anthracene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Dibenzofuran	04	SW8270D	<5.21 ug/L		5.21	1	10/05/17 09:40	10/05/17 20:03	SKS
Diethyl phthalate	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Dimethoate	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
Dimethyl phthalate	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Di-n-butyl phthalate	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Di-n-octyl phthalate	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Diphenylamine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Disulfoton	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
Ethyl methanesulfonate	04	SW8270D	<20.8 ug/L		20.8	1	10/05/17 09:40	10/05/17 20:03	SKS
Ethyl parathion	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
Famphur	04	SW8270D	<2.60 ug/L	C	2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
Fluoranthene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Fluorene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Hexachlorobenzene	04	SW8270D	<0.05 ug/L	C	0.05	1	10/05/17 09:40	10/05/17 20:03	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-04								
Grab Date/Time:	10/03/2017 09:18								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Hexachlorocyclopentadiene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Hexachloroethane	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Hexachloropropene	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
Indeno (1,2,3-cd) pyrene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Isodrin	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Isophorone	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Isosafrole	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Kepone	04	SW8270D	<2.60 ug/L	C	2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
m+p-Cresols	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Methapyrilene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Methyl methanesulfonate	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Methyl parathion	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
Naphthalene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Nitrobenzene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
n-Nitrosodiethylamine	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
n-Nitrosodimethylamine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
n-Nitrosodi-n-butylamine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
n-Nitrosodi-n-propylamine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
n-Nitrosodiphenylamine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
n-Nitrosomethylethylamine	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
n-Nitrosopiperidine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
n-Nitrosopyrrolidine	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
o,o,o-Triethyl phosphorothioate	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results

Sample I.D. 14-1 Laboratory Sample ID: 17J0112-04

Grab Date/Time: 10/03/2017 09:18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
o-Cresol	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
o-Toluidine	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
p-(Dimethylamino)azobenzene	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
p-Chloro-m-cresol	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Pentachlorobenzene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Pentachloronitrobenzene (quintozone)	04	SW8270D	<1.04 ug/L		1.04	1	10/05/17 09:40	10/05/17 20:03	SKS
Phenacetin	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Phenanthrene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Phenol	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Phorate	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
p-Phenylenediamine	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Pronamide	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Pyrene	04	SW8270D	<10.4 ug/L		10.4	1	10/05/17 09:40	10/05/17 20:03	SKS
Safrole	04	SW8270D	<2.60 ug/L		2.60	1	10/05/17 09:40	10/05/17 20:03	SKS
Surr: 2,4,6-Tribromophenol (Surr)	04	SW8270D	55.7 %		20-86		10/05/17 09:40	10/05/17 20:03	SKS
Surr: 2-Fluorobiphenyl (Surr)	04	SW8270D	75.6 %		23-87		10/05/17 09:40	10/05/17 20:03	SKS
Surr: 2-Fluorophenol (Surr)	04	SW8270D	48.8 %		10-52		10/05/17 09:40	10/05/17 20:03	SKS
Surr: Nitrobenzene-d5 (Surr)	04	SW8270D	101 %	S	10-98.5		10/05/17 09:40	10/05/17 20:03	SKS
Surr: Phenol-d5 (Surr)	04	SW8270D	33.6 %	S	5-33		10/05/17 09:40	10/05/17 20:03	SKS
Surr: p-Terphenyl-d14 (Surr)	04	SW8270D	93.3 %		27-133		10/05/17 09:40	10/05/17 20:03	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	04	SW8082A	<0.204 ug/L		0.204	1	10/06/17 15:55	10/06/17 15:55	LBH
PCB as Aroclor 1221	04	SW8082A	<0.204 ug/L		0.204	1	10/06/17 15:55	10/06/17 15:55	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-04								
Grab Date/Time:	10/03/2017 09:18								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	04	SW8082A	<0.204 ug/L		0.204	1	10/06/17 15:55	10/06/17 15:55	LBH
PCB as Aroclor 1242	04	SW8082A	<0.204 ug/L		0.204	1	10/06/17 15:55	10/06/17 15:55	LBH
PCB as Aroclor 1248	04	SW8082A	<0.204 ug/L		0.204	1	10/06/17 15:55	10/06/17 15:55	LBH
PCB as Aroclor 1254	04	SW8082A	<0.204 ug/L		0.204	1	10/06/17 15:55	10/06/17 15:55	LBH
PCB as Aroclor 1260	04	SW8082A	<0.204 ug/L		0.204	1	10/06/17 15:55	10/06/17 15:55	LBH
<i>Surr: DCB</i>	04	SW8082A	55.0 %		30-105		10/06/17 15:55	10/06/17 15:55	LBH
<i>Surr: TCMX</i>	04	SW8082A	65.0 %		30-105		10/06/17 15:55	10/06/17 15:55	LBH
4,4'-DDD	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
4,4'-DDE	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
4,4'-DDT	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Aldrin	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
alpha-BHC	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
beta-BHC	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Chlordane	04	SW8081B	<0.204 ug/L		0.204	1	10/06/17 15:55	10/06/17 15:55	LBH
delta-BHC	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Dieldrin	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Endosulfan I	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Endosulfan II	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Endosulfan sulfate	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Endrin	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Endrin aldehyde	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
gamma-BHC (Lindane)	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Heptachlor	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Heptachlor epoxide	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Methoxychlor	04	SW8081B	<0.051 ug/L		0.051	1	10/06/17 15:55	10/06/17 15:55	LBH
Toxaphene	04	SW8081B	<1.02 ug/L		1.02	1	10/06/17 15:55	10/06/17 15:55	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-04								
Grab Date/Time: 10/03/2017 09:18									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	04	SW8081B	65.0 %		18-112		10/06/17 15:55	10/06/17 15:55	LBH
Surr: DCB	04	SW8081B	55.0 %		27-131		10/06/17 15:55	10/06/17 15:55	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	04	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:05	CVH
2,4,5-TP (Silvex)	04	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:05	CVH
2,4-D	04	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:05	CVH
Dinoseb	04	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:05	CVH
Pentachlorophenol	04	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:05	CVH
Surr: DCAA (Surr)	04	SW8151A	70.0 %		60-112		10/05/17 14:29	10/10/17 13:05	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	04	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 05:16	LBH
1,2,3-Trichloropropane	04	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 05:16	LBH
1,2-Dibromo-3-chloropropane (DBCP)	04	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 05:16	LBH
Wet Chemistry Analysis									
Cyanide	04	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 14:47	10/06/17 14:47	BBP
Sulfide	04	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-05								
Grab Date/Time:	10/03/2017 10:32								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	05	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:02	CWO
Arsenic	05	SW6020A	5.5 ug/L		1.0	1	10/05/17 08:40	10/06/17 16:30	BG
Barium	05	SW6010C	0.0883 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:03	CWO
Beryllium	05	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:02	CWO
Cadmium	05	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:03	CWO
Cobalt	05	SW6010C	0.0047 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:03	CWO
Chromium	05	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:03	CWO
Copper	05	SW6010C	0.0161 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:02	CWO
Mercury	05	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 11:42	RCV
Nickel	05	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:03	CWO
Lead	05RE1	SW6010C	0.0231 mg/L		0.0100	1	10/05/17 08:40	10/06/17 13:51	CWO
Antimony	05	SW6020A	<1.00 ug/L		1.00	1	10/05/17 08:40	10/06/17 16:30	BG
Selenium	05	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 08:40	10/05/17 16:03	CWO
Tin	05	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 08:40	10/05/17 16:03	CWO
Thallium	05	SW6020A	<1.00 ug/L		1.00	1	10/05/17 08:40	10/06/17 16:30	BG
Vanadium	05	SW6010C	0.0147 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:02	CWO
Zinc	05	SW6010C	0.0577 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:03	CWO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	05	SW8260B	<0.40 ug/L		0.40	1	10/04/17 16:15	10/04/17 16:15	KCS
1,1,1-Trichloroethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,1,2,2-Tetrachloroethane	05	SW8260B	<0.40 ug/L		0.40	1	10/04/17 16:15	10/04/17 16:15	KCS
1,1,2-Trichloroethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,1-Dichloroethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,1-Dichloroethylene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,1-Dichloropropene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,2,3-Trichloropropane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-05								
Grab Date/Time:	10/03/2017 10:32								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,2-Dichlorobenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,2-Dichloroethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,2-Dichloropropane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,3-Dichlorobenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,3-Dichloropropane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
1,4-Dichlorobenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
2,2-Dichloropropane	05	SW8260B	<2.00 ug/L		2.00	1	10/04/17 16:15	10/04/17 16:15	KCS
2-Butanone (MEK)	05	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:15	10/04/17 16:15	KCS
2-Hexanone (MBK)	05	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:15	10/04/17 16:15	KCS
4-Methyl-2-pentanone (MIBK)	05	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Acetone	05	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:15	10/04/17 16:15	KCS
Acetonitrile	05	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:15	10/04/17 16:15	KCS
Acrolein	05	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:15	10/04/17 16:15	KCS
Acrylonitrile	05	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Allyl chloride	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Benzene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Bromochloromethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Bromodichloromethane	05	SW8260B	<0.50 ug/L		0.50	1	10/04/17 16:15	10/04/17 16:15	KCS
Bromoform	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Bromomethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Carbon disulfide	05	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:15	10/04/17 16:15	KCS
Carbon tetrachloride	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Chlorobenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Chloroethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Chloroform	05	SW8260B	<0.50 ug/L		0.50	1	10/04/17 16:15	10/04/17 16:15	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-05								
Grab Date/Time:	10/03/2017 10:32								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloromethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Chloroprene	05	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:15	10/04/17 16:15	KCS
cis-1,2-Dichloroethylene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
cis-1,3-Dichloropropene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Dibromochloromethane	05	SW8260B	<0.50 ug/L		0.50	1	10/04/17 16:15	10/04/17 16:15	KCS
Dibromomethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Dichlorodifluoromethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Ethyl methacrylate	05	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Ethylbenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Hexachlorobutadiene	05	SW8260B	<0.80 ug/L		0.80	1	10/04/17 16:15	10/04/17 16:15	KCS
Iodomethane	05	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:15	10/04/17 16:15	KCS
Isobutyl Alcohol	05	SW8260B	<40.0 ug/L		40.0	1	10/04/17 16:15	10/04/17 16:15	KCS
m+p-Xylenes	05	SW8260B	<2.00 ug/L		2.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Methacrylonitrile	05	SW8260B	<1.50 ug/L		1.50	1	10/04/17 16:15	10/04/17 16:15	KCS
Methyl methacrylate	05	SW8260B	<2.00 ug/L		2.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Methylene chloride	05	SW8260B	<4.00 ug/L		4.00	1	10/04/17 16:15	10/04/17 16:15	KCS
o-Xylene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Propionitrile	05	SW8260B	<40.0 ug/L		40.0	1	10/04/17 16:15	10/04/17 16:15	KCS
Styrene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Tetrachloroethylene (PCE)	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Toluene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
trans-1,2-Dichloroethylene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
trans-1,3-Dichloropropene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
trans-1,4-Dichloro-2-butene	05	SW8260B	<4.00 ug/L		4.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Trichloroethylene	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Trichlorofluoromethane	05	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:15	10/04/17 16:15	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-05								
Grab Date/Time:	10/03/2017 10:32								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Vinyl acetate	05	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:15	10/04/17 16:15	KCS
Vinyl chloride	05	SW8260B	<0.50 ug/L		0.50	1	10/04/17 16:15	10/04/17 16:15	KCS
Xylenes, Total	05	SW8260B	<3.00 ug/L		3.00	1	10/04/17 16:15	10/04/17 16:15	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	05	SW8260B	101 %		70-120		10/04/17 16:15	10/04/17 16:15	KCS
Surr: 4-Bromofluorobenzene (Surr)	05	SW8260B	95.7 %		75-120		10/04/17 16:15	10/04/17 16:15	KCS
Surr: Dibromofluoromethane (Surr)	05	SW8260B	92.0 %		80-119		10/04/17 16:15	10/04/17 16:15	KCS
Surr: Toluene-d8 (Surr)	05	SW8260B	98.2 %		85-120		10/04/17 16:15	10/04/17 16:15	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	05	EPA625	Not Detected			1	10/05/17 09:40	10/05/17 20:34	SKS
1,2,4,5-Tetrachlorobenzene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
1,3,5-Trinitrobenzene	05	SW8270D	<5.38 ug/L		5.38	1	10/05/17 09:40	10/05/17 20:34	SKS
1,3-Dinitrobenzene	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
1,4-Naphthoquinone	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
1-Naphthylamine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2,3,4,6-Tetrachlorophenol	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2,4,5-Trichlorophenol	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2,4,6-Trichlorophenol	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2,4-Dichlorophenol	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2,4-Dimethylphenol	05	SW8270D	<0.54 ug/L		0.54	1	10/05/17 09:40	10/05/17 20:34	SKS
2,4-Dinitrophenol	05	SW8270D	<53.8 ug/L		53.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2,4-Dinitrotoluene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2,6-Dichlorophenol	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2,6-Dinitrotoluene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2-Acetylaminofluorene	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-05								
Grab Date/Time:	10/03/2017 10:32								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2-Chlorophenol	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2-Methylnaphthalene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2-Naphthylamine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2-Nitroaniline	05	SW8270D	<21.5 ug/L		21.5	1	10/05/17 09:40	10/05/17 20:34	SKS
2-Nitrophenol	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
3,3'-Dichlorobenzidine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
3,3'-Dimethylbenzidine	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
3-Methylcholanthrene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
3-Nitroaniline	05	SW8270D	<21.5 ug/L		21.5	1	10/05/17 09:40	10/05/17 20:34	SKS
4,6-Dinitro-2-methylphenol	05	SW8270D	<53.8 ug/L		53.8	1	10/05/17 09:40	10/05/17 20:34	SKS
4-Aminobiphenyl	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
4-Bromophenyl phenyl ether	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
4-Chloroaniline	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
4-Chlorophenyl phenyl ether	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
4-Nitroaniline	05	SW8270D	<21.5 ug/L		21.5	1	10/05/17 09:40	10/05/17 20:34	SKS
4-Nitrophenol	05	SW8270D	<53.8 ug/L		53.8	1	10/05/17 09:40	10/05/17 20:34	SKS
5-Nitro-o-toluidine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
7,12-Dimethylbenz (a) anthracene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Acenaphthene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Acenaphthylene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Acetophenone	05	SW8270D	<21.5 ug/L		21.5	1	10/05/17 09:40	10/05/17 20:34	SKS
Anthracene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Benzo (a) anthracene	05	SW8270D	<0.05 ug/L		0.05	1	10/05/17 09:40	10/05/17 20:34	SKS
Benzo (a) pyrene	05	SW8270D	<0.11 ug/L		0.11	1	10/05/17 09:40	10/05/17 20:34	SKS
Benzo (b) fluoranthene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results

Sample I.D. 14-2 Laboratory Sample ID: 17J0112-05

Grab Date/Time: 10/03/2017 10:32

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Benzo (k) fluoranthene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Benzyl alcohol	05	SW8270D	<21.5 ug/L		21.5	1	10/05/17 09:40	10/05/17 20:34	SKS
bis (2-Chloroethoxy) methane	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
bis (2-Chloroethyl) ether	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
2,2'-Oxybis (1-chloropropane)	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
bis (2-Ethylhexyl) phthalate	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
Butyl benzyl phthalate	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Chlorobenzilate	05	SW8270D	<2.69 ug/L	C	2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
Chrysene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Diallate	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
Dibenz (a,h) anthracene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Dibenzofuran	05	SW8270D	<5.38 ug/L		5.38	1	10/05/17 09:40	10/05/17 20:34	SKS
Diethyl phthalate	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Dimethoate	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
Dimethyl phthalate	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Di-n-butyl phthalate	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Di-n-octyl phthalate	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Diphenylamine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Disulfoton	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
Ethyl methanesulfonate	05	SW8270D	<21.5 ug/L		21.5	1	10/05/17 09:40	10/05/17 20:34	SKS
Ethyl parathion	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
Famphur	05	SW8270D	<2.69 ug/L	C	2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
Fluoranthene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Fluorene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Hexachlorobenzene	05	SW8270D	<0.05 ug/L	C	0.05	1	10/05/17 09:40	10/05/17 20:34	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-05								
Grab Date/Time:	10/03/2017 10:32								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Hexachlorocyclopentadiene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Hexachloroethane	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Hexachloropropene	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
Indeno (1,2,3-cd) pyrene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Isodrin	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Isophorone	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Isosafrole	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Kepone	05	SW8270D	<2.69 ug/L	C	2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
m+p-Cresols	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Methapyrilene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Methyl methanesulfonate	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Methyl parathion	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
Naphthalene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Nitrobenzene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
n-Nitrosodiethylamine	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
n-Nitrosodimethylamine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
n-Nitrosodi-n-butylamine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
n-Nitrosodi-n-propylamine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
n-Nitrosodiphenylamine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
n-Nitrosomethylethylamine	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
n-Nitrosopiperidine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
n-Nitrosopyrrolidine	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
o,o,o-Triethyl phosphorothioate	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	14-2	Laboratory Sample ID: 17J0112-05							
Grab Date/Time:		10/03/2017 10:32							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
o-Cresol	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
o-Toluidine	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
p-(Dimethylamino)azobenzene	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
p-Chloro-m-cresol	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Pentachlorobenzene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Pentachloronitrobenzene (quintozone)	05	SW8270D	<1.08 ug/L		1.08	1	10/05/17 09:40	10/05/17 20:34	SKS
Phenacetin	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Phenanthrene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Phenol	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Phorate	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
p-Phenylenediamine	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Pronamide	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Pyrene	05	SW8270D	<10.8 ug/L		10.8	1	10/05/17 09:40	10/05/17 20:34	SKS
Safrole	05	SW8270D	<2.69 ug/L		2.69	1	10/05/17 09:40	10/05/17 20:34	SKS
Surr: 2,4,6-Tribromophenol (Surr)	05	SW8270D	42.5 %		20-86		10/05/17 09:40	10/05/17 20:34	SKS
Surr: 2-Fluorobiphenyl (Surr)	05	SW8270D	56.8 %		23-87		10/05/17 09:40	10/05/17 20:34	SKS
Surr: 2-Fluorophenol (Surr)	05	SW8270D	30.8 %		10-52		10/05/17 09:40	10/05/17 20:34	SKS
Surr: Nitrobenzene-d5 (Surr)	05	SW8270D	76.8 %		10-98.5		10/05/17 09:40	10/05/17 20:34	SKS
Surr: Phenol-d5 (Surr)	05	SW8270D	25.0 %		5-33		10/05/17 09:40	10/05/17 20:34	SKS
Surr: p-Terphenyl-d14 (Surr)	05	SW8270D	75.6 %		27-133		10/05/17 09:40	10/05/17 20:34	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	05	SW8082A	<0.215 ug/L		0.215	1	10/06/17 16:14	10/06/17 16:14	LBH
PCB as Aroclor 1221	05	SW8082A	<0.215 ug/L		0.215	1	10/06/17 16:14	10/06/17 16:14	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-05								
Grab Date/Time:	10/03/2017 10:32								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	05	SW8082A	<0.215 ug/L		0.215	1	10/06/17 16:14	10/06/17 16:14	LBH
PCB as Aroclor 1242	05	SW8082A	<0.215 ug/L		0.215	1	10/06/17 16:14	10/06/17 16:14	LBH
PCB as Aroclor 1248	05	SW8082A	<0.215 ug/L		0.215	1	10/06/17 16:14	10/06/17 16:14	LBH
PCB as Aroclor 1254	05	SW8082A	<0.215 ug/L		0.215	1	10/06/17 16:14	10/06/17 16:14	LBH
PCB as Aroclor 1260	05	SW8082A	<0.215 ug/L		0.215	1	10/06/17 16:14	10/06/17 16:14	LBH
<i>Surr: DCB</i>	05	SW8082A	40.0 %		30-105		10/06/17 16:14	10/06/17 16:14	LBH
<i>Surr: TCMX</i>	05	SW8082A	65.0 %		30-105		10/06/17 16:14	10/06/17 16:14	LBH
4,4'-DDD	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
4,4'-DDE	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
4,4'-DDT	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Aldrin	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
alpha-BHC	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
beta-BHC	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Chlordane	05	SW8081B	<0.215 ug/L		0.215	1	10/06/17 16:14	10/06/17 16:14	LBH
delta-BHC	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Dieldrin	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Endosulfan I	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Endosulfan II	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Endosulfan sulfate	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Endrin	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Endrin aldehyde	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
gamma-BHC (Lindane)	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Heptachlor	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Heptachlor epoxide	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Methoxychlor	05	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:14	10/06/17 16:14	LBH
Toxaphene	05	SW8081B	<1.08 ug/L		1.08	1	10/06/17 16:14	10/06/17 16:14	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-05								
Grab Date/Time:	10/03/2017 10:32								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	05	SW8081B	60.0 %		18-112		10/06/17 16:14	10/06/17 16:14	LBH
Surr: DCB	05	SW8081B	35.0 %		27-131		10/06/17 16:14	10/06/17 16:14	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	05	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:27	CVH
2,4,5-TP (Silvex)	05	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:27	CVH
2,4-D	05	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:27	CVH
Dinoseb	05	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:27	CVH
Pentachlorophenol	05	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:27	CVH
Surr: DCAA (Surr)	05	SW8151A	60.0 %		60-112		10/05/17 14:29	10/10/17 13:27	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	05	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 05:35	LBH
1,2,3-Trichloropropane	05	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 05:35	LBH
1,2-Dibromo-3-chloropropane (DBCP)	05	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 05:35	LBH
Wet Chemistry Analysis									
Cyanide	05	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 14:50	10/06/17 14:50	BBP
Sulfide	05	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results

Sample I.D. 14-3 Laboratory Sample ID: 17J0112-06

Grab Date/Time: 10/03/2017 11:59

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	06RE1	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/06/17 13:52	CWO
Arsenic	06	SW6020A	1.0 ug/L		1.0	1	10/05/17 08:40	10/06/17 16:34	BG
Barium	06	SW6010C	0.0405 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:05	CWO
Beryllium	06	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:04	CWO
Cadmium	06	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:05	CWO
Cobalt	06	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:05	CWO
Chromium	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:05	CWO
Copper	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:04	CWO
Mercury	06	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 11:44	RCV
Nickel	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:05	CWO
Lead	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:05	CWO
Antimony	06	SW6020A	<1.00 ug/L		1.00	1	10/05/17 08:40	10/06/17 16:34	BG
Selenium	06	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 08:40	10/05/17 16:05	CWO
Tin	06	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 08:40	10/05/17 16:05	CWO
Thallium	06	SW6020A	<1.00 ug/L		1.00	1	10/05/17 08:40	10/06/17 16:34	BG
Vanadium	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:04	CWO
Zinc	06	SW6010C	0.0152 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:05	CWO

Volatile Organic Compounds by GCMS

1,1,1,2-Tetrachloroethane	06	SW8260B	<0.40 ug/L		0.40	1	10/04/17 16:38	10/04/17 16:38	KCS
1,1,1-Trichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,1,2,2-Tetrachloroethane	06	SW8260B	<0.40 ug/L		0.40	1	10/04/17 16:38	10/04/17 16:38	KCS
1,1,2-Trichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,1-Dichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,1-Dichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,1-Dichloropropene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,2,3-Trichloropropane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-06								
Grab Date/Time:	10/03/2017 11:59								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,2-Dichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,2-Dichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,2-Dichloropropane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,3-Dichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,3-Dichloropropane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
1,4-Dichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
2,2-Dichloropropane	06	SW8260B	<2.00 ug/L		2.00	1	10/04/17 16:38	10/04/17 16:38	KCS
2-Butanone (MEK)	06	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:38	10/04/17 16:38	KCS
2-Hexanone (MBK)	06	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:38	10/04/17 16:38	KCS
4-Methyl-2-pentanone (MIBK)	06	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Acetone	06	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:38	10/04/17 16:38	KCS
Acetonitrile	06	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:38	10/04/17 16:38	KCS
Acrolein	06	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:38	10/04/17 16:38	KCS
Acrylonitrile	06	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Allyl chloride	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Benzene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Bromochloromethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Bromodichloromethane	06	SW8260B	<0.50 ug/L		0.50	1	10/04/17 16:38	10/04/17 16:38	KCS
Bromoform	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Bromomethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Carbon disulfide	06	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:38	10/04/17 16:38	KCS
Carbon tetrachloride	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Chlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Chloroethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Chloroform	06	SW8260B	<0.50 ug/L		0.50	1	10/04/17 16:38	10/04/17 16:38	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results

Sample I.D. 14-3 Laboratory Sample ID: 17J0112-06

Grab Date/Time: 10/03/2017 11:59

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Organic Compounds by GCMS

Chloromethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Chloroprene	06	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:38	10/04/17 16:38	KCS
cis-1,2-Dichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
cis-1,3-Dichloropropene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Dibromochloromethane	06	SW8260B	<0.50 ug/L		0.50	1	10/04/17 16:38	10/04/17 16:38	KCS
Dibromomethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Dichlorodifluoromethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Ethyl methacrylate	06	SW8260B	<5.00 ug/L		5.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Ethylbenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Hexachlorobutadiene	06	SW8260B	<0.80 ug/L		0.80	1	10/04/17 16:38	10/04/17 16:38	KCS
Iodomethane	06	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:38	10/04/17 16:38	KCS
Isobutyl Alcohol	06	SW8260B	<40.0 ug/L		40.0	1	10/04/17 16:38	10/04/17 16:38	KCS
m+p-Xylenes	06	SW8260B	<2.00 ug/L		2.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Methacrylonitrile	06	SW8260B	<1.50 ug/L		1.50	1	10/04/17 16:38	10/04/17 16:38	KCS
Methyl methacrylate	06	SW8260B	<2.00 ug/L		2.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Methylene chloride	06	SW8260B	<4.00 ug/L		4.00	1	10/04/17 16:38	10/04/17 16:38	KCS
o-Xylene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Propionitrile	06	SW8260B	<40.0 ug/L		40.0	1	10/04/17 16:38	10/04/17 16:38	KCS
Styrene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Tetrachloroethylene (PCE)	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Toluene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
trans-1,2-Dichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
trans-1,3-Dichloropropene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
trans-1,4-Dichloro-2-butene	06	SW8260B	<4.00 ug/L		4.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Trichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Trichlorofluoromethane	06	SW8260B	<1.00 ug/L		1.00	1	10/04/17 16:38	10/04/17 16:38	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results

Sample I.D. 14-3 Laboratory Sample ID: 17J0112-06

Grab Date/Time: 10/03/2017 11:59

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Organic Compounds by GCMS

Vinyl acetate	06	SW8260B	<10.0 ug/L		10.0	1	10/04/17 16:38	10/04/17 16:38	KCS
Vinyl chloride	06	SW8260B	<0.50 ug/L		0.50	1	10/04/17 16:38	10/04/17 16:38	KCS
Xylenes, Total	06	SW8260B	<3.00 ug/L		3.00	1	10/04/17 16:38	10/04/17 16:38	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	06	SW8260B	100 %		70-120		10/04/17 16:38	10/04/17 16:38	KCS
Surr: 4-Bromofluorobenzene (Surr)	06	SW8260B	96.2 %		75-120		10/04/17 16:38	10/04/17 16:38	KCS
Surr: Dibromofluoromethane (Surr)	06	SW8260B	90.7 %		80-119		10/04/17 16:38	10/04/17 16:38	KCS
Surr: Toluene-d8 (Surr)	06	SW8260B	98.6 %		85-120		10/04/17 16:38	10/04/17 16:38	KCS

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	06	EPA625	Not Detected			1	10/05/17 09:40	10/05/17 21:05	SKS
1,2,4,5-Tetrachlorobenzene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
1,3,5-Trinitrobenzene	06	SW8270D	<5.32 ug/L		5.32	1	10/05/17 09:40	10/05/17 21:05	SKS
1,3-Dinitrobenzene	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
1,4-Naphthoquinone	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
1-Naphthylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2,3,4,6-Tetrachlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2,4,5-Trichlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2,4,6-Trichlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2,4-Dichlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2,4-Dimethylphenol	06	SW8270D	<0.53 ug/L		0.53	1	10/05/17 09:40	10/05/17 21:05	SKS
2,4-Dinitrophenol	06	SW8270D	<53.2 ug/L		53.2	1	10/05/17 09:40	10/05/17 21:05	SKS
2,4-Dinitrotoluene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2,6-Dichlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2,6-Dinitrotoluene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2-Acetylaminofluorene	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-06								
Grab Date/Time:	10/03/2017 11:59								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2-Chlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2-Methylnaphthalene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2-Naphthylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2-Nitroaniline	06	SW8270D	<21.3 ug/L		21.3	1	10/05/17 09:40	10/05/17 21:05	SKS
2-Nitrophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
3,3'-Dichlorobenzidine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
3,3'-Dimethylbenzidine	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
3-Methylcholanthrene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
3-Nitroaniline	06	SW8270D	<21.3 ug/L		21.3	1	10/05/17 09:40	10/05/17 21:05	SKS
4,6-Dinitro-2-methylphenol	06	SW8270D	<53.2 ug/L		53.2	1	10/05/17 09:40	10/05/17 21:05	SKS
4-Aminobiphenyl	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
4-Bromophenyl phenyl ether	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
4-Chloroaniline	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
4-Chlorophenyl phenyl ether	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
4-Nitroaniline	06	SW8270D	<21.3 ug/L		21.3	1	10/05/17 09:40	10/05/17 21:05	SKS
4-Nitrophenol	06	SW8270D	<53.2 ug/L		53.2	1	10/05/17 09:40	10/05/17 21:05	SKS
5-Nitro-o-toluidine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
7,12-Dimethylbenz (a) anthracene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Acenaphthene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Acenaphthylene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Acetophenone	06	SW8270D	<21.3 ug/L		21.3	1	10/05/17 09:40	10/05/17 21:05	SKS
Anthracene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Benzo (a) anthracene	06	SW8270D	<0.05 ug/L		0.05	1	10/05/17 09:40	10/05/17 21:05	SKS
Benzo (a) pyrene	06	SW8270D	<0.11 ug/L		0.11	1	10/05/17 09:40	10/05/17 21:05	SKS
Benzo (b) fluoranthene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-06								
Grab Date/Time:	10/03/2017 11:59								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Benzo (k) fluoranthene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Benzyl alcohol	06	SW8270D	<21.3 ug/L		21.3	1	10/05/17 09:40	10/05/17 21:05	SKS
bis (2-Chloroethoxy) methane	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
bis (2-Chloroethyl) ether	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
2,2'-Oxybis (1-chloropropane)	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
bis (2-Ethylhexyl) phthalate	06	SW8270D	3.09 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
Butyl benzyl phthalate	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Chlorobenzilate	06	SW8270D	<2.66 ug/L	C	2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
Chrysene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Diallate	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
Dibenz (a,h) anthracene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Dibenzofuran	06	SW8270D	<5.32 ug/L		5.32	1	10/05/17 09:40	10/05/17 21:05	SKS
Diethyl phthalate	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Dimethoate	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
Dimethyl phthalate	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Di-n-butyl phthalate	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Di-n-octyl phthalate	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Diphenylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Disulfoton	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
Ethyl methanesulfonate	06	SW8270D	<21.3 ug/L		21.3	1	10/05/17 09:40	10/05/17 21:05	SKS
Ethyl parathion	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
Famphur	06	SW8270D	<2.66 ug/L	C	2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
Fluoranthene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Fluorene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Hexachlorobenzene	06	SW8270D	<0.05 ug/L	C	0.05	1	10/05/17 09:40	10/05/17 21:05	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	14-3	Laboratory Sample ID: 17J0112-06							
Grab Date/Time:		10/03/2017 11:59							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Hexachlorocyclopentadiene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Hexachloroethane	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Hexachloropropene	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
Indeno (1,2,3-cd) pyrene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Isodrin	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Isophorone	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Isosafrole	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Kepone	06	SW8270D	<2.66 ug/L	C	2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
m+p-Cresols	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Methapyrilene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Methyl methanesulfonate	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Methyl parathion	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
Naphthalene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Nitrobenzene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
n-Nitrosodiethylamine	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
n-Nitrosodimethylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
n-Nitrosodi-n-butylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
n-Nitrosodi-n-propylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
n-Nitrosodiphenylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
n-Nitrosomethylalkylamine	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
n-Nitrosopiperidine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
n-Nitrosopyrrolidine	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
o,o,o-Triethyl phosphorothioate	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-06								
Grab Date/Time:	10/03/2017 11:59								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
o-Cresol	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
o-Toluidine	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
p-(Dimethylamino)azobenzene	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
p-Chloro-m-cresol	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Pentachlorobenzene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Pentachloronitrobenzene (quintozone)	06	SW8270D	<1.06 ug/L		1.06	1	10/05/17 09:40	10/05/17 21:05	SKS
Phenacetin	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Phenanthrene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Phenol	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Phorate	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
p-Phenylenediamine	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Pronamide	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Pyrene	06	SW8270D	<10.6 ug/L		10.6	1	10/05/17 09:40	10/05/17 21:05	SKS
Safrole	06	SW8270D	<2.66 ug/L		2.66	1	10/05/17 09:40	10/05/17 21:05	SKS
Surr: 2,4,6-Tribromophenol (Surr)	06	SW8270D	47.2 %		20-86		10/05/17 09:40	10/05/17 21:05	SKS
Surr: 2-Fluorobiphenyl (Surr)	06	SW8270D	66.0 %		23-87		10/05/17 09:40	10/05/17 21:05	SKS
Surr: 2-Fluorophenol (Surr)	06	SW8270D	40.3 %		10-52		10/05/17 09:40	10/05/17 21:05	SKS
Surr: Nitrobenzene-d5 (Surr)	06	SW8270D	88.9 %		10-98.5		10/05/17 09:40	10/05/17 21:05	SKS
Surr: Phenol-d5 (Surr)	06	SW8270D	31.6 %		5-33		10/05/17 09:40	10/05/17 21:05	SKS
Surr: p-Terphenyl-d14 (Surr)	06	SW8270D	85.9 %		27-133		10/05/17 09:40	10/05/17 21:05	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	06	SW8082A	<0.220 ug/L		0.220	1	10/06/17 16:33	10/06/17 16:33	LBH
PCB as Aroclor 1221	06	SW8082A	<0.220 ug/L		0.220	1	10/06/17 16:33	10/06/17 16:33	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-06								
Grab Date/Time:	10/03/2017 11:59								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	06	SW8082A	<0.220 ug/L		0.220	1	10/06/17 16:33	10/06/17 16:33	LBH
PCB as Aroclor 1242	06	SW8082A	<0.220 ug/L		0.220	1	10/06/17 16:33	10/06/17 16:33	LBH
PCB as Aroclor 1248	06	SW8082A	<0.220 ug/L		0.220	1	10/06/17 16:33	10/06/17 16:33	LBH
PCB as Aroclor 1254	06	SW8082A	<0.220 ug/L		0.220	1	10/06/17 16:33	10/06/17 16:33	LBH
PCB as Aroclor 1260	06	SW8082A	<0.220 ug/L		0.220	1	10/06/17 16:33	10/06/17 16:33	LBH
<i>Surr: DCB</i>	06	SW8082A	65.0 %		30-105		10/06/17 16:33	10/06/17 16:33	LBH
<i>Surr: TCMX</i>	06	SW8082A	65.0 %		30-105		10/06/17 16:33	10/06/17 16:33	LBH
4,4'-DDD	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
4,4'-DDE	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
4,4'-DDT	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Aldrin	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
alpha-BHC	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
beta-BHC	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Chlordane	06	SW8081B	<0.220 ug/L		0.220	1	10/06/17 16:33	10/06/17 16:33	LBH
delta-BHC	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Dieldrin	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Endosulfan I	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Endosulfan II	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Endosulfan sulfate	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Endrin	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Endrin aldehyde	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
gamma-BHC (Lindane)	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Heptachlor	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Heptachlor epoxide	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Methoxychlor	06	SW8081B	<0.055 ug/L		0.055	1	10/06/17 16:33	10/06/17 16:33	LBH
Toxaphene	06	SW8081B	<1.10 ug/L		1.10	1	10/06/17 16:33	10/06/17 16:33	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-06								
Grab Date/Time:	10/03/2017 11:59								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	06	SW8081B	65.0 %		18-112		10/06/17 16:33	10/06/17 16:33	LBH
Surr: DCB	06	SW8081B	65.0 %		27-131		10/06/17 16:33	10/06/17 16:33	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	06	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:49	CVH
2,4,5-TP (Silvex)	06	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:49	CVH
2,4-D	06	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:49	CVH
Dinoseb	06	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:49	CVH
Pentachlorophenol	06	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 13:49	CVH
Surr: DCAA (Surr)	06	SW8151A	70.0 %		60-112		10/05/17 14:29	10/10/17 13:49	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	06	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 05:55	LBH
1,2,3-Trichloropropane	06	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 05:55	LBH
1,2-Dibromo-3-chloropropane (DBCP)	06	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 05:55	LBH
Wet Chemistry Analysis									
Cyanide	06	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 14:53	10/06/17 14:53	BBP
Sulfide	06	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-07								
Grab Date/Time:	10/03/2017 13:39								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	07	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:06	CWO
Arsenic	07	SW6020A	<1.0 ug/L		1.0	1	10/05/17 08:40	10/06/17 16:38	BG
Barium	07	SW6010C	0.0496 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:07	CWO
Beryllium	07	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:07	CWO
Cadmium	07	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:07	CWO
Cobalt	07	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:07	CWO
Chromium	07	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:07	CWO
Copper	07	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:06	CWO
Mercury	07	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 11:46	RCV
Nickel	07	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:07	CWO
Lead	07	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:07	CWO
Antimony	07	SW6020A	<1.00 ug/L		1.00	1	10/05/17 08:40	10/06/17 16:38	BG
Selenium	07	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 08:40	10/05/17 16:07	CWO
Tin	07	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 08:40	10/05/17 16:07	CWO
Thallium	07	SW6020A	<1.00 ug/L		1.00	1	10/05/17 08:40	10/06/17 16:38	BG
Vanadium	07	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:06	CWO
Zinc	07	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:07	CWO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	07	SW8260B	<0.40 ug/L		0.40	1	10/04/17 17:02	10/04/17 17:02	KCS
1,1,1-Trichloroethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,1,2,2-Tetrachloroethane	07	SW8260B	<0.40 ug/L		0.40	1	10/04/17 17:02	10/04/17 17:02	KCS
1,1,2-Trichloroethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,1-Dichloroethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,1-Dichloroethylene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,1-Dichloropropene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,2,3-Trichloropropane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-07								
Grab Date/Time:	10/03/2017 13:39								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,2-Dichlorobenzene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,2-Dichloroethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,2-Dichloropropane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,3-Dichlorobenzene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,3-Dichloropropane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
1,4-Dichlorobenzene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
2,2-Dichloropropane	07	SW8260B	<2.00 ug/L		2.00	1	10/04/17 17:02	10/04/17 17:02	KCS
2-Butanone (MEK)	07	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:02	10/04/17 17:02	KCS
2-Hexanone (MBK)	07	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:02	10/04/17 17:02	KCS
4-Methyl-2-pentanone (MIBK)	07	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Acetone	07	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:02	10/04/17 17:02	KCS
Acetonitrile	07	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:02	10/04/17 17:02	KCS
Acrolein	07	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:02	10/04/17 17:02	KCS
Acrylonitrile	07	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Allyl chloride	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Benzene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Bromochloromethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Bromodichloromethane	07	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:02	10/04/17 17:02	KCS
Bromoform	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Bromomethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Carbon disulfide	07	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:02	10/04/17 17:02	KCS
Carbon tetrachloride	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Chlorobenzene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Chloroethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Chloroform	07	SW8260B	1.34 ug/L		0.50	1	10/04/17 17:02	10/04/17 17:02	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	15-1								
Grab Date/Time:	10/03/2017 13:39								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloromethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Chloroprene	07	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:02	10/04/17 17:02	KCS
cis-1,2-Dichloroethylene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
cis-1,3-Dichloropropene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Dibromochloromethane	07	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:02	10/04/17 17:02	KCS
Dibromomethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Dichlorodifluoromethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Ethyl methacrylate	07	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Ethylbenzene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Hexachlorobutadiene	07	SW8260B	<0.80 ug/L		0.80	1	10/04/17 17:02	10/04/17 17:02	KCS
Iodomethane	07	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:02	10/04/17 17:02	KCS
Isobutyl Alcohol	07	SW8260B	<40.0 ug/L		40.0	1	10/04/17 17:02	10/04/17 17:02	KCS
m+p-Xylenes	07	SW8260B	<2.00 ug/L		2.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Methacrylonitrile	07	SW8260B	<1.50 ug/L		1.50	1	10/04/17 17:02	10/04/17 17:02	KCS
Methyl methacrylate	07	SW8260B	<2.00 ug/L		2.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Methylene chloride	07	SW8260B	<4.00 ug/L		4.00	1	10/04/17 17:02	10/04/17 17:02	KCS
o-Xylene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Propionitrile	07	SW8260B	<40.0 ug/L		40.0	1	10/04/17 17:02	10/04/17 17:02	KCS
Styrene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Tetrachloroethylene (PCE)	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Toluene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
trans-1,2-Dichloroethylene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
trans-1,3-Dichloropropene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
trans-1,4-Dichloro-2-butene	07	SW8260B	<4.00 ug/L		4.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Trichloroethylene	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Trichlorofluoromethane	07	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:02	10/04/17 17:02	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-07								
Grab Date/Time:	10/03/2017 13:39								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Vinyl acetate	07	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:02	10/04/17 17:02	KCS
Vinyl chloride	07	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:02	10/04/17 17:02	KCS
Xylenes, Total	07	SW8260B	<3.00 ug/L		3.00	1	10/04/17 17:02	10/04/17 17:02	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	07	SW8260B	97.8 %		70-120		10/04/17 17:02	10/04/17 17:02	KCS
Surr: 4-Bromofluorobenzene (Surr)	07	SW8260B	96.8 %		75-120		10/04/17 17:02	10/04/17 17:02	KCS
Surr: Dibromofluoromethane (Surr)	07	SW8260B	90.4 %		80-119		10/04/17 17:02	10/04/17 17:02	KCS
Surr: Toluene-d8 (Surr)	07	SW8260B	97.4 %		85-120		10/04/17 17:02	10/04/17 17:02	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	07	EPA625	Not Detected			1	10/05/17 09:40	10/05/17 21:36	SKS
1,2,4,5-Tetrachlorobenzene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
1,3,5-Trinitrobenzene	07	SW8270D	<5.43 ug/L		5.43	1	10/05/17 09:40	10/05/17 21:36	SKS
1,3-Dinitrobenzene	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
1,4-Naphthoquinone	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
1-Naphthylamine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2,3,4,6-Tetrachlorophenol	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2,4,5-Trichlorophenol	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2,4,6-Trichlorophenol	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2,4-Dichlorophenol	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2,4-Dimethylphenol	07	SW8270D	<0.54 ug/L		0.54	1	10/05/17 09:40	10/05/17 21:36	SKS
2,4-Dinitrophenol	07	SW8270D	<54.3 ug/L		54.3	1	10/05/17 09:40	10/05/17 21:36	SKS
2,4-Dinitrotoluene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2,6-Dichlorophenol	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2,6-Dinitrotoluene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2-Acetylaminofluorene	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-07								
Grab Date/Time:	10/03/2017 13:39								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2-Chlorophenol	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2-Methylnaphthalene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2-Naphthylamine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2-Nitroaniline	07	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 21:36	SKS
2-Nitrophenol	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
3,3'-Dichlorobenzidine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
3,3'-Dimethylbenzidine	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
3-Methylcholanthrene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
3-Nitroaniline	07	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 21:36	SKS
4,6-Dinitro-2-methylphenol	07	SW8270D	<54.3 ug/L		54.3	1	10/05/17 09:40	10/05/17 21:36	SKS
4-Aminobiphenyl	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
4-Bromophenyl phenyl ether	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
4-Chloroaniline	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
4-Chlorophenyl phenyl ether	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
4-Nitroaniline	07	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 21:36	SKS
4-Nitrophenol	07	SW8270D	<54.3 ug/L		54.3	1	10/05/17 09:40	10/05/17 21:36	SKS
5-Nitro-o-toluidine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
7,12-Dimethylbenz (a) anthracene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Acenaphthene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Acenaphthylene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Acetophenone	07	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 21:36	SKS
Anthracene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Benzo (a) anthracene	07	SW8270D	<0.05 ug/L		0.05	1	10/05/17 09:40	10/05/17 21:36	SKS
Benzo (a) pyrene	07	SW8270D	<0.11 ug/L		0.11	1	10/05/17 09:40	10/05/17 21:36	SKS
Benzo (b) fluoranthene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results

Sample I.D. 15-1 Laboratory Sample ID: 17J0112-07

Grab Date/Time: 10/03/2017 13:39

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Benzo (k) fluoranthene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Benzyl alcohol	07	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 21:36	SKS
bis (2-Chloroethoxy) methane	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
bis (2-Chloroethyl) ether	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
2,2'-Oxybis (1-chloropropane)	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
bis (2-Ethylhexyl) phthalate	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
Butyl benzyl phthalate	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Chlorobenzilate	07	SW8270D	<2.72 ug/L	C	2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
Chrysene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Diallate	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
Dibenz (a,h) anthracene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Dibenzofuran	07	SW8270D	<5.43 ug/L		5.43	1	10/05/17 09:40	10/05/17 21:36	SKS
Diethyl phthalate	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Dimethoate	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
Dimethyl phthalate	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Di-n-butyl phthalate	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Di-n-octyl phthalate	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Diphenylamine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Disulfoton	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
Ethyl methanesulfonate	07	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 21:36	SKS
Ethyl parathion	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
Famphur	07	SW8270D	<2.72 ug/L	C	2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
Fluoranthene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Fluorene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Hexachlorobenzene	07	SW8270D	<0.05 ug/L	C	0.05	1	10/05/17 09:40	10/05/17 21:36	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-07								
Grab Date/Time:	10/03/2017 13:39								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Hexachlorocyclopentadiene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Hexachloroethane	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Hexachloropropene	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
Indeno (1,2,3-cd) pyrene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Isodrin	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Isophorone	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Isosafrole	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Kepone	07	SW8270D	<2.72 ug/L	C	2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
m+p-Cresols	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Methapyrilene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Methyl methanesulfonate	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Methyl parathion	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
Naphthalene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Nitrobenzene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
n-Nitrosodiethylamine	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
n-Nitrosodimethylamine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
n-Nitrosodi-n-butylamine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
n-Nitrosodi-n-propylamine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
n-Nitrosodiphenylamine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
n-Nitrosomethylethylamine	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
n-Nitrosopiperidine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
n-Nitrosopyrrolidine	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
o,o,o-Triethyl phosphorothioate	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-07								
Grab Date/Time:	10/03/2017 13:39								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
o-Cresol	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
o-Toluidine	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
p-(Dimethylamino)azobenzene	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
p-Chloro-m-cresol	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Pentachlorobenzene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Pentachloronitrobenzene (quintozone)	07	SW8270D	<1.09 ug/L		1.09	1	10/05/17 09:40	10/05/17 21:36	SKS
Phenacetin	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Phenanthrene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Phenol	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Phorate	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
p-Phenylenediamine	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Pronamide	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Pyrene	07	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 21:36	SKS
Safrole	07	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 21:36	SKS
Surr: 2,4,6-Tribromophenol (Surr)	07	SW8270D	43.7 %		20-86		10/05/17 09:40	10/05/17 21:36	SKS
Surr: 2-Fluorobiphenyl (Surr)	07	SW8270D	66.2 %		23-87		10/05/17 09:40	10/05/17 21:36	SKS
Surr: 2-Fluorophenol (Surr)	07	SW8270D	45.8 %		10-52		10/05/17 09:40	10/05/17 21:36	SKS
Surr: Nitrobenzene-d5 (Surr)	07	SW8270D	89.9 %		10-98.5		10/05/17 09:40	10/05/17 21:36	SKS
Surr: Phenol-d5 (Surr)	07	SW8270D	32.3 %		5-33		10/05/17 09:40	10/05/17 21:36	SKS
Surr: p-Terphenyl-d14 (Surr)	07	SW8270D	84.7 %		27-133		10/05/17 09:40	10/05/17 21:36	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	07	SW8082A	<0.217 ug/L		0.217	1	10/06/17 16:52	10/06/17 16:52	LBH
PCB as Aroclor 1221	07	SW8082A	<0.217 ug/L		0.217	1	10/06/17 16:52	10/06/17 16:52	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	15-1								
Grab Date/Time:			10/03/2017 13:39						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	07	SW8082A	<0.217 ug/L		0.217	1	10/06/17 16:52	10/06/17 16:52	LBH
PCB as Aroclor 1242	07	SW8082A	<0.217 ug/L		0.217	1	10/06/17 16:52	10/06/17 16:52	LBH
PCB as Aroclor 1248	07	SW8082A	<0.217 ug/L		0.217	1	10/06/17 16:52	10/06/17 16:52	LBH
PCB as Aroclor 1254	07	SW8082A	<0.217 ug/L		0.217	1	10/06/17 16:52	10/06/17 16:52	LBH
PCB as Aroclor 1260	07	SW8082A	<0.217 ug/L		0.217	1	10/06/17 16:52	10/06/17 16:52	LBH
<i>Surr: DCB</i>	07	SW8082A	50.0 %		30-105		10/06/17 16:52	10/06/17 16:52	LBH
<i>Surr: TCMX</i>	07	SW8082A	60.0 %		30-105		10/06/17 16:52	10/06/17 16:52	LBH
4,4'-DDD	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
4,4'-DDE	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
4,4'-DDT	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Aldrin	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
alpha-BHC	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
beta-BHC	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Chlordane	07	SW8081B	<0.217 ug/L		0.217	1	10/06/17 16:52	10/06/17 16:52	LBH
delta-BHC	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Dieldrin	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Endosulfan I	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Endosulfan II	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Endosulfan sulfate	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Endrin	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Endrin aldehyde	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
gamma-BHC (Lindane)	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Heptachlor	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Heptachlor epoxide	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Methoxychlor	07	SW8081B	<0.054 ug/L		0.054	1	10/06/17 16:52	10/06/17 16:52	LBH
Toxaphene	07	SW8081B	<1.09 ug/L		1.09	1	10/06/17 16:52	10/06/17 16:52	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-07								
Grab Date/Time:	10/03/2017 13:39								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	07	SW8081B	60.0 %		18-112		10/06/17 16:52	10/06/17 16:52	LBH
Surr: DCB	07	SW8081B	50.0 %		27-131		10/06/17 16:52	10/06/17 16:52	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	07	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 14:11	CVH
2,4,5-TP (Silvex)	07	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 14:11	CVH
2,4-D	07	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 14:11	CVH
Dinoseb	07	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 14:11	CVH
Pentachlorophenol	07	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 14:11	CVH
Surr: DCAA (Surr)	07	SW8151A	70.0 %		60-112		10/05/17 14:29	10/10/17 14:11	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	07	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 06:14	LBH
1,2,3-Trichloropropane	07	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 06:14	LBH
1,2-Dibromo-3-chloropropane (DBCP)	07	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 06:14	LBH
Wet Chemistry Analysis									
Cyanide	07	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 14:56	10/06/17 14:56	BBP
Sulfide	07	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-08								
Grab Date/Time:	10/03/2017 15:41								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	08RE1	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/06/17 13:54	CWO
Arsenic	08	SW6020A	<1.0 ug/L		1.0	1	10/05/17 08:40	10/06/17 16:42	BG
Barium	08	SW6010C	0.0440 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:08	CWO
Beryllium	08	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:08	CWO
Cadmium	08	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:08	CWO
Cobalt	08	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 08:40	10/05/17 16:08	CWO
Chromium	08	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:08	CWO
Copper	08	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:08	CWO
Mercury	08	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 11:48	RCV
Nickel	08	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:08	CWO
Lead	08	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:08	CWO
Antimony	08	SW6020A	<1.00 ug/L		1.00	1	10/05/17 08:40	10/06/17 16:42	BG
Selenium	08	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 08:40	10/05/17 16:08	CWO
Tin	08	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 08:40	10/05/17 16:08	CWO
Thallium	08	SW6020A	<1.00 ug/L		1.00	1	10/05/17 08:40	10/06/17 16:42	BG
Vanadium	08	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:08	CWO
Zinc	08	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 08:40	10/05/17 16:08	CWO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	08	SW8260B	<0.40 ug/L		0.40	1	10/04/17 17:25	10/04/17 17:25	KCS
1,1,1-Trichloroethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,1,2,2-Tetrachloroethane	08	SW8260B	<0.40 ug/L		0.40	1	10/04/17 17:25	10/04/17 17:25	KCS
1,1,2-Trichloroethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,1-Dichloroethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,1-Dichloroethylene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,1-Dichloropropene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,2,3-Trichloropropane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	16-1								
Grab Date/Time:			10/03/2017 15:41						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,2-Dichlorobenzene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,2-Dichloroethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,2-Dichloropropane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,3-Dichlorobenzene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,3-Dichloropropane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
1,4-Dichlorobenzene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
2,2-Dichloropropane	08	SW8260B	<2.00 ug/L		2.00	1	10/04/17 17:25	10/04/17 17:25	KCS
2-Butanone (MEK)	08	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:25	10/04/17 17:25	KCS
2-Hexanone (MBK)	08	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:25	10/04/17 17:25	KCS
4-Methyl-2-pentanone (MIBK)	08	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Acetone	08	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:25	10/04/17 17:25	KCS
Acetonitrile	08	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:25	10/04/17 17:25	KCS
Acrolein	08	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:25	10/04/17 17:25	KCS
Acrylonitrile	08	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Allyl chloride	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Benzene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Bromochloromethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Bromodichloromethane	08	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:25	10/04/17 17:25	KCS
Bromoform	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Bromomethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Carbon disulfide	08	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:25	10/04/17 17:25	KCS
Carbon tetrachloride	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Chlorobenzene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Chloroethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Chloroform	08	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:25	10/04/17 17:25	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results

Sample I.D. 16-1 Laboratory Sample ID: 17J0112-08

Grab Date/Time: 10/03/2017 15:41

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Organic Compounds by GCMS

Chloromethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Chloroprene	08	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:25	10/04/17 17:25	KCS
cis-1,2-Dichloroethylene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
cis-1,3-Dichloropropene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Dibromochloromethane	08	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:25	10/04/17 17:25	KCS
Dibromomethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Dichlorodifluoromethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Ethyl methacrylate	08	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Ethylbenzene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Hexachlorobutadiene	08	SW8260B	<0.80 ug/L		0.80	1	10/04/17 17:25	10/04/17 17:25	KCS
Iodomethane	08	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:25	10/04/17 17:25	KCS
Isobutyl Alcohol	08	SW8260B	<40.0 ug/L		40.0	1	10/04/17 17:25	10/04/17 17:25	KCS
m+p-Xylenes	08	SW8260B	<2.00 ug/L		2.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Methacrylonitrile	08	SW8260B	<1.50 ug/L		1.50	1	10/04/17 17:25	10/04/17 17:25	KCS
Methyl methacrylate	08	SW8260B	<2.00 ug/L		2.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Methylene chloride	08	SW8260B	<4.00 ug/L		4.00	1	10/04/17 17:25	10/04/17 17:25	KCS
o-Xylene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Propionitrile	08	SW8260B	<40.0 ug/L		40.0	1	10/04/17 17:25	10/04/17 17:25	KCS
Styrene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Tetrachloroethylene (PCE)	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Toluene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
trans-1,2-Dichloroethylene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
trans-1,3-Dichloropropene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
trans-1,4-Dichloro-2-butene	08	SW8260B	<4.00 ug/L		4.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Trichloroethylene	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Trichlorofluoromethane	08	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:25	10/04/17 17:25	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-08								
Grab Date/Time:	10/03/2017 15:41								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Vinyl acetate	08	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:25	10/04/17 17:25	KCS
Vinyl chloride	08	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:25	10/04/17 17:25	KCS
Xylenes, Total	08	SW8260B	<3.00 ug/L		3.00	1	10/04/17 17:25	10/04/17 17:25	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	08	SW8260B	98.2 %		70-120		10/04/17 17:25	10/04/17 17:25	KCS
Surr: 4-Bromofluorobenzene (Surr)	08	SW8260B	95.6 %		75-120		10/04/17 17:25	10/04/17 17:25	KCS
Surr: Dibromofluoromethane (Surr)	08	SW8260B	92.9 %		80-119		10/04/17 17:25	10/04/17 17:25	KCS
Surr: Toluene-d8 (Surr)	08	SW8260B	98.4 %		85-120		10/04/17 17:25	10/04/17 17:25	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	08	EPA625	Not Detected			1	10/05/17 09:40	10/05/17 22:07	SKS
1,2,4,5-Tetrachlorobenzene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
1,3,5-Trinitrobenzene	08	SW8270D	<5.43 ug/L		5.43	1	10/05/17 09:40	10/05/17 22:07	SKS
1,3-Dinitrobenzene	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
1,4-Naphthoquinone	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
1-Naphthylamine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2,3,4,6-Tetrachlorophenol	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2,4,5-Trichlorophenol	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2,4,6-Trichlorophenol	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2,4-Dichlorophenol	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2,4-Dimethylphenol	08	SW8270D	<0.54 ug/L		0.54	1	10/05/17 09:40	10/05/17 22:07	SKS
2,4-Dinitrophenol	08	SW8270D	<54.3 ug/L		54.3	1	10/05/17 09:40	10/05/17 22:07	SKS
2,4-Dinitrotoluene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2,6-Dichlorophenol	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2,6-Dinitrotoluene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2-Acetylaminofluorene	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	16-1								
Grab Date/Time:			10/03/2017 15:41						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2-Chlorophenol	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2-Methylnaphthalene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2-Naphthylamine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2-Nitroaniline	08	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 22:07	SKS
2-Nitrophenol	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
3,3'-Dichlorobenzidine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
3,3'-Dimethylbenzidine	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
3-Methylcholanthrene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
3-Nitroaniline	08	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 22:07	SKS
4,6-Dinitro-2-methylphenol	08	SW8270D	<54.3 ug/L		54.3	1	10/05/17 09:40	10/05/17 22:07	SKS
4-Aminobiphenyl	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
4-Bromophenyl phenyl ether	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
4-Chloroaniline	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
4-Chlorophenyl phenyl ether	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
4-Nitroaniline	08	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 22:07	SKS
4-Nitrophenol	08	SW8270D	<54.3 ug/L		54.3	1	10/05/17 09:40	10/05/17 22:07	SKS
5-Nitro-o-toluidine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
7,12-Dimethylbenz (a) anthracene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Acenaphthene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Acenaphthylene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Acetophenone	08	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 22:07	SKS
Anthracene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Benzo (a) anthracene	08	SW8270D	<0.05 ug/L		0.05	1	10/05/17 09:40	10/05/17 22:07	SKS
Benzo (a) pyrene	08	SW8270D	<0.11 ug/L		0.11	1	10/05/17 09:40	10/05/17 22:07	SKS
Benzo (b) fluoranthene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	16-1	Laboratory Sample ID: 17J0112-08							
Grab Date/Time:		10/03/2017 15:41							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Benzo (k) fluoranthene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Benzyl alcohol	08	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 22:07	SKS
bis (2-Chloroethoxy) methane	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
bis (2-Chloroethyl) ether	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
2,2'-Oxybis (1-chloropropane)	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
bis (2-Ethylhexyl) phthalate	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
Butyl benzyl phthalate	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Chlorobenzilate	08	SW8270D	<2.72 ug/L	C	2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
Chrysene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Diallate	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
Dibenz (a,h) anthracene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Dibenzofuran	08	SW8270D	<5.43 ug/L		5.43	1	10/05/17 09:40	10/05/17 22:07	SKS
Diethyl phthalate	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Dimethoate	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
Dimethyl phthalate	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Di-n-butyl phthalate	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Di-n-octyl phthalate	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Diphenylamine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Disulfoton	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
Ethyl methanesulfonate	08	SW8270D	<21.7 ug/L		21.7	1	10/05/17 09:40	10/05/17 22:07	SKS
Ethyl parathion	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
Famphur	08	SW8270D	<2.72 ug/L	C	2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
Fluoranthene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Fluorene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Hexachlorobenzene	08	SW8270D	<0.05 ug/L	C	0.05	1	10/05/17 09:40	10/05/17 22:07	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-08								
Grab Date/Time:	10/03/2017 15:41								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Hexachlorocyclopentadiene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Hexachloroethane	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Hexachloropropene	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
Indeno (1,2,3-cd) pyrene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Isodrin	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Isophorone	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Isosafrole	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Kepone	08	SW8270D	<2.72 ug/L	C	2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
m+p-Cresols	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Methapyrilene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Methyl methanesulfonate	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Methyl parathion	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
Naphthalene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Nitrobenzene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
n-Nitrosodiethylamine	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
n-Nitrosodimethylamine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
n-Nitrosodi-n-butylamine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
n-Nitrosodi-n-propylamine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
n-Nitrosodiphenylamine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
n-Nitrosomethylethylamine	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
n-Nitrosopiperidine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
n-Nitrosopyrrolidine	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
o,o,o-Triethyl phosphorothioate	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-08								
Grab Date/Time:	10/03/2017 15:41								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
o-Cresol	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
o-Toluidine	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
p-(Dimethylamino)azobenzene	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
p-Chloro-m-cresol	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Pentachlorobenzene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Pentachloronitrobenzene (quintozone)	08	SW8270D	<1.09 ug/L		1.09	1	10/05/17 09:40	10/05/17 22:07	SKS
Phenacetin	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Phenanthrene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Phenol	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Phorate	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
p-Phenylenediamine	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Pronamide	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Pyrene	08	SW8270D	<10.9 ug/L		10.9	1	10/05/17 09:40	10/05/17 22:07	SKS
Safrole	08	SW8270D	<2.72 ug/L		2.72	1	10/05/17 09:40	10/05/17 22:07	SKS
Surr: 2,4,6-Tribromophenol (Surr)	08	SW8270D	50.1 %		20-86		10/05/17 09:40	10/05/17 22:07	SKS
Surr: 2-Fluorobiphenyl (Surr)	08	SW8270D	64.8 %		23-87		10/05/17 09:40	10/05/17 22:07	SKS
Surr: 2-Fluorophenol (Surr)	08	SW8270D	37.9 %		10-52		10/05/17 09:40	10/05/17 22:07	SKS
Surr: Nitrobenzene-d5 (Surr)	08	SW8270D	87.2 %		10-98.5		10/05/17 09:40	10/05/17 22:07	SKS
Surr: Phenol-d5 (Surr)	08	SW8270D	31.0 %		5-33		10/05/17 09:40	10/05/17 22:07	SKS
Surr: p-Terphenyl-d14 (Surr)	08	SW8270D	82.8 %		27-133		10/05/17 09:40	10/05/17 22:07	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	08	SW8082A	<0.222 ug/L		0.222	1	10/06/17 17:11	10/06/17 17:11	LBH
PCB as Aroclor 1221	08	SW8082A	<0.222 ug/L		0.222	1	10/06/17 17:11	10/06/17 17:11	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-08								
Grab Date/Time:	10/03/2017 15:41								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	08	SW8082A	<0.222 ug/L	0.222	1	10/06/17 17:11	10/06/17 17:11	LBH	
PCB as Aroclor 1242	08	SW8082A	<0.222 ug/L	0.222	1	10/06/17 17:11	10/06/17 17:11	LBH	
PCB as Aroclor 1248	08	SW8082A	<0.222 ug/L	0.222	1	10/06/17 17:11	10/06/17 17:11	LBH	
PCB as Aroclor 1254	08	SW8082A	<0.222 ug/L	0.222	1	10/06/17 17:11	10/06/17 17:11	LBH	
PCB as Aroclor 1260	08	SW8082A	<0.222 ug/L	0.222	1	10/06/17 17:11	10/06/17 17:11	LBH	
<i>Surr: DCB</i>	08	SW8082A	80.0 %	30-105		10/06/17 17:11	10/06/17 17:11	LBH	
<i>Surr: TCMX</i>	08	SW8082A	65.0 %	30-105		10/06/17 17:11	10/06/17 17:11	LBH	
4,4'-DDD	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
4,4'-DDE	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
4,4'-DDT	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Aldrin	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
alpha-BHC	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
beta-BHC	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Chlordane	08	SW8081B	<0.222 ug/L	0.222	1	10/06/17 17:11	10/06/17 17:11	LBH	
delta-BHC	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Dieldrin	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Endosulfan I	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Endosulfan II	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Endosulfan sulfate	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Endrin	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Endrin aldehyde	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
gamma-BHC (Lindane)	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Heptachlor	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Heptachlor epoxide	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Methoxychlor	08	SW8081B	<0.056 ug/L	0.056	1	10/06/17 17:11	10/06/17 17:11	LBH	
Toxaphene	08	SW8081B	<1.11 ug/L	1.11	1	10/06/17 17:11	10/06/17 17:11	LBH	



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0112-08								
Grab Date/Time:	10/03/2017 15:41								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	08	SW8081B	65.0 %		18-112		10/06/17 17:11	10/06/17 17:11	LBH
Surr: DCB	08	SW8081B	80.0 %		27-131		10/06/17 17:11	10/06/17 17:11	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	08	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 14:34	CVH
2,4,5-TP (Silvex)	08	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 14:34	CVH
2,4-D	08	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 14:34	CVH
Dinoseb	08	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 14:34	CVH
Pentachlorophenol	08	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 14:34	CVH
Surr: DCAA (Surr)	08	SW8151A	80.0 %		60-112		10/05/17 14:29	10/10/17 14:34	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	08	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 06:33	LBH
1,2,3-Trichloropropane	08	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 06:33	LBH
1,2-Dibromo-3-chloropropane (DBCP)	08	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 06:33	LBH
Wet Chemistry Analysis									
Cyanide	08	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 14:59	10/06/17 14:59	BBP
Sulfide	08	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Trip Blank								
Grab Date/Time:	09/08/2017 14:00								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	09	SW8015C	<0.10 mg/L		0.10	1	10/05/17 11:19	10/05/17 11:19	LAO
Surr: 2,5-Dibromotoluene (FID)	09	SW8015C	86.4 %		80-120		10/05/17 11:19	10/05/17 11:19	LAO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	09	SW8260B	<0.40 ug/L		0.40	1	10/04/17 17:49	10/04/17 17:49	KCS
1,1,1-Trichloroethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,1,2,2-Tetrachloroethane	09	SW8260B	<0.40 ug/L		0.40	1	10/04/17 17:49	10/04/17 17:49	KCS
1,1,2-Trichloroethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,1-Dichloroethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,1-Dichloroethylene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,1-Dichloropropene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,2,3-Trichlorobenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,2,3-Trichloropropane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,2,4-Trichlorobenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,2,4-Trimethylbenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,2-Dibromo-3-chloropropane (DBCP)	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,2-Dibromoethane (EDB)	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,2-Dichlorobenzene	09	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:49	10/04/17 17:49	KCS
1,2-Dichloroethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,2-Dichloropropane	09	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:49	10/04/17 17:49	KCS
1,3,5-Trimethylbenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,3-Dichlorobenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,3-Dichloropropane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
1,4-Dichlorobenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS
2,2-Dichloropropane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results								
Sample I.D.	Trip Blank	Laboratory Sample ID:					17J0112-09	
Grab Date/Time:	09/08/2017 14:00							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time Analyst
Volatile Organic Compounds by GCMS								
2-Butanone (MEK)	09	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:49	10/04/17 17:49 KCS
2-Chlorotoluene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
2-Hexanone (MBK)	09	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:49	10/04/17 17:49 KCS
4-Chlorotoluene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
4-Isopropyltoluene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
4-Methyl-2-pentanone (MIBK)	09	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Acetone	09	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:49	10/04/17 17:49 KCS
Benzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Bromobenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Bromochloromethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Bromodichloromethane	09	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:49	10/04/17 17:49 KCS
Bromoform	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Bromomethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Carbon disulfide	09	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:49	10/04/17 17:49 KCS
Carbon tetrachloride	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Chlorobenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Chloroethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Chloroform	09	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:49	10/04/17 17:49 KCS
Chloromethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
cis-1,2-Dichloroethylene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
cis-1,3-Dichloropropene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Dibromochloromethane	09	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:49	10/04/17 17:49 KCS
Dibromomethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Dichlorodifluoromethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Di-isopropyl ether (DIPE)	09	SW8260B	<5.00 ug/L		5.00	1	10/04/17 17:49	10/04/17 17:49 KCS
Ethylbenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49 KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results								
Sample I.D.	Trip Blank	Laboratory Sample ID: 17J0112-09						
Grab Date/Time:		09/08/2017 14:00						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time
Volatile Organic Compounds by GCMS								
Hexachlorobutadiene	09	SW8260B	<0.80 ug/L		0.80	1	10/04/17 17:49	10/04/17 17:49
Iodomethane	09	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:49	10/04/17 17:49
Isopropylbenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
m+p-Xylenes	09	SW8260B	<2.00 ug/L		2.00	1	10/04/17 17:49	10/04/17 17:49
Methylene chloride	09	SW8260B	<4.00 ug/L		4.00	1	10/04/17 17:49	10/04/17 17:49
Methyl-t-butyl ether (MTBE)	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
Naphthalene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
n-Butylbenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
n-Propylbenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
o-Xylene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
sec-Butylbenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
Styrene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
tert-Butylbenzene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
Tetrachloroethylene (PCE)	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
Toluene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
trans-1,2-Dichloroethylene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
trans-1,3-Dichloropropene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
Trichloroethylene	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
Trichlorofluoromethane	09	SW8260B	<1.00 ug/L		1.00	1	10/04/17 17:49	10/04/17 17:49
Vinyl acetate	09	SW8260B	<10.0 ug/L		10.0	1	10/04/17 17:49	10/04/17 17:49
Vinyl chloride	09	SW8260B	<0.50 ug/L		0.50	1	10/04/17 17:49	10/04/17 17:49
Xylenes, Total	09	SW8260B	<3.00 ug/L		3.00	1	10/04/17 17:49	10/04/17 17:49
Surr: 1,2-Dichloroethane-d4 (Surr)	09	SW8260B	97.8 %		70-120		10/04/17 17:49	10/04/17 17:49
Surr: 4-Bromofluorobenzene (Surr)	09	SW8260B	95.8 %		75-120		10/04/17 17:49	10/04/17 17:49



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0112

Analytical Results									
Sample I.D.	Trip Blank								
Grab Date/Time:			Laboratory Sample ID: 17J0112-09						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Surr: Dibromofluoromethane (Surr)	09	SW8260B	91.2 %		80-119		10/04/17 17:49	10/04/17 17:49	KCS
Surr: Toluene-d8 (Surr)	09	SW8260B	97.5 %		85-120		10/04/17 17:49	10/04/17 17:49	KCS
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	09	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 06:53	LBH
1,2,3-Trichloropropane	09	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 06:53	LBH
1,2-Dibromo-3-chloropropane (DBCP)	09	SW8011	<0.010 ug/L		0.010	1	10/06/17 11:26	10/07/17 06:53	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-01								
Grab Date/Time:	10/03/2017 17:31								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	01	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:36	CWO
Arsenic	01	SW6020A	<1.0 ug/L		1.0	1	10/05/17 16:00	10/06/17 23:18	BG
Barium	01	SW6010C	0.0206 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:36	CWO
Beryllium	01	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:36	CWO
Cadmium	01	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:36	CWO
Cobalt	01	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:36	CWO
Chromium	01	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:36	CWO
Copper	01	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:36	CWO
Mercury	01	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 12:43	RCV
Nickel	01	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:36	CWO
Lead	01	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:36	CWO
Antimony	01	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:18	BG
Selenium	01	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 16:00	10/06/17 14:36	CWO
Tin	01	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 16:00	10/06/17 14:36	CWO
Thallium	01	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:18	BG
Vanadium	01	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:36	CWO
Zinc	01	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:36	CWO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	10/06/17 14:31	10/06/17 14:31	KCS
1,1,1-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,1,2,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	10/06/17 14:31	10/06/17 14:31	KCS
1,1,2-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,1-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,1-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,1-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,2,3-Trichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results

Sample I.D. 16-2 Laboratory Sample ID: 17J0155-01

Grab Date/Time: 10/03/2017 17:31

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Organic Compounds by GCMS

1,2,4-Trichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,2-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,2-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,2-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,3-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,3-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
1,4-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
2,2-Dichloropropane	01	SW8260B	<2.00 ug/L		2.00	1	10/06/17 14:31	10/06/17 14:31	KCS
2-Butanone (MEK)	01	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:31	10/06/17 14:31	KCS
2-Hexanone (MBK)	01	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:31	10/06/17 14:31	KCS
4-Methyl-2-pentanone (MIBK)	01	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Acetone	01	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:31	10/06/17 14:31	KCS
Acetonitrile	01	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:31	10/06/17 14:31	KCS
Acrolein	01	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:31	10/06/17 14:31	KCS
Acrylonitrile	01	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Allyl chloride	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Benzene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Bromochloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Bromodichloromethane	01	SW8260B	<0.50 ug/L		0.50	1	10/06/17 14:31	10/06/17 14:31	KCS
Bromoform	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Bromomethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Carbon disulfide	01	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:31	10/06/17 14:31	KCS
Carbon tetrachloride	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Chlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Chloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Chloroform	01	SW8260B	<0.50 ug/L		0.50	1	10/06/17 14:31	10/06/17 14:31	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results

Sample I.D. 16-2 Laboratory Sample ID: 17J0155-01

Grab Date/Time: 10/03/2017 17:31

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Organic Compounds by GCMS

Chloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Chloroprene	01	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:31	10/06/17 14:31	KCS
cis-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
cis-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Dibromochloromethane	01	SW8260B	<0.50 ug/L		0.50	1	10/06/17 14:31	10/06/17 14:31	KCS
Dibromomethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Dichlorodifluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Ethyl methacrylate	01	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Ethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Hexachlorobutadiene	01	SW8260B	<0.80 ug/L		0.80	1	10/06/17 14:31	10/06/17 14:31	KCS
Iodomethane	01	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:31	10/06/17 14:31	KCS
Isobutyl Alcohol	01	SW8260B	<40.0 ug/L		40.0	1	10/06/17 14:31	10/06/17 14:31	KCS
m+p-Xylenes	01	SW8260B	<2.00 ug/L		2.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Methacrylonitrile	01	SW8260B	<1.50 ug/L		1.50	1	10/06/17 14:31	10/06/17 14:31	KCS
Methyl methacrylate	01	SW8260B	<2.00 ug/L		2.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Methylene chloride	01	SW8260B	<4.00 ug/L		4.00	1	10/06/17 14:31	10/06/17 14:31	KCS
o-Xylene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Propionitrile	01	SW8260B	<40.0 ug/L		40.0	1	10/06/17 14:31	10/06/17 14:31	KCS
Styrene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Tetrachloroethylene (PCE)	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Toluene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
trans-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
trans-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
trans-1,4-Dichloro-2-butene	01	SW8260B	<4.00 ug/L		4.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Trichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Trichlorofluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:31	10/06/17 14:31	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-01								
Grab Date/Time:	10/03/2017 17:31								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Vinyl acetate	01	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:31	10/06/17 14:31	KCS
Vinyl chloride	01	SW8260B	<0.50 ug/L		0.50	1	10/06/17 14:31	10/06/17 14:31	KCS
Xylenes, Total	01	SW8260B	<3.00 ug/L		3.00	1	10/06/17 14:31	10/06/17 14:31	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	01	SW8260B	97.4 %		70-120		10/06/17 14:31	10/06/17 14:31	KCS
Surr: 4-Bromofluorobenzene (Surr)	01	SW8260B	96.1 %		75-120		10/06/17 14:31	10/06/17 14:31	KCS
Surr: Dibromofluoromethane (Surr)	01	SW8260B	90.2 %		80-119		10/06/17 14:31	10/06/17 14:31	KCS
Surr: Toluene-d8 (Surr)	01	SW8260B	98.2 %		85-120		10/06/17 14:31	10/06/17 14:31	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	01	EPA625	Not Detected			1	10/09/17 09:39	10/10/17 14:40	SKS
1,2,4,5-Tetrachlorobenzene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
1,3,5-Trinitrobenzene	01	SW8270D	<5.49 ug/L		5.49	1	10/09/17 09:39	10/09/17 20:13	SKS
1,3-Dinitrobenzene	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
1,4-Naphthoquinone	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
1-Naphthylamine	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2,3,4,6-Tetrachlorophenol	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2,4,5-Trichlorophenol	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2,4,6-Trichlorophenol	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2,4-Dichlorophenol	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2,4-Dimethylphenol	01	SW8270D	<0.55 ug/L		0.55	1	10/09/17 09:39	10/09/17 20:13	SKS
2,4-Dinitrophenol	01	SW8270D	<54.9 ug/L		54.9	1	10/09/17 09:39	10/09/17 20:13	SKS
2,4-Dinitrotoluene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2,6-Dichlorophenol	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2,6-Dinitrotoluene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2-Acetylaminofluorene	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-01								
Grab Date/Time:	10/03/2017 17:31								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2-Chlorophenol	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2-Methylnaphthalene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2-Naphthylamine	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2-Nitroaniline	01	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2-Nitrophenol	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
3,3'-Dichlorobenzidine	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
3,3'-Dimethylbenzidine	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
3-Methylcholanthrene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
3-Nitroaniline	01	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:13	SKS
4,6-Dinitro-2-methylphenol	01	SW8270D	<54.9 ug/L		54.9	1	10/09/17 09:39	10/09/17 20:13	SKS
4-Aminobiphenyl	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
4-Bromophenyl phenyl ether	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
4-Chloroaniline	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
4-Chlorophenyl phenyl ether	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
4-Nitroaniline	01	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:13	SKS
4-Nitrophenol	01	SW8270D	<54.9 ug/L		54.9	1	10/09/17 09:39	10/09/17 20:13	SKS
5-Nitro-o-toluidine	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
7,12-Dimethylbenz (a)anthracene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Acenaphthene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Acenaphthylene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Acetophenone	01	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Anthracene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Benzo (a) anthracene	01	SW8270D	0.88 ug/L		0.05	1	10/09/17 09:39	10/09/17 20:13	SKS
Benzo (a) pyrene	01	SW8270D	0.37 ug/L		0.11	1	10/09/17 09:39	10/09/17 20:13	SKS
Benzo (b) fluoranthene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results

Sample I.D. 16-2 Laboratory Sample ID: 17J0155-01

Grab Date/Time: 10/03/2017 17:31

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Benzo (k) fluoranthene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Benzyl alcohol	01	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:13	SKS
bis (2-Chloroethoxy) methane	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
bis (2-Chloroethyl) ether	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
2,2'-Oxybis (1-chloropropane)	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
Butyl benzyl phthalate	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Chlorobenzilate	01	SW8270D	<2.75 ug/L	C	2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
Chrysene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Diallate	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
Dibenz (a,h) anthracene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Dibenzofuran	01	SW8270D	<5.49 ug/L		5.49	1	10/09/17 09:39	10/09/17 20:13	SKS
Diethyl phthalate	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Dimethoate	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
Dimethyl phthalate	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Di-n-butyl phthalate	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Di-n-octyl phthalate	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Diphenylamine	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Disulfoton	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
Ethyl methanesulfonate	01	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Ethyl parathion	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
Famphur	01	SW8270D	<2.75 ug/L	C	2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
Fluoranthene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Fluorene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Hexachlorobenzene	01	SW8270D	<0.05 ug/L	C	0.05	1	10/09/17 09:39	10/09/17 20:13	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-01								
Grab Date/Time:	10/03/2017 17:31								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Hexachlorocyclopentadiene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Hexachloroethane	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Hexachloropropene	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
Indeno (1,2,3-cd) pyrene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Isodrin	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Isophorone	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Isosafrole	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Kepone	01	SW8270D	<2.75 ug/L	C	2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
m+p-Cresols	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Methapyrilene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Methyl methanesulfonate	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Methyl parathion	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
Naphthalene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Nitrobenzene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
n-Nitrosodiethylamine	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
n-Nitrosodimethylamine	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
n-Nitrosodi-n-butylamine	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
n-Nitrosodi-n-propylamine	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
n-Nitrosodiphenylamine	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
n-Nitrosomethylethylamine	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
n-Nitrosopiperidine	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
n-Nitrosopyrrolidine	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
o,o,o-Triethyl phosphorothioate	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results

Sample I.D. 16-2 Laboratory Sample ID: 17J0155-01

Grab Date/Time: 10/03/2017 17:31

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
o-Cresol	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
o-Toluidine	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
p-(Dimethylamino)azobenzene	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
p-Chloro-m-cresol	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Pentachlorobenzene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Pentachloronitrobenzene (quintozone)	01	SW8270D	<1.10 ug/L		1.10	1	10/09/17 09:39	10/09/17 20:13	SKS
Phenacetin	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Phenanthrene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Phenol	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Phorate	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
p-Phenylenediamine	01	SW8270D	<11.0 ug/L	C	11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Pronamide	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Pyrene	01	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:13	SKS
Safrole	01	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:13	SKS
Surr: 2,4,6-Tribromophenol (Surr)	01	SW8270D	44.0 %		20-86		10/09/17 09:39	10/09/17 20:13	SKS
Surr: 2-Fluorobiphenyl (Surr)	01	SW8270D	61.4 %		23-87		10/09/17 09:39	10/09/17 20:13	SKS
Surr: 2-Fluorophenol (Surr)	01	SW8270D	38.3 %		10-52		10/09/17 09:39	10/09/17 20:13	SKS
Surr: Nitrobenzene-d5 (Surr)	01	SW8270D	80.4 %		10-98.5		10/09/17 09:39	10/09/17 20:13	SKS
Surr: Phenol-d5 (Surr)	01	SW8270D	31.8 %		5-33		10/09/17 09:39	10/09/17 20:13	SKS
Surr: p-Terphenyl-d14 (Surr)	01	SW8270D	61.3 %		27-133		10/09/17 09:39	10/09/17 20:13	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	01	SW8082A	<0.204 ug/L		0.204	1	10/06/17 20:20	10/06/17 20:20	LBH
PCB as Aroclor 1221	01	SW8082A	<0.204 ug/L		0.204	1	10/06/17 20:20	10/06/17 20:20	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-01								
Grab Date/Time:	10/03/2017 17:31								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	01	SW8082A	<0.204 ug/L		0.204	1	10/06/17 20:20	10/06/17 20:20	LBH
PCB as Aroclor 1242	01	SW8082A	<0.204 ug/L		0.204	1	10/06/17 20:20	10/06/17 20:20	LBH
PCB as Aroclor 1248	01	SW8082A	<0.204 ug/L		0.204	1	10/06/17 20:20	10/06/17 20:20	LBH
PCB as Aroclor 1254	01	SW8082A	<0.204 ug/L		0.204	1	10/06/17 20:20	10/06/17 20:20	LBH
PCB as Aroclor 1260	01	SW8082A	<0.204 ug/L		0.204	1	10/06/17 20:20	10/06/17 20:20	LBH
<i>Surr: DCB</i>	01	SW8082A	80.0 %		30-105		10/06/17 20:20	10/06/17 20:20	LBH
<i>Surr: TCMX</i>	01	SW8082A	70.0 %		30-105		10/06/17 20:20	10/06/17 20:20	LBH
4,4'-DDD	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
4,4'-DDE	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
4,4'-DDT	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Aldrin	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
alpha-BHC	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
beta-BHC	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Chlordane	01	SW8081B	<0.204 ug/L		0.204	1	10/06/17 20:20	10/06/17 20:20	LBH
delta-BHC	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Dieldrin	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Endosulfan I	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Endosulfan II	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Endosulfan sulfate	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Endrin	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Endrin aldehyde	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
gamma-BHC (Lindane)	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Heptachlor	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Heptachlor epoxide	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Methoxychlor	01	SW8081B	<0.051 ug/L		0.051	1	10/06/17 20:20	10/06/17 20:20	LBH
Toxaphene	01	SW8081B	<1.02 ug/L		1.02	1	10/06/17 20:20	10/06/17 20:20	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-01								
Grab Date/Time:	10/03/2017 17:31								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	01	SW8081B	70.0 %		18-112		10/06/17 20:20	10/06/17 20:20	LBH
Surr: DCB	01	SW8081B	75.0 %		27-131		10/06/17 20:20	10/06/17 20:20	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	01	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 18:15	CVH
2,4,5-TP (Silvex)	01	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 18:15	CVH
2,4-D	01	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 18:15	CVH
Dinoseb	01	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 18:15	CVH
Pentachlorophenol	01	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 18:15	CVH
Surr: DCAA (Surr)	01	SW8151A	75.0 %		60-112		10/05/17 14:29	10/10/17 18:15	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	01	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 20:24	LBH
1,2,3-Trichloropropane	01	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 20:24	LBH
1,2-Dibromo-3-chloropropane (DBCP)	01	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 20:24	LBH
Wet Chemistry Analysis									
Cyanide	01	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 15:23	10/06/17 15:23	BBP
Sulfide	01	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-02								
Grab Date/Time:	10/03/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	02	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:38	CWO
Arsenic	02	SW6020A	<1.0 ug/L		1.0	1	10/05/17 16:00	10/06/17 23:22	BG
Barium	02	SW6010C	0.0170 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:38	CWO
Beryllium	02	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:38	CWO
Cadmium	02	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:38	CWO
Cobalt	02	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:38	CWO
Chromium	02	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:38	CWO
Copper	02	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:38	CWO
Mercury	02	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 12:54	RCV
Nickel	02	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:38	CWO
Lead	02	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:38	CWO
Antimony	02	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:22	BG
Selenium	02	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 16:00	10/06/17 14:38	CWO
Tin	02	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 16:00	10/06/17 14:38	CWO
Thallium	02	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:22	BG
Vanadium	02	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:38	CWO
Zinc	02	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:38	CWO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	10/06/17 14:55	10/06/17 14:55	KCS
1,1,1-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,1,2,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	10/06/17 14:55	10/06/17 14:55	KCS
1,1,2-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,1-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,1-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,1-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,2,3-Trichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-02								
Grab Date/Time:	10/03/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,2-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,2-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,2-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,3-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,3-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
1,4-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
2,2-Dichloropropane	02	SW8260B	<2.00 ug/L		2.00	1	10/06/17 14:55	10/06/17 14:55	KCS
2-Butanone (MEK)	02	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:55	10/06/17 14:55	KCS
2-Hexanone (MBK)	02	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:55	10/06/17 14:55	KCS
4-Methyl-2-pentanone (MIBK)	02	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Acetone	02	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:55	10/06/17 14:55	KCS
Acetonitrile	02	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:55	10/06/17 14:55	KCS
Acrolein	02	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:55	10/06/17 14:55	KCS
Acrylonitrile	02	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Allyl chloride	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Benzene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Bromochloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Bromodichloromethane	02	SW8260B	<0.50 ug/L		0.50	1	10/06/17 14:55	10/06/17 14:55	KCS
Bromoform	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Bromomethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Carbon disulfide	02	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:55	10/06/17 14:55	KCS
Carbon tetrachloride	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Chlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Chloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Chloroform	02	SW8260B	<0.50 ug/L		0.50	1	10/06/17 14:55	10/06/17 14:55	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
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Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-02								
Grab Date/Time:	10/03/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Chloroprene	02	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:55	10/06/17 14:55	KCS
cis-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
cis-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Dibromochloromethane	02	SW8260B	<0.50 ug/L		0.50	1	10/06/17 14:55	10/06/17 14:55	KCS
Dibromomethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Dichlorodifluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Ethyl methacrylate	02	SW8260B	<5.00 ug/L		5.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Ethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Hexachlorobutadiene	02	SW8260B	<0.80 ug/L		0.80	1	10/06/17 14:55	10/06/17 14:55	KCS
Iodomethane	02	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:55	10/06/17 14:55	KCS
Isobutyl Alcohol	02	SW8260B	<40.0 ug/L		40.0	1	10/06/17 14:55	10/06/17 14:55	KCS
m+p-Xylenes	02	SW8260B	<2.00 ug/L		2.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Methacrylonitrile	02	SW8260B	<1.50 ug/L		1.50	1	10/06/17 14:55	10/06/17 14:55	KCS
Methyl methacrylate	02	SW8260B	<2.00 ug/L		2.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Methylene chloride	02	SW8260B	<4.00 ug/L		4.00	1	10/06/17 14:55	10/06/17 14:55	KCS
o-Xylene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Propionitrile	02	SW8260B	<40.0 ug/L		40.0	1	10/06/17 14:55	10/06/17 14:55	KCS
Styrene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Tetrachloroethylene (PCE)	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Toluene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
trans-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
trans-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
trans-1,4-Dichloro-2-butene	02	SW8260B	<4.00 ug/L		4.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Trichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Trichlorofluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/06/17 14:55	10/06/17 14:55	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-02								
Grab Date/Time:	10/03/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Vinyl acetate	02	SW8260B	<10.0 ug/L		10.0	1	10/06/17 14:55	10/06/17 14:55	KCS
Vinyl chloride	02	SW8260B	<0.50 ug/L		0.50	1	10/06/17 14:55	10/06/17 14:55	KCS
Xylenes, Total	02	SW8260B	<3.00 ug/L		3.00	1	10/06/17 14:55	10/06/17 14:55	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	02	SW8260B	101 %		70-120		10/06/17 14:55	10/06/17 14:55	KCS
Surr: 4-Bromofluorobenzene (Surr)	02	SW8260B	97.7 %		75-120		10/06/17 14:55	10/06/17 14:55	KCS
Surr: Dibromofluoromethane (Surr)	02	SW8260B	93.0 %		80-119		10/06/17 14:55	10/06/17 14:55	KCS
Surr: Toluene-d8 (Surr)	02	SW8260B	98.8 %		85-120		10/06/17 14:55	10/06/17 14:55	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	02	EPA625	Not Detected			1	10/09/17 09:39	10/10/17 14:40	SKS
1,2,4,5-Tetrachlorobenzene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
1,3,5-Trinitrobenzene	02	SW8270D	<5.49 ug/L		5.49	1	10/09/17 09:39	10/09/17 20:44	SKS
1,3-Dinitrobenzene	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
1,4-Naphthoquinone	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
1-Naphthylamine	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2,3,4,6-Tetrachlorophenol	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2,4,5-Trichlorophenol	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2,4,6-Trichlorophenol	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2,4-Dichlorophenol	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2,4-Dimethylphenol	02	SW8270D	<0.55 ug/L		0.55	1	10/09/17 09:39	10/09/17 20:44	SKS
2,4-Dinitrophenol	02	SW8270D	<54.9 ug/L		54.9	1	10/09/17 09:39	10/09/17 20:44	SKS
2,4-Dinitrotoluene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2,6-Dichlorophenol	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2,6-Dinitrotoluene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2-Acetylaminofluorene	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	16-3	Laboratory Sample ID: 17J0155-02							
Grab Date/Time:		10/03/2017 18:30							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2-Chlorophenol	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2-Methylnaphthalene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2-Naphthylamine	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2-Nitroaniline	02	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2-Nitrophenol	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
3,3'-Dichlorobenzidine	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
3,3'-Dimethylbenzidine	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
3-Methylcholanthrene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
3-Nitroaniline	02	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:44	SKS
4,6-Dinitro-2-methylphenol	02	SW8270D	<54.9 ug/L		54.9	1	10/09/17 09:39	10/09/17 20:44	SKS
4-Aminobiphenyl	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
4-Bromophenyl phenyl ether	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
4-Chloroaniline	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
4-Chlorophenyl phenyl ether	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
4-Nitroaniline	02	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:44	SKS
4-Nitrophenol	02	SW8270D	<54.9 ug/L		54.9	1	10/09/17 09:39	10/09/17 20:44	SKS
5-Nitro-o-toluidine	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
7,12-Dimethylbenz (a) anthracene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Acenaphthene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Acenaphthylene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Acetophenone	02	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Anthracene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Benzo (a) anthracene	02	SW8270D	<0.05 ug/L		0.05	1	10/09/17 09:39	10/09/17 20:44	SKS
Benzo (a) pyrene	02	SW8270D	<0.11 ug/L		0.11	1	10/09/17 09:39	10/09/17 20:44	SKS
Benzo (b) fluoranthene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-02								
Grab Date/Time:	10/03/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Benzo (k) fluoranthene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Benzyl alcohol	02	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:44	SKS
bis (2-Chloroethoxy) methane	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
bis (2-Chloroethyl) ether	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
2,2'-Oxybis (1-chloropropane)	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
bis (2-Ethylhexyl) phthalate	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
Butyl benzyl phthalate	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Chlorobenzilate	02	SW8270D	<2.75 ug/L	C	2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
Chrysene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Diallate	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
Dibenz (a,h) anthracene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Dibenzofuran	02	SW8270D	<5.49 ug/L		5.49	1	10/09/17 09:39	10/09/17 20:44	SKS
Diethyl phthalate	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Dimethoate	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
Dimethyl phthalate	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Di-n-butyl phthalate	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Di-n-octyl phthalate	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Diphenylamine	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Disulfoton	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
Ethyl methanesulfonate	02	SW8270D	<22.0 ug/L		22.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Ethyl parathion	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
Famphur	02	SW8270D	<2.75 ug/L	C	2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
Fluoranthene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Fluorene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Hexachlorobenzene	02	SW8270D	<0.05 ug/L	C	0.05	1	10/09/17 09:39	10/09/17 20:44	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-02								
Grab Date/Time:	10/03/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Hexachlorocyclopentadiene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Hexachloroethane	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Hexachloropropene	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
Indeno (1,2,3-cd) pyrene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Isodrin	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Isophorone	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Isosafrole	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Kepone	02	SW8270D	<2.75 ug/L	C	2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
m+p-Cresols	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Methapyrilene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Methyl methanesulfonate	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Methyl parathion	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
Naphthalene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Nitrobenzene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
n-Nitrosodiethylamine	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
n-Nitrosodimethylamine	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
n-Nitrosodi-n-butylamine	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
n-Nitrosodi-n-propylamine	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
n-Nitrosodiphenylamine	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
n-Nitrosomethylethylamine	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
n-Nitrosopiperidine	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
n-Nitrosopyrrolidine	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
o,o,o-Triethyl phosphorothioate	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-02								
Grab Date/Time:	10/03/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
o-Cresol	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
o-Toluidine	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
p-(Dimethylamino)azobenzene	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
p-Chloro-m-cresol	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Pentachlorobenzene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Pentachloronitrobenzene (quintozone)	02	SW8270D	<1.10 ug/L		1.10	1	10/09/17 09:39	10/09/17 20:44	SKS
Phenacetin	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Phenanthrene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Phenol	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Phorate	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
p-Phenylenediamine	02	SW8270D	<11.0 ug/L	C	11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Pronamide	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Pyrene	02	SW8270D	<11.0 ug/L		11.0	1	10/09/17 09:39	10/09/17 20:44	SKS
Safrole	02	SW8270D	<2.75 ug/L		2.75	1	10/09/17 09:39	10/09/17 20:44	SKS
Surr: 2,4,6-Tribromophenol (Surr)	02	SW8270D	46.3 %		20-86		10/09/17 09:39	10/09/17 20:44	SKS
Surr: 2-Fluorobiphenyl (Surr)	02	SW8270D	67.4 %		23-87		10/09/17 09:39	10/09/17 20:44	SKS
Surr: 2-Fluorophenol (Surr)	02	SW8270D	49.4 %		10-52		10/09/17 09:39	10/09/17 20:44	SKS
Surr: Nitrobenzene-d5 (Surr)	02	SW8270D	88.9 %		10-98.5		10/09/17 09:39	10/09/17 20:44	SKS
Surr: Phenol-d5 (Surr)	02	SW8270D	37.0 %	S	5-33		10/09/17 09:39	10/09/17 20:44	SKS
Surr: p-Terphenyl-d14 (Surr)	02	SW8270D	67.8 %		27-133		10/09/17 09:39	10/09/17 20:44	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	02	SW8082A	<0.220 ug/L		0.220	1	10/06/17 20:39	10/06/17 20:39	LBH
PCB as Aroclor 1221	02	SW8082A	<0.220 ug/L		0.220	1	10/06/17 20:39	10/06/17 20:39	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results		Laboratory Sample ID: 17J0155-02							
Sample I.D.	16-3	Grab Date/Time:	10/03/2017 18:30						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	02	SW8082A	<0.220 ug/L		0.220	1	10/06/17 20:39	10/06/17 20:39	LBH
PCB as Aroclor 1242	02	SW8082A	<0.220 ug/L		0.220	1	10/06/17 20:39	10/06/17 20:39	LBH
PCB as Aroclor 1248	02	SW8082A	<0.220 ug/L		0.220	1	10/06/17 20:39	10/06/17 20:39	LBH
PCB as Aroclor 1254	02	SW8082A	<0.220 ug/L		0.220	1	10/06/17 20:39	10/06/17 20:39	LBH
PCB as Aroclor 1260	02	SW8082A	<0.220 ug/L		0.220	1	10/06/17 20:39	10/06/17 20:39	LBH
<i>Surr: DCB</i>	02	SW8082A	80.0 %		30-105		10/06/17 20:39	10/06/17 20:39	LBH
<i>Surr: TCMX</i>	02	SW8082A	60.0 %		30-105		10/06/17 20:39	10/06/17 20:39	LBH
4,4'-DDD	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
4,4'-DDE	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
4,4'-DDT	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Aldrin	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
alpha-BHC	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
beta-BHC	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Chlordane	02	SW8081B	<0.220 ug/L		0.220	1	10/06/17 20:39	10/06/17 20:39	LBH
delta-BHC	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Dieldrin	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Endosulfan I	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Endosulfan II	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Endosulfan sulfate	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Endrin	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Endrin aldehyde	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
gamma-BHC (Lindane)	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Heptachlor	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Heptachlor epoxide	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Methoxychlor	02	SW8081B	<0.055 ug/L		0.055	1	10/06/17 20:39	10/06/17 20:39	LBH
Toxaphene	02	SW8081B	<1.10 ug/L		1.10	1	10/06/17 20:39	10/06/17 20:39	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-02								
Grab Date/Time:	10/03/2017 18:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	02	SW8081B	60.0 %		18-112		10/06/17 20:39	10/06/17 20:39	LBH
Surr: DCB	02	SW8081B	80.0 %		27-131		10/06/17 20:39	10/06/17 20:39	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	02	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 18:37	CVH
2,4,5-TP (Silvex)	02	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 18:37	CVH
2,4-D	02	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 18:37	CVH
Dinoseb	02	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 18:37	CVH
Pentachlorophenol	02	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 18:37	CVH
Surr: DCAA (Surr)	02	SW8151A	80.0 %		60-112		10/05/17 14:29	10/10/17 18:37	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	02	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 20:44	LBH
1,2,3-Trichloropropane	02	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 20:44	LBH
1,2-Dibromo-3-chloropropane (DBCP)	02	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 20:44	LBH
Wet Chemistry Analysis									
Cyanide	02	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 15:26	10/06/17 15:26	BBP
Sulfide	02	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results		Laboratory Sample ID: 17J0155-03							
Sample I.D.	16-4								
Grab Date/Time:		10/04/2017 11:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst

Metals (Total) by EPA 6000/7000 Series Methods

Silver	03	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:40	CWO
Arsenic	03	SW6020A	<1.0 ug/L		1.0	1	10/05/17 16:00	10/06/17 23:26	BG
Barium	03	SW6010C	0.0300 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:40	CWO
Beryllium	03	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:40	CWO
Cadmium	03	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:40	CWO
Cobalt	03	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:40	CWO
Chromium	03	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:40	CWO
Copper	03	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:40	CWO
Mercury	03	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 12:57	RCV
Nickel	03	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:40	CWO
Lead	03	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:40	CWO
Antimony	03	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:26	BG
Selenium	03	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 16:00	10/06/17 14:40	CWO
Tin	03	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 16:00	10/06/17 14:40	CWO
Thallium	03	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:26	BG
Vanadium	03	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:40	CWO
Zinc	03	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:40	CWO

Volatile Organic Compounds by GCMS

1,1,1,2-Tetrachloroethane	03	SW8260B	<0.40 ug/L		0.40	1	10/06/17 15:18	10/06/17 15:18	KCS
1,1,1-Trichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,1,2,2-Tetrachloroethane	03	SW8260B	<0.40 ug/L		0.40	1	10/06/17 15:18	10/06/17 15:18	KCS
1,1,2-Trichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,1-Dichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,1-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,1-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,2,3-Trichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-03								
Grab Date/Time:	10/04/2017 11:10								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,2-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,2-Dichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,2-Dichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,3-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,3-Dichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
1,4-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
2,2-Dichloropropane	03	SW8260B	<2.00 ug/L		2.00	1	10/06/17 15:18	10/06/17 15:18	KCS
2-Butanone (MEK)	03	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:18	10/06/17 15:18	KCS
2-Hexanone (MBK)	03	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:18	10/06/17 15:18	KCS
4-Methyl-2-pentanone (MIBK)	03	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Acetone	03	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:18	10/06/17 15:18	KCS
Acetonitrile	03	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:18	10/06/17 15:18	KCS
Acrolein	03	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:18	10/06/17 15:18	KCS
Acrylonitrile	03	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Allyl chloride	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Benzene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Bromochloromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Bromodichloromethane	03	SW8260B	<0.50 ug/L		0.50	1	10/06/17 15:18	10/06/17 15:18	KCS
Bromoform	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Bromomethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Carbon disulfide	03	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:18	10/06/17 15:18	KCS
Carbon tetrachloride	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Chlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Chloroethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Chloroform	03	SW8260B	<0.50 ug/L		0.50	1	10/06/17 15:18	10/06/17 15:18	KCS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-03								
Grab Date/Time:	10/04/2017 11:10								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Chloroprene	03	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:18	10/06/17 15:18	KCS
cis-1,2-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
cis-1,3-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Dibromochloromethane	03	SW8260B	<0.50 ug/L		0.50	1	10/06/17 15:18	10/06/17 15:18	KCS
Dibromomethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Dichlorodifluoromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Ethyl methacrylate	03	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Ethylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Hexachlorobutadiene	03	SW8260B	<0.80 ug/L		0.80	1	10/06/17 15:18	10/06/17 15:18	KCS
Iodomethane	03	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:18	10/06/17 15:18	KCS
Isobutyl Alcohol	03	SW8260B	<40.0 ug/L		40.0	1	10/06/17 15:18	10/06/17 15:18	KCS
m+p-Xylenes	03	SW8260B	<2.00 ug/L		2.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Methacrylonitrile	03	SW8260B	<1.50 ug/L		1.50	1	10/06/17 15:18	10/06/17 15:18	KCS
Methyl methacrylate	03	SW8260B	<2.00 ug/L		2.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Methylene chloride	03	SW8260B	<4.00 ug/L		4.00	1	10/06/17 15:18	10/06/17 15:18	KCS
o-Xylene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Propionitrile	03	SW8260B	<40.0 ug/L		40.0	1	10/06/17 15:18	10/06/17 15:18	KCS
Styrene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Tetrachloroethylene (PCE)	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Toluene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
trans-1,2-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
trans-1,3-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
trans-1,4-Dichloro-2-butene	03	SW8260B	<4.00 ug/L		4.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Trichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Trichlorofluoromethane	03	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:18	10/06/17 15:18	KCS



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Certificate of Analysis

Final Report

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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-03								
Grab Date/Time:	10/04/2017 11:10								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Vinyl acetate	03	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:18	10/06/17 15:18	KCS
Vinyl chloride	03	SW8260B	<0.50 ug/L		0.50	1	10/06/17 15:18	10/06/17 15:18	KCS
Xylenes, Total	03	SW8260B	<3.00 ug/L		3.00	1	10/06/17 15:18	10/06/17 15:18	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	03	SW8260B	95.7 %		70-120		10/06/17 15:18	10/06/17 15:18	KCS
Surr: 4-Bromofluorobenzene (Surr)	03	SW8260B	96.4 %		75-120		10/06/17 15:18	10/06/17 15:18	KCS
Surr: Dibromofluoromethane (Surr)	03	SW8260B	88.9 %		80-119		10/06/17 15:18	10/06/17 15:18	KCS
Surr: Toluene-d8 (Surr)	03	SW8260B	97.6 %		85-120		10/06/17 15:18	10/06/17 15:18	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	03	EPA625	Not Detected			1	10/09/17 09:39	10/10/17 14:40	SKS
1,2,4,5-Tetrachlorobenzene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
1,3,5-Trinitrobenzene	03	SW8270D	<5.26 ug/L		5.26	1	10/09/17 09:39	10/09/17 21:15	SKS
1,3-Dinitrobenzene	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
1,4-Naphthoquinone	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
1-Naphthylamine	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2,3,4,6-Tetrachlorophenol	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2,4,5-Trichlorophenol	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2,4,6-Trichlorophenol	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2,4-Dichlorophenol	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2,4-Dimethylphenol	03	SW8270D	<0.53 ug/L		0.53	1	10/09/17 09:39	10/09/17 21:15	SKS
2,4-Dinitrophenol	03	SW8270D	<52.6 ug/L		52.6	1	10/09/17 09:39	10/09/17 21:15	SKS
2,4-Dinitrotoluene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2,6-Dichlorophenol	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2,6-Dinitrotoluene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2-Acetylaminofluorene	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-03								
Grab Date/Time:	10/04/2017 11:10								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2-Chlorophenol	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2-Methylnaphthalene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2-Naphthylamine	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2-Nitroaniline	03	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:15	SKS
2-Nitrophenol	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
3,3'-Dichlorobenzidine	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
3,3'-Dimethylbenzidine	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
3-Methylcholanthrene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
3-Nitroaniline	03	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:15	SKS
4,6-Dinitro-2-methylphenol	03	SW8270D	<52.6 ug/L		52.6	1	10/09/17 09:39	10/09/17 21:15	SKS
4-Aminobiphenyl	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
4-Bromophenyl phenyl ether	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
4-Chloroaniline	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
4-Chlorophenyl phenyl ether	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
4-Nitroaniline	03	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:15	SKS
4-Nitrophenol	03	SW8270D	<52.6 ug/L		52.6	1	10/09/17 09:39	10/09/17 21:15	SKS
5-Nitro-o-toluidine	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
7,12-Dimethylbenz (a) anthracene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Acenaphthene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Acenaphthylene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Acetophenone	03	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:15	SKS
Anthracene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Benzo (a) anthracene	03	SW8270D	<0.05 ug/L		0.05	1	10/09/17 09:39	10/09/17 21:15	SKS
Benzo (a) pyrene	03	SW8270D	<0.11 ug/L		0.11	1	10/09/17 09:39	10/09/17 21:15	SKS
Benzo (b) fluoranthene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-03								
Grab Date/Time:	10/04/2017 11:10								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Benzo (k) fluoranthene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Benzyl alcohol	03	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:15	SKS
bis (2-Chloroethoxy) methane	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
bis (2-Chloroethyl) ether	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
2,2'-Oxybis (1-chloropropane)	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
bis (2-Ethylhexyl) phthalate	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
Butyl benzyl phthalate	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Chlorobenzilate	03	SW8270D	<2.63 ug/L	C	2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
Chrysene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Diallate	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
Dibenz (a,h) anthracene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Dibenzofuran	03	SW8270D	<5.26 ug/L		5.26	1	10/09/17 09:39	10/09/17 21:15	SKS
Diethyl phthalate	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Dimethoate	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
Dimethyl phthalate	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Di-n-butyl phthalate	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Di-n-octyl phthalate	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Diphenylamine	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Disulfoton	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
Ethyl methanesulfonate	03	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:15	SKS
Ethyl parathion	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
Famphur	03	SW8270D	<2.63 ug/L	C	2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
Fluoranthene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Fluorene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Hexachlorobenzene	03	SW8270D	<0.05 ug/L	C	0.05	1	10/09/17 09:39	10/09/17 21:15	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-03								
Grab Date/Time:	10/04/2017 11:10								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Hexachlorocyclopentadiene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Hexachloroethane	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Hexachloropropene	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
Indeno (1,2,3-cd) pyrene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Isodrin	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Isophorone	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Isosafrole	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Kepone	03	SW8270D	<2.63 ug/L	C	2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
m+p-Cresols	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Methapyrilene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Methyl methanesulfonate	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Methyl parathion	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
Naphthalene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Nitrobenzene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
n-Nitrosodiethylamine	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
n-Nitrosodimethylamine	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
n-Nitrosodi-n-butylamine	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
n-Nitrosodi-n-propylamine	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
n-Nitrosodiphenylamine	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
n-Nitrosomethylethylamine	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
n-Nitrosopiperidine	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
n-Nitrosopyrrolidine	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
o,o,o-Triethyl phosphorothioate	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-03								
Grab Date/Time:	10/04/2017 11:10								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
o-Cresol	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
o-Toluidine	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
p-(Dimethylamino)azobenzene	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
p-Chloro-m-cresol	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Pentachlorobenzene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Pentachloronitrobenzene (quintozone)	03	SW8270D	<1.05 ug/L		1.05	1	10/09/17 09:39	10/09/17 21:15	SKS
Phenacetin	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Phenanthrene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Phenol	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Phorate	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
p-Phenylenediamine	03	SW8270D	<10.5 ug/L	C	10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Pronamide	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Pyrene	03	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:15	SKS
Safrole	03	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:15	SKS
Surr: 2,4,6-Tribromophenol (Surr)	03	SW8270D	43.2 %		20-86		10/09/17 09:39	10/09/17 21:15	SKS
Surr: 2-Fluorobiphenyl (Surr)	03	SW8270D	62.8 %		23-87		10/09/17 09:39	10/09/17 21:15	SKS
Surr: 2-Fluorophenol (Surr)	03	SW8270D	31.8 %		10-52		10/09/17 09:39	10/09/17 21:15	SKS
Surr: Nitrobenzene-d5 (Surr)	03	SW8270D	85.1 %		10-98.5		10/09/17 09:39	10/09/17 21:15	SKS
Surr: Phenol-d5 (Surr)	03	SW8270D	31.8 %		5-33		10/09/17 09:39	10/09/17 21:15	SKS
Surr: p-Terphenyl-d14 (Surr)	03	SW8270D	64.6 %		27-133		10/09/17 09:39	10/09/17 21:15	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	03	SW8082A	<0.213 ug/L		0.213	1	10/06/17 20:58	10/06/17 20:58	LBH
PCB as Aroclor 1221	03	SW8082A	<0.213 ug/L		0.213	1	10/06/17 20:58	10/06/17 20:58	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-03								
Grab Date/Time:	10/04/2017 11:10								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	03	SW8082A	<0.213 ug/L		0.213	1	10/06/17 20:58	10/06/17 20:58	LBH
PCB as Aroclor 1242	03	SW8082A	<0.213 ug/L		0.213	1	10/06/17 20:58	10/06/17 20:58	LBH
PCB as Aroclor 1248	03	SW8082A	<0.213 ug/L		0.213	1	10/06/17 20:58	10/06/17 20:58	LBH
PCB as Aroclor 1254	03	SW8082A	<0.213 ug/L		0.213	1	10/06/17 20:58	10/06/17 20:58	LBH
PCB as Aroclor 1260	03	SW8082A	<0.213 ug/L		0.213	1	10/06/17 20:58	10/06/17 20:58	LBH
<i>Surr: DCB</i>	03	SW8082A	80.0 %		30-105		10/06/17 20:58	10/06/17 20:58	LBH
<i>Surr: TCMX</i>	03	SW8082A	70.0 %		30-105		10/06/17 20:58	10/06/17 20:58	LBH
4,4'-DDD	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
4,4'-DDE	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
4,4'-DDT	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Aldrin	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
alpha-BHC	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
beta-BHC	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Chlordane	03	SW8081B	<0.213 ug/L		0.213	1	10/06/17 20:58	10/06/17 20:58	LBH
delta-BHC	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Dieldrin	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Endosulfan I	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Endosulfan II	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Endosulfan sulfate	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Endrin	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Endrin aldehyde	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
gamma-BHC (Lindane)	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Heptachlor	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Heptachlor epoxide	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Methoxychlor	03	SW8081B	<0.053 ug/L		0.053	1	10/06/17 20:58	10/06/17 20:58	LBH
Toxaphene	03	SW8081B	<1.06 ug/L		1.06	1	10/06/17 20:58	10/06/17 20:58	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-03								
Grab Date/Time:		10/04/2017 11:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	03	SW8081B	70.0 %		18-112		10/06/17 20:58	10/06/17 20:58	LBH
Surr: DCB	03	SW8081B	75.0 %		27-131		10/06/17 20:58	10/06/17 20:58	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	03	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:00	CVH
2,4,5-TP (Silvex)	03	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:00	CVH
2,4-D	03	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:00	CVH
Dinoseb	03	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:00	CVH
Pentachlorophenol	03	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:00	CVH
Surr: DCAA (Surr)	03	SW8151A	75.0 %		60-112		10/05/17 14:29	10/10/17 19:00	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	03	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 21:03	LBH
1,2,3-Trichloropropane	03	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 21:03	LBH
1,2-Dibromo-3-chloropropane (DBCP)	03	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 21:03	LBH
Wet Chemistry Analysis									
Cyanide	03	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 15:29	10/06/17 15:29	BBP
Sulfide	03	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-04								
Grab Date/Time:	10/04/2017 12:25								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:42	CWO
Arsenic	04	SW6020A	<1.0 ug/L		1.0	1	10/05/17 16:00	10/06/17 23:30	BG
Barium	04	SW6010C	0.0893 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:42	CWO
Beryllium	04	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:42	CWO
Cadmium	04	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:42	CWO
Cobalt	04	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:42	CWO
Chromium	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:42	CWO
Copper	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:42	CWO
Mercury	04	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 12:58	RCV
Nickel	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:42	CWO
Lead	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:42	CWO
Antimony	04	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:30	BG
Selenium	04	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 16:00	10/06/17 14:42	CWO
Tin	04	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 16:00	10/06/17 14:42	CWO
Thallium	04	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:30	BG
Vanadium	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:42	CWO
Zinc	04	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:42	CWO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	04	SW8260B	<0.40 ug/L		0.40	1	10/06/17 15:42	10/06/17 15:42	KCS
1,1,1-Trichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,1,2,2-Tetrachloroethane	04	SW8260B	<0.40 ug/L		0.40	1	10/06/17 15:42	10/06/17 15:42	KCS
1,1,2-Trichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,1-Dichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,1-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,1-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,2,3-Trichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-04								
Grab Date/Time:	10/04/2017 12:25								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,2-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,2-Dichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,2-Dichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,3-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,3-Dichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
1,4-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
2,2-Dichloropropane	04	SW8260B	<2.00 ug/L		2.00	1	10/06/17 15:42	10/06/17 15:42	KCS
2-Butanone (MEK)	04	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:42	10/06/17 15:42	KCS
2-Hexanone (MBK)	04	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:42	10/06/17 15:42	KCS
4-Methyl-2-pentanone (MIBK)	04	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Acetone	04	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:42	10/06/17 15:42	KCS
Acetonitrile	04	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:42	10/06/17 15:42	KCS
Acrolein	04	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:42	10/06/17 15:42	KCS
Acrylonitrile	04	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Allyl chloride	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Benzene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Bromochloromethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Bromodichloromethane	04	SW8260B	<0.50 ug/L		0.50	1	10/06/17 15:42	10/06/17 15:42	KCS
Bromoform	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Bromomethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Carbon disulfide	04	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:42	10/06/17 15:42	KCS
Carbon tetrachloride	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Chlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Chloroethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Chloroform	04	SW8260B	<0.50 ug/L		0.50	1	10/06/17 15:42	10/06/17 15:42	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-04								
Grab Date/Time:	10/04/2017 12:25								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloromethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Chloroprene	04	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:42	10/06/17 15:42	KCS
cis-1,2-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
cis-1,3-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Dibromochloromethane	04	SW8260B	<0.50 ug/L		0.50	1	10/06/17 15:42	10/06/17 15:42	KCS
Dibromomethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Dichlorodifluoromethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Ethyl methacrylate	04	SW8260B	<5.00 ug/L		5.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Ethylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Hexachlorobutadiene	04	SW8260B	<0.80 ug/L		0.80	1	10/06/17 15:42	10/06/17 15:42	KCS
Iodomethane	04	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:42	10/06/17 15:42	KCS
Isobutyl Alcohol	04	SW8260B	<40.0 ug/L		40.0	1	10/06/17 15:42	10/06/17 15:42	KCS
m+p-Xylenes	04	SW8260B	<2.00 ug/L		2.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Methacrylonitrile	04	SW8260B	<1.50 ug/L		1.50	1	10/06/17 15:42	10/06/17 15:42	KCS
Methyl methacrylate	04	SW8260B	<2.00 ug/L		2.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Methylene chloride	04	SW8260B	<4.00 ug/L		4.00	1	10/06/17 15:42	10/06/17 15:42	KCS
o-Xylene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Propionitrile	04	SW8260B	<40.0 ug/L		40.0	1	10/06/17 15:42	10/06/17 15:42	KCS
Styrene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Tetrachloroethylene (PCE)	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Toluene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
trans-1,2-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
trans-1,3-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
trans-1,4-Dichloro-2-butene	04	SW8260B	<4.00 ug/L		4.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Trichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Trichlorofluoromethane	04	SW8260B	<1.00 ug/L		1.00	1	10/06/17 15:42	10/06/17 15:42	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-04								
Grab Date/Time:	10/04/2017 12:25								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Vinyl acetate	04	SW8260B	<10.0 ug/L		10.0	1	10/06/17 15:42	10/06/17 15:42	KCS
Vinyl chloride	04	SW8260B	<0.50 ug/L		0.50	1	10/06/17 15:42	10/06/17 15:42	KCS
Xylenes, Total	04	SW8260B	<3.00 ug/L		3.00	1	10/06/17 15:42	10/06/17 15:42	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	04	SW8260B	97.0 %		70-120		10/06/17 15:42	10/06/17 15:42	KCS
Surr: 4-Bromofluorobenzene (Surr)	04	SW8260B	97.2 %		75-120		10/06/17 15:42	10/06/17 15:42	KCS
Surr: Dibromofluoromethane (Surr)	04	SW8260B	89.4 %		80-119		10/06/17 15:42	10/06/17 15:42	KCS
Surr: Toluene-d8 (Surr)	04	SW8260B	97.7 %		85-120		10/06/17 15:42	10/06/17 15:42	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	04	EPA625	Not Detected			1	10/09/17 09:39	10/10/17 14:40	SKS
1,2,4,5-Tetrachlorobenzene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
1,3,5-Trinitrobenzene	04	SW8270D	<5.26 ug/L		5.26	1	10/09/17 09:39	10/09/17 21:46	SKS
1,3-Dinitrobenzene	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
1,4-Naphthoquinone	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
1-Naphthylamine	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2,3,4,6-Tetrachlorophenol	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2,4,5-Trichlorophenol	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2,4,6-Trichlorophenol	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2,4-Dichlorophenol	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2,4-Dimethylphenol	04	SW8270D	<0.53 ug/L		0.53	1	10/09/17 09:39	10/09/17 21:46	SKS
2,4-Dinitrophenol	04	SW8270D	<52.6 ug/L		52.6	1	10/09/17 09:39	10/09/17 21:46	SKS
2,4-Dinitrotoluene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2,6-Dichlorophenol	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2,6-Dinitrotoluene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2-Acetylaminofluorene	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-04								
Grab Date/Time:	10/04/2017 12:25								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2-Chlorophenol	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2-Methylnaphthalene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2-Naphthylamine	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2-Nitroaniline	04	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:46	SKS
2-Nitrophenol	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
3,3'-Dichlorobenzidine	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
3,3'-Dimethylbenzidine	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
3-Methylcholanthrene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
3-Nitroaniline	04	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:46	SKS
4,6-Dinitro-2-methylphenol	04	SW8270D	<52.6 ug/L		52.6	1	10/09/17 09:39	10/09/17 21:46	SKS
4-Aminobiphenyl	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
4-Bromophenyl phenyl ether	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
4-Chloroaniline	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
4-Chlorophenyl phenyl ether	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
4-Nitroaniline	04	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:46	SKS
4-Nitrophenol	04	SW8270D	<52.6 ug/L		52.6	1	10/09/17 09:39	10/09/17 21:46	SKS
5-Nitro-o-toluidine	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
7,12-Dimethylbenz (a) anthracene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Acenaphthene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Acenaphthylene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Acetophenone	04	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:46	SKS
Anthracene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Benzo (a) anthracene	04	SW8270D	<0.05 ug/L		0.05	1	10/09/17 09:39	10/09/17 21:46	SKS
Benzo (a) pyrene	04	SW8270D	<0.11 ug/L		0.11	1	10/09/17 09:39	10/09/17 21:46	SKS
Benzo (b) fluoranthene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results

Sample I.D. 16-5 Laboratory Sample ID: 17J0155-04

Grab Date/Time: 10/04/2017 12:25

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Benzo (k) fluoranthene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Benzyl alcohol	04	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:46	SKS
bis (2-Chloroethoxy) methane	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
bis (2-Chloroethyl) ether	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
2,2'-Oxybis (1-chloropropane)	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
bis (2-Ethylhexyl) phthalate	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
Butyl benzyl phthalate	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Chlorobenzilate	04	SW8270D	<2.63 ug/L	C	2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
Chrysene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Diallate	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
Dibenz (a,h) anthracene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Dibenzofuran	04	SW8270D	<5.26 ug/L		5.26	1	10/09/17 09:39	10/09/17 21:46	SKS
Diethyl phthalate	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Dimethoate	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
Dimethyl phthalate	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Di-n-butyl phthalate	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Di-n-octyl phthalate	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Diphenylamine	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Disulfoton	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
Ethyl methanesulfonate	04	SW8270D	<21.1 ug/L		21.1	1	10/09/17 09:39	10/09/17 21:46	SKS
Ethyl parathion	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
Famphur	04	SW8270D	<2.63 ug/L	C	2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
Fluoranthene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Fluorene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Hexachlorobenzene	04	SW8270D	<0.05 ug/L	C	0.05	1	10/09/17 09:39	10/09/17 21:46	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-04								
Grab Date/Time:	10/04/2017 12:25								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Hexachlorocyclopentadiene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Hexachloroethane	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Hexachloropropene	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
Indeno (1,2,3-cd) pyrene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Isodrin	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Isophorone	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Isosafrole	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Kepone	04	SW8270D	<2.63 ug/L	C	2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
m+p-Cresols	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Methapyrilene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Methyl methanesulfonate	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Methyl parathion	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
Naphthalene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Nitrobenzene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
n-Nitrosodiethylamine	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
n-Nitrosodimethylamine	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
n-Nitrosodi-n-butylamine	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
n-Nitrosodi-n-propylamine	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
n-Nitrosodiphenylamine	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
n-Nitrosomethylethylamine	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
n-Nitrosopiperidine	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
n-Nitrosopyrrolidine	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
o,o,o-Triethyl phosphorothioate	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results

Sample I.D. 16-5 Laboratory Sample ID: 17J0155-04

Grab Date/Time: 10/04/2017 12:25

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
o-Cresol	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
o-Toluidine	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
p-(Dimethylamino)azobenzene	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
p-Chloro-m-cresol	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Pentachlorobenzene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Pentachloronitrobenzene (quintozone)	04	SW8270D	<1.05 ug/L		1.05	1	10/09/17 09:39	10/09/17 21:46	SKS
Phenacetin	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Phenanthrene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Phenol	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Phorate	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
p-Phenylenediamine	04	SW8270D	<10.5 ug/L	C	10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Pronamide	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Pyrene	04	SW8270D	<10.5 ug/L		10.5	1	10/09/17 09:39	10/09/17 21:46	SKS
Safrole	04	SW8270D	<2.63 ug/L		2.63	1	10/09/17 09:39	10/09/17 21:46	SKS
Surr: 2,4,6-Tribromophenol (Surr)	04	SW8270D	42.0 %		20-86		10/09/17 09:39	10/09/17 21:46	SKS
Surr: 2-Fluorobiphenyl (Surr)	04	SW8270D	62.8 %		23-87		10/09/17 09:39	10/09/17 21:46	SKS
Surr: 2-Fluorophenol (Surr)	04	SW8270D	35.8 %		10-52		10/09/17 09:39	10/09/17 21:46	SKS
Surr: Nitrobenzene-d5 (Surr)	04	SW8270D	83.1 %		10-98.5		10/09/17 09:39	10/09/17 21:46	SKS
Surr: Phenol-d5 (Surr)	04	SW8270D	31.3 %		5-33		10/09/17 09:39	10/09/17 21:46	SKS
Surr: p-Terphenyl-d14 (Surr)	04	SW8270D	66.0 %		27-133		10/09/17 09:39	10/09/17 21:46	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	04	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:17	10/06/17 21:17	LBH
PCB as Aroclor 1221	04	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:17	10/06/17 21:17	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-04								
Grab Date/Time:	10/04/2017 12:25								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	04	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:17	10/06/17 21:17	LBH
PCB as Aroclor 1242	04	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:17	10/06/17 21:17	LBH
PCB as Aroclor 1248	04	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:17	10/06/17 21:17	LBH
PCB as Aroclor 1254	04	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:17	10/06/17 21:17	LBH
PCB as Aroclor 1260	04	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:17	10/06/17 21:17	LBH
<i>Surr: DCB</i>	04	SW8082A	80.0 %		30-105		10/06/17 21:17	10/06/17 21:17	LBH
<i>Surr: TCMX</i>	04	SW8082A	65.0 %		30-105		10/06/17 21:17	10/06/17 21:17	LBH
4,4'-DDD	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
4,4'-DDE	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
4,4'-DDT	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Aldrin	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
alpha-BHC	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
beta-BHC	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Chlordane	04	SW8081B	<0.206 ug/L		0.206	1	10/06/17 21:17	10/06/17 21:17	LBH
delta-BHC	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Dieldrin	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Endosulfan I	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Endosulfan II	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Endosulfan sulfate	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Endrin	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Endrin aldehyde	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
gamma-BHC (Lindane)	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Heptachlor	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Heptachlor epoxide	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Methoxychlor	04	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:17	10/06/17 21:17	LBH
Toxaphene	04	SW8081B	<1.03 ug/L		1.03	1	10/06/17 21:17	10/06/17 21:17	LBH



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-04								
Grab Date/Time:		10/04/2017 12:25							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	04	SW8081B	65.0 %		18-112		10/06/17 21:17	10/06/17 21:17	LBH
Surr: DCB	04	SW8081B	80.0 %		27-131		10/06/17 21:17	10/06/17 21:17	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	04	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:22	CVH
2,4,5-TP (Silvex)	04	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:22	CVH
2,4-D	04	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:22	CVH
Dinoseb	04	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:22	CVH
Pentachlorophenol	04	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:22	CVH
Surr: DCAA (Surr)	04	SW8151A	75.0 %		60-112		10/05/17 14:29	10/10/17 19:22	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	04	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 21:23	LBH
1,2,3-Trichloropropane	04	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 21:23	LBH
1,2-Dibromo-3-chloropropane (DBCP)	04	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 21:23	LBH
Wet Chemistry Analysis									
Cyanide	04	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 15:32	10/06/17 15:32	BBP
Sulfide	04	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-05								
Grab Date/Time:	10/04/2017 15:15								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	05	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:43	CWO
Arsenic	05	SW6020A	<1.0 ug/L		1.0	1	10/05/17 16:00	10/06/17 23:34	BG
Barium	05	SW6010C	0.0548 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:44	CWO
Beryllium	05	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:44	CWO
Cadmium	05	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:44	CWO
Cobalt	05	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:44	CWO
Chromium	05	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:44	CWO
Copper	05	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:43	CWO
Mercury	05	SW7470A	<0.00020 mg/L		0.00020	1	10/09/17 08:30	10/10/17 13:00	RCV
Nickel	05	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:44	CWO
Lead	05	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:44	CWO
Antimony	05	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:34	BG
Selenium	05	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 16:00	10/06/17 14:44	CWO
Tin	05	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 16:00	10/06/17 14:44	CWO
Thallium	05	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:34	BG
Vanadium	05	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:43	CWO
Zinc	05	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:44	CWO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	05	SW8260B	<0.40 ug/L		0.40	1	10/06/17 16:05	10/06/17 16:05	KCS
1,1,1-Trichloroethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,1,2,2-Tetrachloroethane	05	SW8260B	<0.40 ug/L		0.40	1	10/06/17 16:05	10/06/17 16:05	KCS
1,1,2-Trichloroethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,1-Dichloroethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,1-Dichloroethylene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,1-Dichloropropene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,2,3-Trichloropropane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-05								
Grab Date/Time:	10/04/2017 15:15								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,2-Dichlorobenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,2-Dichloroethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,2-Dichloropropane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,3-Dichlorobenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,3-Dichloropropane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
1,4-Dichlorobenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
2,2-Dichloropropane	05	SW8260B	<2.00 ug/L		2.00	1	10/06/17 16:05	10/06/17 16:05	KCS
2-Butanone (MEK)	05	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:05	10/06/17 16:05	KCS
2-Hexanone (MBK)	05	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:05	10/06/17 16:05	KCS
4-Methyl-2-pentanone (MIBK)	05	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Acetone	05	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:05	10/06/17 16:05	KCS
Acetonitrile	05	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:05	10/06/17 16:05	KCS
Acrolein	05	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:05	10/06/17 16:05	KCS
Acrylonitrile	05	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Allyl chloride	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Benzene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Bromochloromethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Bromodichloromethane	05	SW8260B	<0.50 ug/L		0.50	1	10/06/17 16:05	10/06/17 16:05	KCS
Bromoform	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Bromomethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Carbon disulfide	05	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:05	10/06/17 16:05	KCS
Carbon tetrachloride	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Chlorobenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Chloroethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Chloroform	05	SW8260B	<0.50 ug/L		0.50	1	10/06/17 16:05	10/06/17 16:05	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-05								
Grab Date/Time:	10/04/2017 15:15								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloromethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Chloroprene	05	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:05	10/06/17 16:05	KCS
cis-1,2-Dichloroethylene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
cis-1,3-Dichloropropene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Dibromochloromethane	05	SW8260B	<0.50 ug/L		0.50	1	10/06/17 16:05	10/06/17 16:05	KCS
Dibromomethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Dichlorodifluoromethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Ethyl methacrylate	05	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Ethylbenzene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Hexachlorobutadiene	05	SW8260B	<0.80 ug/L		0.80	1	10/06/17 16:05	10/06/17 16:05	KCS
Iodomethane	05	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:05	10/06/17 16:05	KCS
Isobutyl Alcohol	05	SW8260B	<40.0 ug/L		40.0	1	10/06/17 16:05	10/06/17 16:05	KCS
m+p-Xylenes	05	SW8260B	<2.00 ug/L		2.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Methacrylonitrile	05	SW8260B	<1.50 ug/L		1.50	1	10/06/17 16:05	10/06/17 16:05	KCS
Methyl methacrylate	05	SW8260B	<2.00 ug/L		2.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Methylene chloride	05	SW8260B	<4.00 ug/L		4.00	1	10/06/17 16:05	10/06/17 16:05	KCS
o-Xylene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Propionitrile	05	SW8260B	<40.0 ug/L		40.0	1	10/06/17 16:05	10/06/17 16:05	KCS
Styrene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Tetrachloroethylene (PCE)	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Toluene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
trans-1,2-Dichloroethylene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
trans-1,3-Dichloropropene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
trans-1,4-Dichloro-2-butene	05	SW8260B	<4.00 ug/L		4.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Trichloroethylene	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Trichlorofluoromethane	05	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:05	10/06/17 16:05	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-05								
Grab Date/Time:	10/04/2017 15:15								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Vinyl acetate	05	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:05	10/06/17 16:05	KCS
Vinyl chloride	05	SW8260B	<0.50 ug/L		0.50	1	10/06/17 16:05	10/06/17 16:05	KCS
Xylenes, Total	05	SW8260B	<3.00 ug/L		3.00	1	10/06/17 16:05	10/06/17 16:05	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	05	SW8260B	93.0 %		70-120		10/06/17 16:05	10/06/17 16:05	KCS
Surr: 4-Bromofluorobenzene (Surr)	05	SW8260B	94.8 %		75-120		10/06/17 16:05	10/06/17 16:05	KCS
Surr: Dibromofluoromethane (Surr)	05	SW8260B	90.4 %		80-119		10/06/17 16:05	10/06/17 16:05	KCS
Surr: Toluene-d8 (Surr)	05	SW8260B	97.3 %		85-120		10/06/17 16:05	10/06/17 16:05	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	05	EPA625	Not Detected			1	10/09/17 09:39	10/10/17 14:40	SKS
1,2,4,5-Tetrachlorobenzene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
1,3,5-Trinitrobenzene	05	SW8270D	<5.15 ug/L		5.15	1	10/09/17 09:39	10/09/17 22:17	SKS
1,3-Dinitrobenzene	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
1,4-Naphthoquinone	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
1-Naphthylamine	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2,3,4,6-Tetrachlorophenol	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2,4,5-Trichlorophenol	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2,4,6-Trichlorophenol	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2,4-Dichlorophenol	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2,4-Dimethylphenol	05	SW8270D	<0.52 ug/L		0.52	1	10/09/17 09:39	10/09/17 22:17	SKS
2,4-Dinitrophenol	05	SW8270D	<51.5 ug/L		51.5	1	10/09/17 09:39	10/09/17 22:17	SKS
2,4-Dinitrotoluene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2,6-Dichlorophenol	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2,6-Dinitrotoluene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2-Acetylaminofluorene	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	13-1	Laboratory Sample ID: 17J0155-05							
Grab Date/Time:		10/04/2017 15:15							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2-Chlorophenol	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2-Methylnaphthalene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2-Naphthylamine	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2-Nitroaniline	05	SW8270D	<20.6 ug/L		20.6	1	10/09/17 09:39	10/09/17 22:17	SKS
2-Nitrophenol	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
3,3'-Dichlorobenzidine	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
3,3'-Dimethylbenzidine	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
3-Methylcholanthrene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
3-Nitroaniline	05	SW8270D	<20.6 ug/L		20.6	1	10/09/17 09:39	10/09/17 22:17	SKS
4,6-Dinitro-2-methylphenol	05	SW8270D	<51.5 ug/L		51.5	1	10/09/17 09:39	10/09/17 22:17	SKS
4-Aminobiphenyl	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
4-Bromophenyl phenyl ether	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
4-Chloroaniline	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
4-Chlorophenyl phenyl ether	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
4-Nitroaniline	05	SW8270D	<20.6 ug/L		20.6	1	10/09/17 09:39	10/09/17 22:17	SKS
4-Nitrophenol	05	SW8270D	<51.5 ug/L		51.5	1	10/09/17 09:39	10/09/17 22:17	SKS
5-Nitro-o-toluidine	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
7,12-Dimethylbenz (a) anthracene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Acenaphthene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Acenaphthylene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Acetophenone	05	SW8270D	<20.6 ug/L		20.6	1	10/09/17 09:39	10/09/17 22:17	SKS
Anthracene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Benzo (a) anthracene	05	SW8270D	<0.05 ug/L		0.05	1	10/09/17 09:39	10/09/17 22:17	SKS
Benzo (a) pyrene	05	SW8270D	<0.10 ug/L		0.10	1	10/09/17 09:39	10/09/17 22:17	SKS
Benzo (b) fluoranthene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	13-1								
Grab Date/Time:			10/04/2017 15:15						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Benzo (k) fluoranthene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Benzyl alcohol	05	SW8270D	<20.6 ug/L		20.6	1	10/09/17 09:39	10/09/17 22:17	SKS
bis (2-Chloroethoxy) methane	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
bis (2-Chloroethyl) ether	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
2,2'-Oxybis (1-chloropropane)	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
bis (2-Ethylhexyl) phthalate	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
Butyl benzyl phthalate	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Chlorobenzilate	05	SW8270D	<2.58 ug/L	C	2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
Chrysene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Diallate	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
Dibenz (a,h) anthracene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Dibenzofuran	05	SW8270D	<5.15 ug/L		5.15	1	10/09/17 09:39	10/09/17 22:17	SKS
Diethyl phthalate	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Dimethoate	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
Dimethyl phthalate	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Di-n-butyl phthalate	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Di-n-octyl phthalate	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Diphenylamine	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Disulfoton	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
Ethyl methanesulfonate	05	SW8270D	<20.6 ug/L		20.6	1	10/09/17 09:39	10/09/17 22:17	SKS
Ethyl parathion	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
Famphur	05	SW8270D	<2.58 ug/L	C	2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
Fluoranthene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Fluorene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Hexachlorobenzene	05	SW8270D	<0.05 ug/L	C	0.05	1	10/09/17 09:39	10/09/17 22:17	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	13-1	Laboratory Sample ID: 17J0155-05							
Grab Date/Time:		10/04/2017 15:15							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Hexachlorocyclopentadiene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Hexachloroethane	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Hexachloropropene	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
Indeno (1,2,3-cd) pyrene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Isodrin	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Isophorone	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Isosafrole	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Kepone	05	SW8270D	<2.58 ug/L	C	2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
m+p-Cresols	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Methapyrilene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Methyl methanesulfonate	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Methyl parathion	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
Naphthalene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Nitrobenzene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
n-Nitrosodiethylamine	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
n-Nitrosodimethylamine	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
n-Nitrosodi-n-butylamine	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
n-Nitrosodi-n-propylamine	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
n-Nitrosodiphenylamine	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
n-Nitrosomethylalkylamine	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
n-Nitrosopiperidine	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
n-Nitrosopyrrolidine	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
o,o,o-Triethyl phosphorothioate	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-05								
Grab Date/Time:	10/04/2017 15:15								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
o-Cresol	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
o-Toluidine	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
p-(Dimethylamino)azobenzene	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
p-Chloro-m-cresol	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Pentachlorobenzene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Pentachloronitrobenzene (quintozone)	05	SW8270D	<1.03 ug/L		1.03	1	10/09/17 09:39	10/09/17 22:17	SKS
Phenacetin	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Phenanthrene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Phenol	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Phorate	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
p-Phenylenediamine	05	SW8270D	<10.3 ug/L	C	10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Pronamide	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Pyrene	05	SW8270D	<10.3 ug/L		10.3	1	10/09/17 09:39	10/09/17 22:17	SKS
Safrole	05	SW8270D	<2.58 ug/L		2.58	1	10/09/17 09:39	10/09/17 22:17	SKS
Surr: 2,4,6-Tribromophenol (Surr)	05	SW8270D	40.4 %		20-86		10/09/17 09:39	10/09/17 22:17	SKS
Surr: 2-Fluorobiphenyl (Surr)	05	SW8270D	62.0 %		23-87		10/09/17 09:39	10/09/17 22:17	SKS
Surr: 2-Fluorophenol (Surr)	05	SW8270D	32.7 %		10-52		10/09/17 09:39	10/09/17 22:17	SKS
Surr: Nitrobenzene-d5 (Surr)	05	SW8270D	83.8 %		10-98.5		10/09/17 09:39	10/09/17 22:17	SKS
Surr: Phenol-d5 (Surr)	05	SW8270D	28.2 %		5-33		10/09/17 09:39	10/09/17 22:17	SKS
Surr: p-Terphenyl-d14 (Surr)	05	SW8270D	58.4 %		27-133		10/09/17 09:39	10/09/17 22:17	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	05	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:35	10/06/17 21:35	LBH
PCB as Aroclor 1221	05	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:35	10/06/17 21:35	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results		Laboratory Sample ID: 17J0155-05							
Sample I.D.	13-1								
Grab Date/Time:	10/04/2017 15:15								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	05	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:35	10/06/17 21:35	LBH
PCB as Aroclor 1242	05	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:35	10/06/17 21:35	LBH
PCB as Aroclor 1248	05	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:35	10/06/17 21:35	LBH
PCB as Aroclor 1254	05	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:35	10/06/17 21:35	LBH
PCB as Aroclor 1260	05	SW8082A	<0.206 ug/L		0.206	1	10/06/17 21:35	10/06/17 21:35	LBH
<i>Surr: DCB</i>	05	SW8082A	70.0 %		30-105		10/06/17 21:35	10/06/17 21:35	LBH
<i>Surr: TCMX</i>	05	SW8082A	60.0 %		30-105		10/06/17 21:35	10/06/17 21:35	LBH
4,4'-DDD	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
4,4'-DDE	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
4,4'-DDT	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Aldrin	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
alpha-BHC	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
beta-BHC	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Chlordane	05	SW8081B	<0.206 ug/L		0.206	1	10/06/17 21:35	10/06/17 21:35	LBH
delta-BHC	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Dieldrin	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Endosulfan I	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Endosulfan II	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Endosulfan sulfate	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Endrin	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Endrin aldehyde	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
gamma-BHC (Lindane)	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Heptachlor	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Heptachlor epoxide	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Methoxychlor	05	SW8081B	<0.052 ug/L		0.052	1	10/06/17 21:35	10/06/17 21:35	LBH
Toxaphene	05	SW8081B	<1.03 ug/L		1.03	1	10/06/17 21:35	10/06/17 21:35	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-05								
Grab Date/Time:	10/04/2017 15:15								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	05	SW8081B	60.0 %		18-112		10/06/17 21:35	10/06/17 21:35	LBH
Surr: DCB	05	SW8081B	70.0 %		27-131		10/06/17 21:35	10/06/17 21:35	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	05	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:44	CVH
2,4,5-TP (Silvex)	05	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:44	CVH
2,4-D	05	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:44	CVH
Dinoseb	05	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:44	CVH
Pentachlorophenol	05	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 19:44	CVH
Surr: DCAA (Surr)	05	SW8151A	65.0 %		60-112		10/05/17 14:29	10/10/17 19:44	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	05	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 21:42	LBH
1,2,3-Trichloropropane	05	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 21:42	LBH
1,2-Dibromo-3-chloropropane (DBCP)	05	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 21:42	LBH
Wet Chemistry Analysis									
Cyanide	05	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 15:35	10/06/17 15:35	BBP
Sulfide	05	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-06								
Grab Date/Time:	10/04/2017 16:05								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:45	CWO
Arsenic	06	SW6020A	<1.0 ug/L		1.0	1	10/05/17 16:00	10/06/17 23:39	BG
Barium	06	SW6010C	0.0895 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:46	CWO
Beryllium	06	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:46	CWO
Cadmium	06	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:46	CWO
Cobalt	06	SW6010C	<0.0040 mg/L		0.0040	1	10/05/17 16:00	10/06/17 14:46	CWO
Chromium	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:46	CWO
Copper	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:45	CWO
Mercury	06	SW7470A	0.00032 mg/L		0.00020	1	10/09/17 08:30	10/10/17 13:02	RCV
Nickel	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:46	CWO
Lead	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:46	CWO
Antimony	06	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:39	BG
Selenium	06	SW6010C	<0.0500 mg/L		0.0500	1	10/05/17 16:00	10/06/17 14:46	CWO
Tin	06	SW6010C	<0.0200 mg/L		0.0200	1	10/05/17 16:00	10/06/17 14:46	CWO
Thallium	06	SW6020A	<1.00 ug/L		1.00	1	10/05/17 16:00	10/06/17 23:39	BG
Vanadium	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:45	CWO
Zinc	06	SW6010C	<0.0100 mg/L		0.0100	1	10/05/17 16:00	10/06/17 14:46	CWO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	06	SW8260B	<0.40 ug/L		0.40	1	10/06/17 16:28	10/06/17 16:28	KCS
1,1,1-Trichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,1,2,2-Tetrachloroethane	06	SW8260B	<0.40 ug/L		0.40	1	10/06/17 16:28	10/06/17 16:28	KCS
1,1,2-Trichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,1-Dichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,1-Dichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,1-Dichloropropene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,2,3-Trichloropropane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-06								
Grab Date/Time:	10/04/2017 16:05								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,2-Dichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,2-Dichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,2-Dichloropropane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,3-Dichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,3-Dichloropropane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
1,4-Dichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
2,2-Dichloropropane	06	SW8260B	<2.00 ug/L		2.00	1	10/06/17 16:28	10/06/17 16:28	KCS
2-Butanone (MEK)	06	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:28	10/06/17 16:28	KCS
2-Hexanone (MBK)	06	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:28	10/06/17 16:28	KCS
4-Methyl-2-pentanone (MIBK)	06	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Acetone	06	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:28	10/06/17 16:28	KCS
Acetonitrile	06	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:28	10/06/17 16:28	KCS
Acrolein	06	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:28	10/06/17 16:28	KCS
Acrylonitrile	06	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Allyl chloride	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Benzene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Bromochloromethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Bromodichloromethane	06	SW8260B	<0.50 ug/L		0.50	1	10/06/17 16:28	10/06/17 16:28	KCS
Bromoform	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Bromomethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Carbon disulfide	06	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:28	10/06/17 16:28	KCS
Carbon tetrachloride	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Chlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Chloroethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Chloroform	06	SW8260B	<0.50 ug/L		0.50	1	10/06/17 16:28	10/06/17 16:28	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-06								
Grab Date/Time:	10/04/2017 16:05								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Chloromethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Chloroprene	06	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:28	10/06/17 16:28	KCS
cis-1,2-Dichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
cis-1,3-Dichloropropene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Dibromochloromethane	06	SW8260B	<0.50 ug/L		0.50	1	10/06/17 16:28	10/06/17 16:28	KCS
Dibromomethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Dichlorodifluoromethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Ethyl methacrylate	06	SW8260B	<5.00 ug/L		5.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Ethylbenzene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Hexachlorobutadiene	06	SW8260B	<0.80 ug/L		0.80	1	10/06/17 16:28	10/06/17 16:28	KCS
Iodomethane	06	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:28	10/06/17 16:28	KCS
Isobutyl Alcohol	06	SW8260B	<40.0 ug/L		40.0	1	10/06/17 16:28	10/06/17 16:28	KCS
m+p-Xylenes	06	SW8260B	<2.00 ug/L		2.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Methacrylonitrile	06	SW8260B	<1.50 ug/L		1.50	1	10/06/17 16:28	10/06/17 16:28	KCS
Methyl methacrylate	06	SW8260B	<2.00 ug/L		2.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Methylene chloride	06	SW8260B	<4.00 ug/L		4.00	1	10/06/17 16:28	10/06/17 16:28	KCS
o-Xylene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Propionitrile	06	SW8260B	<40.0 ug/L		40.0	1	10/06/17 16:28	10/06/17 16:28	KCS
Styrene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Tetrachloroethylene (PCE)	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Toluene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
trans-1,2-Dichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
trans-1,3-Dichloropropene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
trans-1,4-Dichloro-2-butene	06	SW8260B	<4.00 ug/L		4.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Trichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Trichlorofluoromethane	06	SW8260B	<1.00 ug/L		1.00	1	10/06/17 16:28	10/06/17 16:28	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-06								
Grab Date/Time:	10/04/2017 16:05								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Vinyl acetate	06	SW8260B	<10.0 ug/L		10.0	1	10/06/17 16:28	10/06/17 16:28	KCS
Vinyl chloride	06	SW8260B	<0.50 ug/L		0.50	1	10/06/17 16:28	10/06/17 16:28	KCS
Xylenes, Total	06	SW8260B	<3.00 ug/L		3.00	1	10/06/17 16:28	10/06/17 16:28	KCS
Surr: 1,2-Dichloroethane-d4 (Surr)	06	SW8260B	92.8 %		70-120		10/06/17 16:28	10/06/17 16:28	KCS
Surr: 4-Bromofluorobenzene (Surr)	06	SW8260B	96.5 %		75-120		10/06/17 16:28	10/06/17 16:28	KCS
Surr: Dibromofluoromethane (Surr)	06	SW8260B	88.7 %		80-119		10/06/17 16:28	10/06/17 16:28	KCS
Surr: Toluene-d8 (Surr)	06	SW8260B	97.2 %		85-120		10/06/17 16:28	10/06/17 16:28	KCS
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	06	EPA625	Not Detected			1	10/09/17 09:39	10/10/17 14:40	SKS
1,2,4,5-Tetrachlorobenzene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
1,3,5-Trinitrobenzene	06	SW8270D	<5.32 ug/L		5.32	1	10/09/17 09:39	10/09/17 22:48	SKS
1,3-Dinitrobenzene	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
1,4-Naphthoquinone	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
1-Naphthylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2,3,4,6-Tetrachlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2,4,5-Trichlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2,4,6-Trichlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2,4-Dichlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2,4-Dimethylphenol	06	SW8270D	<0.53 ug/L		0.53	1	10/09/17 09:39	10/09/17 22:48	SKS
2,4-Dinitrophenol	06	SW8270D	<53.2 ug/L		53.2	1	10/09/17 09:39	10/09/17 22:48	SKS
2,4-Dinitrotoluene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2,6-Dichlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2,6-Dinitrotoluene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2-Acetylaminofluorene	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-06								
Grab Date/Time:	10/04/2017 16:05								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
2-Chloronaphthalene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2-Chlorophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2-Methylnaphthalene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2-Naphthylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2-Nitroaniline	06	SW8270D	<21.3 ug/L		21.3	1	10/09/17 09:39	10/09/17 22:48	SKS
2-Nitrophenol	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
3,3'-Dichlorobenzidine	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
3,3'-Dimethylbenzidine	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
3-Methylcholanthrene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
3-Nitroaniline	06	SW8270D	<21.3 ug/L		21.3	1	10/09/17 09:39	10/09/17 22:48	SKS
4,6-Dinitro-2-methylphenol	06	SW8270D	<53.2 ug/L		53.2	1	10/09/17 09:39	10/09/17 22:48	SKS
4-Aminobiphenyl	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
4-Bromophenyl phenyl ether	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
4-Chloroaniline	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
4-Chlorophenyl phenyl ether	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
4-Nitroaniline	06	SW8270D	<21.3 ug/L		21.3	1	10/09/17 09:39	10/09/17 22:48	SKS
4-Nitrophenol	06	SW8270D	<53.2 ug/L		53.2	1	10/09/17 09:39	10/09/17 22:48	SKS
5-Nitro-o-toluidine	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
7,12-Dimethylbenz (a) anthracene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Acenaphthene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Acenaphthylene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Acetophenone	06	SW8270D	<21.3 ug/L		21.3	1	10/09/17 09:39	10/09/17 22:48	SKS
Anthracene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Benzo (a) anthracene	06	SW8270D	<0.05 ug/L		0.05	1	10/09/17 09:39	10/09/17 22:48	SKS
Benzo (a) pyrene	06	SW8270D	<0.11 ug/L		0.11	1	10/09/17 09:39	10/09/17 22:48	SKS
Benzo (b) fluoranthene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-06								
Grab Date/Time:	10/04/2017 16:05								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Benzo (g,h,i) perylene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Benzo (k) fluoranthene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Benzyl alcohol	06	SW8270D	<21.3 ug/L		21.3	1	10/09/17 09:39	10/09/17 22:48	SKS
bis (2-Chloroethoxy) methane	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
bis (2-Chloroethyl) ether	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
2,2'-Oxybis (1-chloropropane)	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
bis (2-Ethylhexyl) phthalate	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
Butyl benzyl phthalate	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Chlorobenzilate	06	SW8270D	<2.66 ug/L	C	2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
Chrysene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Diallate	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
Dibenz (a,h) anthracene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Dibenzofuran	06	SW8270D	<5.32 ug/L		5.32	1	10/09/17 09:39	10/09/17 22:48	SKS
Diethyl phthalate	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Dimethoate	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
Dimethyl phthalate	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Di-n-butyl phthalate	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Di-n-octyl phthalate	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Diphenylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Disulfoton	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
Ethyl methanesulfonate	06	SW8270D	<21.3 ug/L		21.3	1	10/09/17 09:39	10/09/17 22:48	SKS
Ethyl parathion	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
Famphur	06	SW8270D	<2.66 ug/L	C	2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
Fluoranthene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Fluorene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Hexachlorobenzene	06	SW8270D	<0.05 ug/L	C	0.05	1	10/09/17 09:39	10/09/17 22:48	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-06								
Grab Date/Time:	10/04/2017 16:05								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Hexachlorobutadiene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Hexachlorocyclopentadiene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Hexachloroethane	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Hexachloropropene	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
Indeno (1,2,3-cd) pyrene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Isodrin	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Isophorone	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Isosafrole	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Kepone	06	SW8270D	<2.66 ug/L	C	2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
m+p-Cresols	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Methapyrilene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Methyl methanesulfonate	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Methyl parathion	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
Naphthalene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Nitrobenzene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
n-Nitrosodiethylamine	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
n-Nitrosodimethylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
n-Nitrosodi-n-butylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
n-Nitrosodi-n-propylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
n-Nitrosodiphenylamine	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
n-Nitrosomethylalkylamine	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
n-Nitrosopiperidine	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
n-Nitrosopyrrolidine	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
o,o,o-Triethyl phosphorothioate	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
o,o-Diethyl o-2-pyrazinyl phosphorothioate	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-06								
Grab Date/Time:	10/04/2017 16:05								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
o+m+p-Cresols	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
o-Cresol	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
o-Toluidine	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
p-(Dimethylamino)azobenzene	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
p-Chloro-m-cresol	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Pentachlorobenzene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Pentachloronitrobenzene (quintozone)	06	SW8270D	<1.06 ug/L		1.06	1	10/09/17 09:39	10/09/17 22:48	SKS
Phenacetin	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Phenanthrene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Phenol	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Phorate	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
p-Phenylenediamine	06	SW8270D	<10.6 ug/L	C	10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Pronamide	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Pyrene	06	SW8270D	<10.6 ug/L		10.6	1	10/09/17 09:39	10/09/17 22:48	SKS
Safrole	06	SW8270D	<2.66 ug/L		2.66	1	10/09/17 09:39	10/09/17 22:48	SKS
Surr: 2,4,6-Tribromophenol (Surr)	06	SW8270D	46.1 %		20-86		10/09/17 09:39	10/09/17 22:48	SKS
Surr: 2-Fluorobiphenyl (Surr)	06	SW8270D	66.2 %		23-87		10/09/17 09:39	10/09/17 22:48	SKS
Surr: 2-Fluorophenol (Surr)	06	SW8270D	37.0 %		10-52		10/09/17 09:39	10/09/17 22:48	SKS
Surr: Nitrobenzene-d5 (Surr)	06	SW8270D	86.6 %		10-98.5		10/09/17 09:39	10/09/17 22:48	SKS
Surr: Phenol-d5 (Surr)	06	SW8270D	31.6 %		5-33		10/09/17 09:39	10/09/17 22:48	SKS
Surr: p-Terphenyl-d14 (Surr)	06	SW8270D	65.7 %		27-133		10/09/17 09:39	10/09/17 22:48	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	06	SW8082A	<0.204 ug/L		0.204	1	10/06/17 21:54	10/06/17 21:54	LBH
PCB as Aroclor 1221	06	SW8082A	<0.204 ug/L		0.204	1	10/06/17 21:54	10/06/17 21:54	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-06								
Grab Date/Time:	10/04/2017 16:05								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1232	06	SW8082A	<0.204 ug/L		0.204	1	10/06/17 21:54	10/06/17 21:54	LBH
PCB as Aroclor 1242	06	SW8082A	<0.204 ug/L		0.204	1	10/06/17 21:54	10/06/17 21:54	LBH
PCB as Aroclor 1248	06	SW8082A	<0.204 ug/L		0.204	1	10/06/17 21:54	10/06/17 21:54	LBH
PCB as Aroclor 1254	06	SW8082A	<0.204 ug/L		0.204	1	10/06/17 21:54	10/06/17 21:54	LBH
PCB as Aroclor 1260	06	SW8082A	<0.204 ug/L		0.204	1	10/06/17 21:54	10/06/17 21:54	LBH
<i>Surr: DCB</i>	06	SW8082A	80.0 %		30-105		10/06/17 21:54	10/06/17 21:54	LBH
<i>Surr: TCMX</i>	06	SW8082A	55.0 %		30-105		10/06/17 21:54	10/06/17 21:54	LBH
4,4'-DDD	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
4,4'-DDE	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
4,4'-DDT	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Aldrin	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
alpha-BHC	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
beta-BHC	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Chlordane	06	SW8081B	<0.204 ug/L		0.204	1	10/06/17 21:54	10/06/17 21:54	LBH
delta-BHC	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Dieldrin	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Endosulfan I	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Endosulfan II	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Endosulfan sulfate	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Endrin	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Endrin aldehyde	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
gamma-BHC (Lindane)	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Heptachlor	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Heptachlor epoxide	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Methoxychlor	06	SW8081B	<0.051 ug/L		0.051	1	10/06/17 21:54	10/06/17 21:54	LBH
Toxaphene	06	SW8081B	<1.02 ug/L		1.02	1	10/06/17 21:54	10/06/17 21:54	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Laboratory Order ID: 17J0155

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17J0155-06								
Grab Date/Time:	10/04/2017 16:05								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Surr: TCMX	06	SW8081B	55.0 %		18-112		10/06/17 21:54	10/06/17 21:54	LBH
Surr: DCB	06	SW8081B	80.0 %		27-131		10/06/17 21:54	10/06/17 21:54	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	06	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 20:06	CVH
2,4,5-TP (Silvex)	06	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 20:06	CVH
2,4-D	06	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 20:06	CVH
Dinoseb	06	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 20:06	CVH
Pentachlorophenol	06	SW8151A	<0.500 ug/L		0.500	1	10/05/17 14:29	10/10/17 20:06	CVH
Surr: DCAA (Surr)	06	SW8151A	85.0 %		60-112		10/05/17 14:29	10/10/17 20:06	CVH
Micro-extractables by GC/ECD									
1,2-Dibromoethane (EDB)	06	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 22:02	LBH
1,2,3-Trichloropropane	06	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 22:02	LBH
1,2-Dibromo-3-chloropropane (DBCP)	06	SW8011	<0.010 ug/L		0.010	1	10/11/17 11:53	10/11/17 22:02	LBH
Wet Chemistry Analysis									
Cyanide	06	SW9012B	<0.01 mg/L	Cl	0.01	1	10/06/17 15:38	10/06/17 15:38	BBP
Sulfide	06	SW9215	<1.00 mg/L		1.00	1	10/09/17 16:18	10/09/17 16:18	BBP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Analytical Summary

Preparation Method:

Preparation Method:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods					
17J0112-01	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0158	AJ70020
17J0112-01RE1	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0182	AJ70029
17J0112-02	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0158	AJ70020
17J0112-02RE1	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0182	AJ70029
17J0112-03	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0158	AJ70020
17J0112-03RE1	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0182	AJ70029
17J0112-04	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0158	AJ70020
17J0112-04RE1	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0182	AJ70029
17J0112-05	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0158	AJ70020
17J0112-05RE1	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0182	AJ70029
17J0112-06	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0158	AJ70020
17J0112-06RE1	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0182	AJ70029
17J0112-07	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0158	AJ70020
17J0112-08	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0158	AJ70020
17J0112-08RE1	50.0 mL / 50.0 mL	SW6010C	BAJ0126	SAJ0182	AJ70029
Metals (Total) by EPA 6000/7000 Series Methods					
17J0155-01	50.0 mL / 50.0 mL	SW6010C	BAJ0154	SAJ0182	AJ70029
17J0155-02	50.0 mL / 50.0 mL	SW6010C	BAJ0154	SAJ0182	AJ70029
17J0155-03	50.0 mL / 50.0 mL	SW6010C	BAJ0154	SAJ0182	AJ70029
17J0155-04	50.0 mL / 50.0 mL	SW6010C	BAJ0154	SAJ0182	AJ70029
17J0155-05	50.0 mL / 50.0 mL	SW6010C	BAJ0154	SAJ0182	AJ70029
17J0155-06	50.0 mL / 50.0 mL	SW6010C	BAJ0154	SAJ0182	AJ70029
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods					
17J0112-04	50.0 mL / 50.0 mL	SW6020A	BAJ0127	SAJ0194	AJ70031
17J0112-05	50.0 mL / 50.0 mL	SW6020A	BAJ0127	SAJ0194	AJ70031
17J0112-06	50.0 mL / 50.0 mL	SW6020A	BAJ0127	SAJ0194	AJ70031
17J0112-07	50.0 mL / 50.0 mL	SW6020A	BAJ0127	SAJ0194	AJ70031



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17J0112-08	50.0 mL / 50.0 mL	SW6020A	BAJ0127	SAJ0194	AJ70031
Metals (Total) by EPA 6000/7000 Series Methods		Preparation Method:	EPA200.8 R5.4		
17J0155-01	50.0 mL / 50.0 mL	SW6020A	BAJ0157	SAJ0194	AJ70031
17J0155-02	50.0 mL / 50.0 mL	SW6020A	BAJ0157	SAJ0194	AJ70031
17J0155-03	50.0 mL / 50.0 mL	SW6020A	BAJ0157	SAJ0194	AJ70031
17J0155-04	50.0 mL / 50.0 mL	SW6020A	BAJ0157	SAJ0194	AJ70031
17J0155-05	50.0 mL / 50.0 mL	SW6020A	BAJ0157	SAJ0194	AJ70031
17J0155-06	50.0 mL / 50.0 mL	SW6020A	BAJ0157	SAJ0194	AJ70031
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analysis		Preparation Method:	No Prep Wet Chem		
17J0112-01	100 mL / 100 mL	SW7196A	BAJ0174	SAJ0164	AJ70025
17J0112-02	100 mL / 100 mL	SW7196A	BAJ0174	SAJ0164	AJ70025
17J0112-03	100 mL / 100 mL	SW7196A	BAJ0174	SAJ0164	AJ70025
Wet Chemistry Analysis		Preparation Method:	No Prep Wet Chem		
17J0112-04	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
17J0112-05	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
17J0112-06	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
17J0112-07	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
17J0112-08	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
17J0155-01	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
17J0155-02	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
17J0155-03	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
17J0155-04	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
17J0155-05	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
17J0155-06	6.00 mL / 6.00 mL	SW9012B	BAJ0197	SAJ0181	AJ70028
Wet Chemistry Analysis		Preparation Method:	No Prep Wet Chem		
17J0112-04	6.00 mL / 6.00 mL	SW9215	BAJ0230	SAJ0209	
17J0112-05	6.00 mL / 6.00 mL	SW9215	BAJ0230	SAJ0209	
17J0112-06	6.00 mL / 6.00 mL	SW9215	BAJ0230	SAJ0209	
17J0112-07	6.00 mL / 6.00 mL	SW9215	BAJ0230	SAJ0209	
17J0112-08	6.00 mL / 6.00 mL	SW9215	BAJ0230	SAJ0209	
17J0155-01	6.00 mL / 6.00 mL	SW9215	BAJ0230	SAJ0209	
17J0155-02	6.00 mL / 6.00 mL	SW9215	BAJ0230	SAJ0209	



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17J0155-03	6.00 mL / 6.00 mL	SW9215	BAJ0230	SAJ0209	
Wet Chemistry Analysis					
17J0155-04	6.00 mL / 6.00 mL	SW9215	BAJ0231	SAJ0209	
17J0155-05	6.00 mL / 6.00 mL	SW9215	BAJ0231	SAJ0209	
17J0155-06	6.00 mL / 6.00 mL	SW9215	BAJ0231	SAJ0209	
Semivolatile Hydrocarbons by GC					
17J0020-01	930 mL / 1.00 mL	SW8015C	BAJ0075	SAJ0086	AI70149
17J0020-02	930 mL / 1.00 mL	SW8015C	BAJ0075	SAJ0086	AI70149
Semivolatile Organic Compounds by GCMS					
17J0112-04	960 mL / 1.00 mL	EPA625	BAJ0133	SAJ0154	AI70066
17J0112-05	930 mL / 1.00 mL	EPA625	BAJ0133	SAJ0154	AI70066
17J0112-06	940 mL / 1.00 mL	EPA625	BAJ0133	SAJ0154	AI70066
17J0112-07	920 mL / 1.00 mL	EPA625	BAJ0133	SAJ0154	AI70066
17J0112-08	920 mL / 1.00 mL	EPA625	BAJ0133	SAJ0154	AI70066
17J0112-04	960 mL / 1.00 mL	SW8270D	BAJ0133	SAJ0154	AI70066
17J0112-05	930 mL / 1.00 mL	SW8270D	BAJ0133	SAJ0154	AI70066
17J0112-06	940 mL / 1.00 mL	SW8270D	BAJ0133	SAJ0154	AI70066
17J0112-07	920 mL / 1.00 mL	SW8270D	BAJ0133	SAJ0154	AI70066
17J0112-08	920 mL / 1.00 mL	SW8270D	BAJ0133	SAJ0154	AI70066
Organochlorine Herbicides by GC/ECD					
17J0112-04	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
17J0112-05	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
17J0112-06	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
17J0112-07	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
17J0112-08	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
17J0155-01	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
17J0155-02	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
17J0155-03	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
17J0155-04	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
17J0155-05	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
17J0155-06	900 mL / 5.00 mL	SW8151A	BAJ0144	SAJ0291	AI70122
Organochlorine Pesticides and PCBs by GC/ECD					
		Preparation Method:	SW3510C		



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Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17J0112-04	980 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0112-05	930 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0112-06	910 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0112-07	920 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0112-08	900 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0155-01	980 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0155-02	910 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0155-03	940 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0155-04	970 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0155-05	970 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0155-06	980 mL / 1.00 mL	SW8081B	BAJ0182	SAJ0223	AI70057
17J0112-04	980 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
17J0112-05	930 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
17J0112-06	910 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
17J0112-07	920 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
17J0112-08	900 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
17J0155-01	980 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
17J0155-02	910 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
17J0155-03	940 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
17J0155-04	970 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
17J0155-05	970 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
17J0155-06	980 mL / 1.00 mL	SW8082A	BAJ0182	SAJ0224	AI70058
Semivolatile Organic Compounds by GCMS		Preparation Method:	SW3510C		
17J0155-01	910 mL / 1.00 mL	EPA625	BAJ0224	SAJ0215	AI70066
17J0155-02	910 mL / 1.00 mL	EPA625	BAJ0224	SAJ0215	AI70066
17J0155-03	950 mL / 1.00 mL	EPA625	BAJ0224	SAJ0215	AI70066
17J0155-04	950 mL / 1.00 mL	EPA625	BAJ0224	SAJ0215	AI70066
17J0155-05	970 mL / 1.00 mL	EPA625	BAJ0224	SAJ0215	AI70066
17J0155-06	940 mL / 1.00 mL	EPA625	BAJ0224	SAJ0215	AI70066
17J0155-01	910 mL / 1.00 mL	SW8270D	BAJ0224	SAJ0215	AI70066
17J0155-02	910 mL / 1.00 mL	SW8270D	BAJ0224	SAJ0215	AI70066
17J0155-03	950 mL / 1.00 mL	SW8270D	BAJ0224	SAJ0215	AI70066
17J0155-04	950 mL / 1.00 mL	SW8270D	BAJ0224	SAJ0215	AI70066
17J0155-05	970 mL / 1.00 mL	SW8270D	BAJ0224	SAJ0215	AI70066
17J0155-06	940 mL / 1.00 mL	SW8270D	BAJ0224	SAJ0215	AI70066
Semivolatile Hydrocarbons by GC		Preparation Method:	SW3510C		



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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17J0112-01	920 mL / 1.00 mL	SW8015C	BAJ0225	SAJ0242	AI70120
17J0112-02	910 mL / 1.00 mL	SW8015C	BAJ0225	SAJ0242	AI70120
17J0112-03	910 mL / 1.00 mL	SW8015C	BAJ0225	SAJ0242	AI70120
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Hydrocarbons by GC		Preparation Method:	SW5030B		
17J0020-01	5.00 mL / 5.00 mL	SW8015C	BAJ0064	SAJ0065	AF70032
17J0020-02	5.00 mL / 5.00 mL	SW8015C	BAJ0064	SAJ0065	AF70032
Volatile Organic Compounds by GCMS		Preparation Method:	SW5030B		
17J0020-01	5.00 mL / 5.00 mL	SW8260B	BAJ0087	SAJ0087	AJ70010
17J0020-02	5.00 mL / 5.00 mL	SW8260B	BAJ0087	SAJ0087	AJ70010
Volatile Organic Compounds by GCMS		Preparation Method:	SW5030B		
17J0112-01	5.00 mL / 5.00 mL	SW8260B	BAJ0125	SAJ0121	AJ70012
17J0112-02	5.00 mL / 5.00 mL	SW8260B	BAJ0125	SAJ0121	AJ70012
17J0112-03	5.00 mL / 5.00 mL	SW8260B	BAJ0125	SAJ0121	AJ70012
17J0112-04	5.00 mL / 5.00 mL	SW8260B	BAJ0125	SAJ0121	AJ70012
17J0112-05	5.00 mL / 5.00 mL	SW8260B	BAJ0125	SAJ0121	AJ70012
17J0112-06	5.00 mL / 5.00 mL	SW8260B	BAJ0125	SAJ0121	AJ70012
17J0112-07	5.00 mL / 5.00 mL	SW8260B	BAJ0125	SAJ0121	AJ70012
17J0112-08	5.00 mL / 5.00 mL	SW8260B	BAJ0125	SAJ0121	AJ70012
17J0112-09	5.00 mL / 5.00 mL	SW8260B	BAJ0125	SAJ0121	AJ70012
Volatile Hydrocarbons by GC		Preparation Method:	SW5030B		
17J0112-01	5.00 mL / 5.00 mL	SW8015C	BAJ0131	SAJ0142	AF70032
17J0112-02	5.00 mL / 5.00 mL	SW8015C	BAJ0131	SAJ0142	AF70032
17J0112-03	5.00 mL / 5.00 mL	SW8015C	BAJ0131	SAJ0142	AF70032
17J0112-09	5.00 mL / 5.00 mL	SW8015C	BAJ0131	SAJ0142	AF70032
Volatile Organic Compounds by GCMS		Preparation Method:	SW5030B		
17J0155-01	5.00 mL / 5.00 mL	SW8260B	BAJ0227	SAJ0207	AJ70012
17J0155-02	5.00 mL / 5.00 mL	SW8260B	BAJ0227	SAJ0207	AJ70012
17J0155-03	5.00 mL / 5.00 mL	SW8260B	BAJ0227	SAJ0207	AJ70012
17J0155-04	5.00 mL / 5.00 mL	SW8260B	BAJ0227	SAJ0207	AJ70012
17J0155-05	5.00 mL / 5.00 mL	SW8260B	BAJ0227	SAJ0207	AJ70012
17J0155-06	5.00 mL / 5.00 mL	SW8260B	BAJ0227	SAJ0207	AJ70012



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods					
17J0112-01	20.0 mL / 20.0 mL	SW7470A	BAJ0219	SAJ0255	AJ70044
17J0112-02	20.0 mL / 20.0 mL	SW7470A	BAJ0219	SAJ0255	AJ70044
17J0112-03	20.0 mL / 20.0 mL	SW7470A	BAJ0219	SAJ0255	AJ70044
17J0112-04	20.0 mL / 20.0 mL	SW7470A	BAJ0219	SAJ0255	AJ70044
17J0112-05	20.0 mL / 20.0 mL	SW7470A	BAJ0219	SAJ0255	AJ70044
17J0112-06	20.0 mL / 20.0 mL	SW7470A	BAJ0219	SAJ0255	AJ70044
17J0112-07	20.0 mL / 20.0 mL	SW7470A	BAJ0219	SAJ0255	AJ70044
17J0112-08	20.0 mL / 20.0 mL	SW7470A	BAJ0219	SAJ0255	AJ70044
Metals (Total) by EPA 6000/7000 Series Methods					
17J0155-01	20.0 mL / 20.0 mL	SW7470A	BAJ0220	SAJ0255	AJ70044
17J0155-02	20.0 mL / 20.0 mL	SW7470A	BAJ0220	SAJ0255	AJ70044
17J0155-03	20.0 mL / 20.0 mL	SW7470A	BAJ0220	SAJ0255	AJ70044
17J0155-04	20.0 mL / 20.0 mL	SW7470A	BAJ0220	SAJ0255	AJ70044
17J0155-05	20.0 mL / 20.0 mL	SW7470A	BAJ0220	SAJ0255	AJ70044
17J0155-06	20.0 mL / 20.0 mL	SW7470A	BAJ0220	SAJ0255	AJ70044
 Sample ID					
Preparation Factors Initial / Final					
Method					
Batch ID					
Sequence ID					
Calibration ID					
Micro-extractables by GC/ECD					
17J0112-04	60.0 mL / 2.00 mL	SW8011	BAJ0184	SAJ0169	AG70133
17J0112-05	61.4 mL / 2.00 mL	SW8011	BAJ0184	SAJ0169	AG70133
17J0112-06	60.3 mL / 2.00 mL	SW8011	BAJ0184	SAJ0169	AG70133
17J0112-07	61.2 mL / 2.00 mL	SW8011	BAJ0184	SAJ0169	AG70133
17J0112-08	61.5 mL / 2.00 mL	SW8011	BAJ0184	SAJ0169	AG70133
17J0112-09	61.2 mL / 2.00 mL	SW8011	BAJ0184	SAJ0169	AG70133
Micro-extractables by GC/ECD					
17J0155-01	61.9 mL / 2.00 mL	SW8011	BAJ0313	SAJ0302	AG70133
17J0155-02	61.4 mL / 2.00 mL	SW8011	BAJ0313	SAJ0302	AG70133
17J0155-03	61.1 mL / 2.00 mL	SW8011	BAJ0313	SAJ0302	AG70133
17J0155-04	61.7 mL / 2.00 mL	SW8011	BAJ0313	SAJ0302	AG70133
17J0155-05	61.4 mL / 2.00 mL	SW8011	BAJ0313	SAJ0302	AG70133
17J0155-06	61.3 mL / 2.00 mL	SW8011	BAJ0313	SAJ0302	AG70133



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0126 - EPA200.2/R2.8

Blank (BAJ0126-BLK1)				Prepared & Analyzed: 10/05/2017				
Arsenic	<0.0200 mg/L	0.0200	mg/L					
Barium	<0.0100 mg/L	0.0100	mg/L					
Beryllium	<0.0040 mg/L	0.0040	mg/L					
Cadmium	<0.0040 mg/L	0.0040	mg/L					
Chromium	<0.0100 mg/L	0.0100	mg/L					
Cobalt	<0.0040 mg/L	0.0040	mg/L					
Copper	<0.0100 mg/L	0.0100	mg/L					
Lead	<0.0100 mg/L	0.0100	mg/L					
Nickel	<0.0100 mg/L	0.0100	mg/L					
Selenium	<0.0500 mg/L	0.0500	mg/L					
Silver	<0.0100 mg/L	0.0100	mg/L					
Tin	<0.0200 mg/L	0.0200	mg/L					
Vanadium	<0.0100 mg/L	0.0100	mg/L					
Zinc	<0.0100 mg/L	0.0100	mg/L					

Blank (BAJ0126-BLK2)				Prepared: 10/05/2017 Analyzed: 10/06/2017				
Barium	<0.0100 mg/L	0.0100	mg/L					
Beryllium	<0.0040 mg/L	0.0040	mg/L					
Cadmium	<0.0040 mg/L	0.0040	mg/L					
Chromium	<0.0100 mg/L	0.0100	mg/L					
Cobalt	<0.0040 mg/L	0.0040	mg/L					
Copper	<0.0100 mg/L	0.0100	mg/L					
Lead	<0.0100 mg/L	0.0100	mg/L					
Nickel	<0.0100 mg/L	0.0100	mg/L					
Selenium	<0.0500 mg/L	0.0500	mg/L					
Silver	<0.0100 mg/L	0.0100	mg/L					
Tin	<0.0200 mg/L	0.0200	mg/L					
Vanadium	<0.0100 mg/L	0.0100	mg/L					
Zinc	<0.0100 mg/L	0.0100	mg/L					



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0126 - EPA200.2/R2.8

LCS (BAJ0126-BS1) Prepared & Analyzed: 10/05/2017						
Arsenic	0.519 mg/L	0.0200	mg/L	0.500 mg/L	104	80-120
Barium	0.505 mg/L	0.0100	mg/L	0.500 mg/L	101	80-120
Beryllium	0.520 mg/L	0.0040	mg/L	0.500 mg/L	104	80-120
Cadmium	0.510 mg/L	0.0040	mg/L	0.500 mg/L	102	80-120
Chromium	0.501 mg/L	0.0100	mg/L	0.500 mg/L	100	80-120
Cobalt	0.502 mg/L	0.0040	mg/L	0.500 mg/L	100	80-120
Copper	0.509 mg/L	0.0100	mg/L	0.500 mg/L	102	80-120
Lead	0.501 mg/L	0.0100	mg/L	0.500 mg/L	100	80-120
Nickel	0.5007 mg/L	0.0100	mg/L	0.500 mg/L	100	80-120
Selenium	0.490 mg/L	0.0500	mg/L	0.500 mg/L	98.1	80-120
Silver	0.107 mg/L	0.0100	mg/L	0.100 mg/L	107	80-120
Tin	0.0969 mg/L	0.0200	mg/L	0.100 mg/L	96.9	80-120
Vanadium	0.504 mg/L	0.0100	mg/L	0.500 mg/L	101	80-120
Zinc	0.493 mg/L	0.0100	mg/L	0.500 mg/L	98.7	80-120

LCS Dup (BAJ0126-BSD1) Prepared & Analyzed: 10/05/2017						
Arsenic	0.528 mg/L	0.0200	mg/L	0.500 mg/L	106	80-120 1.71 20
Barium	0.511 mg/L	0.0100	mg/L	0.500 mg/L	102	80-120 1.26 20
Beryllium	0.525 mg/L	0.0040	mg/L	0.500 mg/L	105	80-120 1.05 20
Cadmium	0.514 mg/L	0.0040	mg/L	0.500 mg/L	103	80-120 0.848 20
Chromium	0.506 mg/L	0.0100	mg/L	0.500 mg/L	101	80-120 0.861 20
Cobalt	0.508 mg/L	0.0040	mg/L	0.500 mg/L	102	80-120 1.15 20
Copper	0.513 mg/L	0.0100	mg/L	0.500 mg/L	103	80-120 0.832 20
Lead	0.507 mg/L	0.0100	mg/L	0.500 mg/L	101	80-120 1.18 20
Nickel	0.5075 mg/L	0.0100	mg/L	0.500 mg/L	102	80-120 1.34 20
Selenium	0.501 mg/L	0.0500	mg/L	0.500 mg/L	100	80-120 2.07 20
Silver	0.109 mg/L	0.0100	mg/L	0.100 mg/L	109	80-120 1.90 20
Tin	0.0981 mg/L	0.0200	mg/L	0.100 mg/L	98.1	80-120 1.24 20
Vanadium	0.507 mg/L	0.0100	mg/L	0.500 mg/L	101	80-120 0.648 20
Zinc	0.501 mg/L	0.0100	mg/L	0.500 mg/L	100	80-120 1.55 20



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0126 - EPA200.2/R2.8

Matrix Spike (BAJ0126-MS1)		Source: 17J0112-04		Prepared & Analyzed: 10/05/2017					
Arsenic	0.525 mg/L	0.0200	mg/L	0.500	<0.0200 mg/L	103	75-125		
Barium	0.562 mg/L	0.0100	mg/L	0.500	0.0505 mg/L	102	75-125		
Beryllium	0.520 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	104	75-125		
Cadmium	0.504 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	101	75-125		
Chromium	0.508 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	99.6	75-125		
Cobalt	0.500 mg/L	0.0040	mg/L	0.500	0.0040 mg/L	99.2	75-125		
Copper	0.514 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	102	75-125		
Lead	0.496 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	99.1	75-125		
Nickel	0.5028 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	99.3	75-125		
Selenium	0.497 mg/L	0.0500	mg/L	0.500	<0.0500 mg/L	99.4	75-125		
Silver	0.108 mg/L	0.0100	mg/L	0.100	<0.0100 mg/L	105	75-125	E	
Tin	0.0906 mg/L	0.0200	mg/L	0.100	<0.0200 mg/L	90.6	75-125		
Vanadium	0.510 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	101	75-125		
Zinc	0.506 mg/L	0.0100	mg/L	0.500	0.0129 mg/L	98.6	75-125		

Matrix Spike (BAJ0126-MS2)		Source: 17J0112-08		Prepared & Analyzed: 10/05/2017					
Arsenic	0.517 mg/L	0.0200	mg/L	0.500	<0.0200 mg/L	103	75-125		
Barium	0.542 mg/L	0.0100	mg/L	0.500	0.0440 mg/L	99.5	75-125		
Beryllium	0.513 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	103	75-125		
Cadmium	0.493 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	98.5	75-125		
Chromium	0.489 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	97.7	75-125		
Cobalt	0.487 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	96.9	75-125		
Copper	0.501 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	100	75-125		
Lead	0.482 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	96.4	75-125		
Nickel	0.4870 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	97.4	75-125		
Selenium	0.505 mg/L	0.0500	mg/L	0.500	<0.0500 mg/L	97.9	75-125		
Silver	0.106 mg/L	0.0100	mg/L	0.100	<0.0100 mg/L	103	75-125	E	
Tin	0.0914 mg/L	0.0200	mg/L	0.100	<0.0200 mg/L	91.4	75-125		
Vanadium	0.494 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	98.0	75-125		
Zinc	0.487 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	97.4	75-125		



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0126 - EPA200.2/R2.8

Matrix Spike Dup (BAJ0126-MSD1)		Source: 17J0112-04		Prepared & Analyzed: 10/05/2017					
Arsenic	0.513 mg/L	0.0200	mg/L	0.500 <0.0200 mg/L	100	75-125	2.41	20	
Barium	0.546 mg/L	0.0100	mg/L	0.500 0.0505 mg/L	99.2	75-125	2.81	20	
Beryllium	0.505 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	101	75-125	2.97	20	
Cadmium	0.489 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	97.9	75-125	2.94	20	
Chromium	0.497 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	97.4	75-125	2.23	20	
Cobalt	0.489 mg/L	0.0040	mg/L	0.500 0.0040 mg/L	97.1	75-125	2.15	20	
Copper	0.498 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	98.9	75-125	3.21	20	
Lead	0.483 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	96.7	75-125	2.48	20	
Nickel	0.4905 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	96.9	75-125	2.46	20	
Selenium	0.490 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	97.9	75-125	1.48	20	
Silver	0.103 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	101	75-125	4.51	20	E
Tin	0.0883 mg/L	0.0200	mg/L	0.100 <0.0200 mg/L	88.3	75-125	2.52	20	
Vanadium	0.496 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	97.7	75-125	2.83	20	
Zinc	0.495 mg/L	0.0100	mg/L	0.500 0.0129 mg/L	96.4	75-125	2.13	20	

Matrix Spike Dup (BAJ0126-MSD2)		Source: 17J0112-08		Prepared & Analyzed: 10/05/2017					
Arsenic	0.502 mg/L	0.0200	mg/L	0.500 <0.0200 mg/L	100	75-125	2.79	20	
Barium	0.515 mg/L	0.0100	mg/L	0.500 0.0440 mg/L	94.2	75-125	5.01	20	
Beryllium	0.494 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	98.7	75-125	3.83	20	
Cadmium	0.475 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	95.0	75-125	3.64	20	
Chromium	0.474 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	94.8	75-125	2.99	20	
Cobalt	0.474 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	94.3	75-125	2.73	20	
Copper	0.482 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	96.4	75-125	3.82	20	
Lead	0.471 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	94.1	75-125	2.35	20	
Nickel	0.4720 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	94.4	75-125	3.13	20	
Selenium	0.484 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	93.8	75-125	4.16	20	
Silver	0.0998 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	96.9	75-125	6.00	20	
Tin	0.0869 mg/L	0.0200	mg/L	0.100 <0.0200 mg/L	86.9	75-125	5.00	20	
Vanadium	0.476 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	94.5	75-125	3.63	20	
Zinc	0.473 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	94.6	75-125	2.85	20	



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/12/2017 17:19
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0127 - EPA200.8 R5.4

Blank (BAJ0127-BLK1)		Prepared: 10/05/2017 Analyzed: 10/06/2017						
Antimony	<1.00 ug/L	1.00	ug/L					
Arsenic	<1.0 ug/L	1.0	ug/L					
Thallium	<1.00 ug/L	1.00	ug/L					

LCS (BAJ0127-BS1)		Prepared: 10/05/2017 Analyzed: 10/06/2017						
Antimony	51.8 ug/L	1.00	ug/L	50.0 ug/L	104	80-120		
Arsenic	51 ug/L	1.0	ug/L	50.0 ug/L	103	80-120		
Thallium	50.6 ug/L	1.00	ug/L	50.0 ug/L	101	80-120		

LCS Dup (BAJ0127-BSD1)		Prepared: 10/05/2017 Analyzed: 10/06/2017						
Antimony	52.0 ug/L	1.00	ug/L	50.0 ug/L	104	80-120	0.295	20
Arsenic	50 ug/L	1.0	ug/L	50.0 ug/L	99.6	80-120	3.12	20
Thallium	52.7 ug/L	1.00	ug/L	50.0 ug/L	105	80-120	4.11	20

Matrix Spike (BAJ0127-MS1)		Source: 17J0112-04 Prepared: 10/05/2017 Analyzed: 10/06/2017						
Antimony	47.5 ug/L	1.00	ug/L	50.0 <1.00 ug/L	95.0	75-125		
Arsenic	52 ug/L	1.0	ug/L	50.0 1.4 ug/L	101	75-125		
Thallium	48.1 ug/L	1.00	ug/L	50.0 <1.00 ug/L	96.3	75-125		

Matrix Spike Dup (BAJ0127-MSD1)		Source: 17J0112-04 Prepared: 10/05/2017 Analyzed: 10/06/2017						
Antimony	49.2 ug/L	1.00	ug/L	50.0 <1.00 ug/L	98.5	75-125	3.59	20
Arsenic	53 ug/L	1.0	ug/L	50.0 1.4 ug/L	103	75-125	1.23	20
Thallium	49.6 ug/L	1.00	ug/L	50.0 <1.00 ug/L	99.1	75-125	2.89	20

Batch BAJ0154 - EPA200.2/R2.8

Blank (BAJ0154-BLK1)		Prepared: 10/05/2017 Analyzed: 10/06/2017						
Barium	<0.0100 mg/L	0.0100	mg/L					
Beryllium	<0.0040 mg/L	0.0040	mg/L					
Cadmium	<0.0040 mg/L	0.0040	mg/L					
Chromium	<0.0100 mg/L	0.0100	mg/L					
Cobalt	<0.0040 mg/L	0.0040	mg/L					
Copper	<0.0100 mg/L	0.0100	mg/L					



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201 Church Street
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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0154 - EPA200.2/R2.8

Blank (BAJ0154-BLK1)		Prepared: 10/05/2017 Analyzed: 10/06/2017						
Lead	<0.0100 mg/L	0.0100	mg/L					
Nickel	<0.0100 mg/L	0.0100	mg/L					
Selenium	<0.0500 mg/L	0.0500	mg/L					
Silver	<0.0100 mg/L	0.0100	mg/L					
Tin	<0.0200 mg/L	0.0200	mg/L					
Vanadium	<0.0100 mg/L	0.0100	mg/L					
Zinc	<0.0100 mg/L	0.0100	mg/L					

LCS (BAJ0154-BS1)		Prepared: 10/05/2017 Analyzed: 10/06/2017						
Barium	0.490 mg/L	0.0100	mg/L	0.500 mg/L	98.0	80-120		
Beryllium	0.499 mg/L	0.0040	mg/L	0.500 mg/L	99.8	80-120		
Cadmium	0.502 mg/L	0.0040	mg/L	0.500 mg/L	100	80-120		
Chromium	0.494 mg/L	0.0100	mg/L	0.500 mg/L	98.9	80-120		
Cobalt	0.499 mg/L	0.0040	mg/L	0.500 mg/L	99.8	80-120		
Copper	0.501 mg/L	0.0100	mg/L	0.500 mg/L	100	80-120		
Lead	0.503 mg/L	0.0100	mg/L	0.500 mg/L	101	80-120		
Nickel	0.5003 mg/L	0.0100	mg/L	0.500 mg/L	100	80-120		
Selenium	0.513 mg/L	0.0500	mg/L	0.500 mg/L	103	80-120		
Silver	0.101 mg/L	0.0100	mg/L	0.100 mg/L	101	80-120	E	
Tin	0.0981 mg/L	0.0200	mg/L	0.100 mg/L	98.1	80-120		
Vanadium	0.492 mg/L	0.0100	mg/L	0.500 mg/L	98.3	80-120		
Zinc	0.496 mg/L	0.0100	mg/L	0.500 mg/L	99.2	80-120		

LCS Dup (BAJ0154-BSD1)		Prepared: 10/05/2017 Analyzed: 10/06/2017						
Barium	0.501 mg/L	0.0100	mg/L	0.500 mg/L	100	80-120	2.23	20
Beryllium	0.507 mg/L	0.0040	mg/L	0.500 mg/L	101	80-120	1.61	20
Cadmium	0.510 mg/L	0.0040	mg/L	0.500 mg/L	102	80-120	1.68	20
Chromium	0.500 mg/L	0.0100	mg/L	0.500 mg/L	100	80-120	1.09	20
Cobalt	0.505 mg/L	0.0040	mg/L	0.500 mg/L	101	80-120	1.11	20
Copper	0.506 mg/L	0.0100	mg/L	0.500 mg/L	101	80-120	0.981	20
Lead	0.508 mg/L	0.0100	mg/L	0.500 mg/L	102	80-120	1.02	20
Nickel	0.5071 mg/L	0.0100	mg/L	0.500 mg/L	101	80-120	1.34	20



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0154 - EPA200.2/R2.8

<u>LCS Dup (BAJ0154-BSD1)</u>		Prepared: 10/05/2017 Analyzed: 10/06/2017							
Selenium	0.513 mg/L	0.0500	mg/L	0.500 mg/L	103	80-120	0.116	20	
Silver	0.104 mg/L	0.0100	mg/L	0.100 mg/L	104	80-120	3.08	20	E
Tin	0.100 mg/L	0.0200	mg/L	0.100 mg/L	100	80-120	2.01	20	
Vanadium	0.499 mg/L	0.0100	mg/L	0.500 mg/L	99.8	80-120	1.43	20	
Zinc	0.502 mg/L	0.0100	mg/L	0.500 mg/L	100	80-120	1.16	20	

<u>Matrix Spike (BAJ0154-MS1)</u>		Source: 17J0136-03 Prepared: 10/05/2017 Analyzed: 10/06/2017							
Barium	0.658 mg/L	0.0100	mg/L	0.500 0.171 mg/L	97.5	75-125			
Beryllium	0.517 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	103	75-125			
Cadmium	0.512 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	102	75-125			
Chromium	0.510 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	102	75-125			
Cobalt	0.539 mg/L	0.0040	mg/L	0.500 0.0311 mg/L	102	75-125			
Copper	0.517 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	103	75-125			
Lead	0.510 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	102	75-125			
Nickel	0.5150 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	101	75-125			
Selenium	0.535 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	101	75-125			
Silver	0.104 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	104	75-125			E
Tin	0.0967 mg/L	0.0200	mg/L	0.100 <0.0200 mg/L	96.7	75-125			
Vanadium	0.506 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	101	75-125			
Zinc	0.513 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	103	75-125			

<u>Matrix Spike (BAJ0154-MS2)</u>		Source: 17J0136-05 Prepared: 10/05/2017 Analyzed: 10/06/2017							
Barium	0.553 mg/L	0.0100	mg/L	0.500 0.0469 mg/L	101	75-125			
Beryllium	0.524 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	105	75-125			
Cadmium	0.519 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	104	75-125			
Chromium	0.515 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	103	75-125			
Cobalt	0.526 mg/L	0.0040	mg/L	0.500 0.0118 mg/L	103	75-125			
Copper	0.522 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	104	75-125			
Lead	0.519 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	104	75-125			
Nickel	0.5212 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	103	75-125			
Selenium	0.529 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	106	75-125			
Silver	0.106 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	106	75-125			E



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Certificate of Analysis

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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0154 - EPA200.2/R2.8

Matrix Spike (BAJ0154-MS2)		Source: 17J0136-05		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Tin	0.0951 mg/L	0.0200	mg/L	0.100 <0.0200 mg/L	95.1	75-125			
Vanadium	0.515 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	103	75-125			
Zinc	0.512 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	102	75-125			
Matrix Spike Dup (BAJ0154-MSD1)		Source: 17J0136-03		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Barium	0.706 mg/L	0.0100	mg/L	0.500 0.171 mg/L	107	75-125	7.04	20	
Beryllium	0.542 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	108	75-125	4.57	20	
Cadmium	0.537 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	107	75-125	4.72	20	
Chromium	0.538 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	108	75-125	5.33	20	
Cobalt	0.556 mg/L	0.0040	mg/L	0.500 0.0311 mg/L	105	75-125	3.06	20	
Copper	0.541 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	108	75-125	4.53	20	
Lead	0.528 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125	3.46	20	
Nickel	0.5308 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125	3.03	20	
Selenium	0.568 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	107	75-125	5.96	20	
Silver	0.110 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	110	75-125	5.89	20	E
Tin	0.101 mg/L	0.0200	mg/L	0.100 <0.0200 mg/L	101	75-125	4.49	20	
Vanadium	0.529 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125	4.46	20	
Zinc	0.525 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125	2.34	20	
Matrix Spike Dup (BAJ0154-MSD2)		Source: 17J0136-05		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Barium	0.560 mg/L	0.0100	mg/L	0.500 0.0469 mg/L	103	75-125	1.25	20	
Beryllium	0.528 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	106	75-125	0.661	20	
Cadmium	0.523 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	105	75-125	0.863	20	
Chromium	0.523 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125	1.67	20	
Cobalt	0.536 mg/L	0.0040	mg/L	0.500 0.0118 mg/L	105	75-125	1.95	20	
Copper	0.526 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125	0.750	20	
Lead	0.529 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125	1.98	20	
Nickel	0.5325 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	105	75-125	2.15	20	
Selenium	0.538 mg/L	0.0500	mg/L	0.500 <0.0500 mg/L	108	75-125	1.73	20	
Silver	0.105 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	105	75-125	0.872	20	E
Tin	0.0978 mg/L	0.0200	mg/L	0.100 <0.0200 mg/L	97.8	75-125	2.79	20	
Vanadium	0.519 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	103	75-125	0.847	20	



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Certificate of Analysis

Final Report

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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0154 - EPA200.2/R2.8

<u>Matrix Spike Dup (BAJ0154-MSD2)</u>		Source: 17J0136-05		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Zinc	0.523 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	105	75-125	2.17	20

Batch BAJ0157 - EPA200.8 R5.4

<u>Blank (BAJ0157-BLK1)</u>		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Antimony	<1.00 ug/L	1.00	ug/L				
Arsenic	<1.0 ug/L	1.0	ug/L				
Thallium	<1.00 ug/L	1.00	ug/L				

<u>LCS (BAJ0157-BS1)</u>		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Antimony	54.7 ug/L	1.00	ug/L	50.0	ug/L	109	80-120
Arsenic	52 ug/L	1.0	ug/L	50.0	ug/L	103	80-120
Thallium	48.9 ug/L	1.00	ug/L	50.0	ug/L	97.7	80-120

<u>LCS Dup (BAJ0157-BSD1)</u>		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Antimony	53.3 ug/L	1.00	ug/L	50.0	ug/L	107	80-120
Arsenic	51 ug/L	1.0	ug/L	50.0	ug/L	102	80-120
Thallium	48.6 ug/L	1.00	ug/L	50.0	ug/L	97.1	80-120

<u>Matrix Spike (BAJ0157-MS1)</u>		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Antimony	56.2 ug/L	1.00	ug/L	50.0	<1.00 ug/L	112	75-125
Arsenic	53 ug/L	1.0	ug/L	50.0	<1.0 ug/L	107	75-125
Thallium	46.2 ug/L	1.00	ug/L	50.0	<1.00 ug/L	92.4	75-125

<u>Matrix Spike (BAJ0157-MS2)</u>		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Antimony	54.8 ug/L	1.00	ug/L	50.0	<1.00 ug/L	110	75-125
Arsenic	53 ug/L	1.0	ug/L	50.0	<1.0 ug/L	106	75-125
Thallium	47.4 ug/L	1.00	ug/L	50.0	<1.00 ug/L	94.8	75-125



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Certificate of Analysis

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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0157 - EPA200.8 R5.4

Matrix Spike Dup (BAJ0157-MSD1)		Source: 17J0136-03		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Antimony	51.7 ug/L	1.00	ug/L	50.0 <1.00 ug/L	103	75-125	8.34	20	
Arsenic	53 ug/L	1.0	ug/L	50.0 <1.0 ug/L	106	75-125	0.849	20	
Thallium	47.2 ug/L	1.00	ug/L	50.0 <1.00 ug/L	94.4	75-125	2.09	20	
Matrix Spike Dup (BAJ0157-MSD2)		Source: 17J0136-05		Prepared: 10/05/2017 Analyzed: 10/06/2017					
Antimony	53.0 ug/L	1.00	ug/L	50.0 <1.00 ug/L	106	75-125	3.42	20	
Arsenic	52 ug/L	1.0	ug/L	50.0 <1.0 ug/L	104	75-125	1.21	20	
Thallium	48.5 ug/L	1.00	ug/L	50.0 <1.00 ug/L	97.1	75-125	2.37	20	

Batch BAJ0219 - SW7470A

Blank (BAJ0219-BLK1)		Prepared: 10/09/2017 Analyzed: 10/10/2017					
Mercury	<0.00020 mg/L	0.00020	mg/L				
LCS (BAJ0219-BS1)		Prepared: 10/09/2017 Analyzed: 10/10/2017					
Mercury	0.00246 mg/L	0.00020	mg/L	0.00250 mg/L	98.6	80-120	
LCS Dup (BAJ0219-BSD1)		Prepared: 10/09/2017 Analyzed: 10/10/2017					
Mercury	0.00257 mg/L	0.00020	mg/L	0.00250 mg/L	103	80-120	4.04
Matrix Spike (BAJ0219-MS1)		Prepared: 10/09/2017 Analyzed: 10/10/2017					
Mercury	0.00269 mg/L	0.00020	mg/L	0.00250 <0.00020 mg/L	108	80-120	
Matrix Spike (BAJ0219-MS2)		Prepared: 10/09/2017 Analyzed: 10/10/2017					
Mercury	0.00214 mg/L	0.00020	mg/L	0.00250 0.00024 mg/L	76.1	80-120	M
Matrix Spike Dup (BAJ0219-MSD1)		Prepared: 10/09/2017 Analyzed: 10/10/2017					
Mercury	0.00250 mg/L	0.00020	mg/L	0.00250 <0.00020 mg/L	99.8	80-120	7.66



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Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/12/2017 17:19
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0219 - SW7470A

Matrix Spike Dup (BAJ0219-MSD2)	Source: 17J0136-03	Prepared: 10/09/2017	Analyzed: 10/10/2017
Mercury	0.00213 mg/L	0.00020 mg/L	0.002500.00024 mg/L 75.7 80-120 0.566 20 M

Batch BAJ0220 - SW7470A

Blank (BAJ0220-BLK1)	Source: 17J0136-03	Prepared: 10/09/2017	Analyzed: 10/10/2017
Mercury	<0.00020 mg/L	0.00020 mg/L	
LCS (BAJ0220-BS1)	Source: 17J0155-01	Prepared: 10/09/2017	Analyzed: 10/10/2017
Mercury	0.00256 mg/L	0.00020 mg/L	0.00250 mg/L 102 80-120
LCS Dup (BAJ0220-BSD1)	Source: 17J0155-01	Prepared: 10/09/2017	Analyzed: 10/10/2017
Mercury	0.00245 mg/L	0.00020 mg/L	0.00250 mg/L 98.0 80-120 4.46 20
Matrix Spike (BAJ0220-MS1)	Source: 17J0155-01	Prepared: 10/09/2017	Analyzed: 10/10/2017
Mercury	0.00250 mg/L	0.00020 mg/L	0.00250<0.00020 mg/L 100 80-120
Matrix Spike (BAJ0220-MS2)	Source: 17J0263-05	Prepared: 10/09/2017	Analyzed: 10/10/2017
Mercury	0.00251 mg/L	0.00020 mg/L	0.00250<0.00020 mg/L 100 80-120
Matrix Spike Dup (BAJ0220-MSD1)	Source: 17J0155-01	Prepared: 10/09/2017	Analyzed: 10/10/2017
Mercury	0.00250 mg/L	0.00020 mg/L	0.00250<0.00020 mg/L 100 80-120 0.0839 20
Matrix Spike Dup (BAJ0220-MSD2)	Source: 17J0263-05	Prepared: 10/09/2017	Analyzed: 10/10/2017
Mercury	0.00245 mg/L	0.00020 mg/L	0.00250<0.00020 mg/L 97.9 80-120 2.43 20



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0064 - SW5030B

Blank (BAJ0064-BLK1)							Prepared & Analyzed: 10/03/2017			
TPH-Volatiles (GRO)	<0.10 mg/L	0.10	mg/L							
Surr: 2,5-Dibromotoluene (FID)	91.5		ug/L	100		91.5	80-120			
LCS (BAJ0064-BS1)							Prepared & Analyzed: 10/03/2017			
TPH-Volatiles (GRO)	0.93 mg/L	0.10	mg/L	1.00	mg/L	93.2	70-130			
Surr: 2,5-Dibromotoluene (FID)	90.6		ug/L	100	ug/L	90.6	80-120			
Matrix Spike (BAJ0064-MS1)							Source: 17J0021-11 Prepared & Analyzed: 10/03/2017			
TPH-Volatiles (GRO)	0.96 mg/L	0.10	mg/L	1.00	<0.10 mg/L	95.8	70-130			
Surr: 2,5-Dibromotoluene (FID)	86.0		ug/L	100	ug/L	86.0	80-120			
Matrix Spike Dup (BAJ0064-MSD1)							Source: 17J0021-11 Prepared & Analyzed: 10/03/2017			
TPH-Volatiles (GRO)	0.97 mg/L	0.10	mg/L	1.00	<0.10 mg/L	96.9	70-130	1.19	20	
Surr: 2,5-Dibromotoluene (FID)	84.7		ug/L	100	ug/L	84.7	80-120			

Batch BAJ0131 - SW5030B

Blank (BAJ0131-BLK1)							Prepared & Analyzed: 10/05/2017			
TPH-Volatiles (GRO)	<0.10 mg/L	0.10	mg/L							
Surr: 2,5-Dibromotoluene (FID)	82.9		ug/L	100		82.9	80-120			
LCS (BAJ0131-BS1)							Prepared & Analyzed: 10/05/2017			
TPH-Volatiles (GRO)	0.93 mg/L	0.10	mg/L	1.00	mg/L	92.6	70-130			
Surr: 2,5-Dibromotoluene (FID)	84.4		ug/L	100	ug/L	84.4	80-120			
Matrix Spike (BAJ0131-MS1)							Source: 17J0112-01 Prepared & Analyzed: 10/05/2017			
TPH-Volatiles (GRO)	0.91 mg/L	0.10	mg/L	1.00	<0.10 mg/L	91.1	70-130			
Surr: 2,5-Dibromotoluene (FID)	83.9		ug/L	100	ug/L	83.9	80-120			



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0131 - SW5030B

Matrix Spike Dup (BAJ0131-MSD1)	Source: 17J0112-01			Prepared & Analyzed: 10/05/2017					
TPH-Volatiles (GRO)	0.89 mg/L	0.10	mg/L	1.00	<0.10 mg/L	89.1	70-130	2.12	20
Surr: 2,5-Dibromotoluene (FID)	82.5		ug/L	100	ug/L	82.5	80-120		



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0087 - SW5030B

Blank (BAJ0087-BLK1) Prepared & Analyzed: 10/03/2017

1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L						
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L						
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L						
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L						
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L						
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L						
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L						
1,2,3-Trichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L						
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,2,4-Trimethylbenzene	<1.00 ug/L	1.00	ug/L						
1,2-Dibromo-3-chloropropane (DBCP)	<4.00 ug/L	4.00	ug/L						
1,2-Dibromoethane (EDB)	<1.00 ug/L	1.00	ug/L						
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L						
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L						
1,3,5-Trimethylbenzene	<1.00 ug/L	1.00	ug/L						
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L						
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L						
2-Butanone (MEK)	<10.0 ug/L	10.0	ug/L						
2-Chlorotoluene	<1.00 ug/L	1.00	ug/L						
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L						
4-Chlorotoluene	<1.00 ug/L	1.00	ug/L						
4-Isopropyltoluene	<1.00 ug/L	1.00	ug/L						
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L						
Acetone	<10.0 ug/L	10.0	ug/L						
Benzene	<1.00 ug/L	1.00	ug/L						
Bromobenzene	<1.00 ug/L	1.00	ug/L						
Bromochloromethane	<1.00 ug/L	1.00	ug/L						



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0087 - SW5030B

Blank (BAJ0087-BLK1) Prepared & Analyzed: 10/03/2017

Bromodichloromethane	<0.50 ug/L	0.50	ug/L
Bromoform	<1.00 ug/L	1.00	ug/L
Bromomethane	<1.00 ug/L	1.00	ug/L
Carbon disulfide	<10.0 ug/L	10.0	ug/L
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L
Chlorobenzene	<1.00 ug/L	1.00	ug/L
Chloroethane	<1.00 ug/L	1.00	ug/L
Chloroform	<0.50 ug/L	0.50	ug/L
Chloromethane	<1.00 ug/L	1.00	ug/L
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L
Dibromochloromethane	<1.00 ug/L	1.00	ug/L
Dibromomethane	<1.00 ug/L	1.00	ug/L
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L
Di-isopropyl ether (DIPE)	<5.00 ug/L	5.00	ug/L
Ethylbenzene	<1.00 ug/L	1.00	ug/L
Hexachlorobutadiene	<1.00 ug/L	1.00	ug/L
Iodomethane	<10.0 ug/L	10.0	ug/L
Isopropylbenzene	<1.00 ug/L	1.00	ug/L
m+p-Xylenes	<2.00 ug/L	2.00	ug/L
Methylene chloride	<4.00 ug/L	4.00	ug/L
Methyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L
Naphthalene	<1.00 ug/L	1.00	ug/L
n-Butylbenzene	<1.00 ug/L	1.00	ug/L
n-Propylbenzene	<1.00 ug/L	1.00	ug/L
o-Xylene	<1.00 ug/L	1.00	ug/L
sec-Butylbenzene	<1.00 ug/L	1.00	ug/L
Styrene	<1.00 ug/L	1.00	ug/L
tert-Butylbenzene	<1.00 ug/L	1.00	ug/L
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L
Toluene	<1.00 ug/L	1.00	ug/L



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0087 - SW5030B

Blank (BAJ0087-BLK1)						
						Prepared & Analyzed: 10/03/2017
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L			
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L			
Trichloroethylene	<1.00 ug/L	1.00	ug/L			
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L			
Vinyl acetate	<10.0 ug/L	10.0	ug/L			
Vinyl chloride	<0.50 ug/L	0.50	ug/L			
Xylenes, Total	<3.00 ug/L	3.00	ug/L			
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	49.4		ug/L	50.0	98.7	70-120
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	47.3		ug/L	50.0	94.5	75-120
<i>Surr: Dibromofluoromethane (Surr)</i>	49.6		ug/L	50.0	99.2	80-119
<i>Surr: Toluene-d8 (Surr)</i>	49.7		ug/L	50.0	99.5	85-120

LCS (BAJ0087-BS1)						
						Prepared & Analyzed: 10/03/2017
1,1,1,2-Tetrachloroethane	49.1 ug/L	0.4	ug/L	50.0 ug/L	98.1	80-130
1,1,1-Trichloroethane	47.2 ug/L	1	ug/L	50.0 ug/L	94.3	65-130
1,1,2,2-Tetrachloroethane	48.9 ug/L	0.4	ug/L	50.0 ug/L	97.7	65-130
1,1,2-Trichloroethane	48.1 ug/L	1	ug/L	50.0 ug/L	96.2	75-125
1,1-Dichloroethane	49.6 ug/L	1	ug/L	50.0 ug/L	99.2	70-135
1,1-Dichloroethylene	47.4 ug/L	1	ug/L	50.0 ug/L	94.9	70-130
1,1-Dichloropropene	49.9 ug/L	1	ug/L	50.0 ug/L	99.8	75-135
1,2,3-Trichlorobenzene	53.8 ug/L	1	ug/L	50.0 ug/L	108	55-140
1,2,3-Trichloropropane	49.3 ug/L	1	ug/L	50.0 ug/L	98.6	75-125
1,2,4-Trichlorobenzene	56.0 ug/L	1	ug/L	50.0 ug/L	112	65-135
1,2,4-Trimethylbenzene	52.4 ug/L	1	ug/L	50.0 ug/L	105	75-130
1,2-Dibromo-3-chloropropane (DBCP)	53.4 ug/L	4	ug/L	50.0 ug/L	107	50-130
1,2-Dibromoethane (EDB)	50.6 ug/L	1	ug/L	50.0 ug/L	101	80-120
1,2-Dichlorobenzene	52.5 ug/L	1	ug/L	50.0 ug/L	105	70-120
1,2-Dichloroethane	45.0 ug/L	1	ug/L	50.0 ug/L	89.9	70-130
1,2-Dichloropropane	46.7 ug/L	1	ug/L	50.0 ug/L	93.4	75-125
1,3,5-Trimethylbenzene	55.5 ug/L	1	ug/L	50.0 ug/L	111	75-125
1,3-Dichlorobenzene	54.7 ug/L	1	ug/L	50.0 ug/L	109	75-125



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0087 - SW5030B

LCS (BAJ0087-BS1)	Prepared & Analyzed: 10/03/2017						
1,3-Dichloropropane	47.5 ug/L	1	ug/L	50.0	ug/L	94.9	75-125
1,4-Dichlorobenzene	51.1 ug/L	1	ug/L	50.0	ug/L	102	75-125
2,2-Dichloropropane	51.2 ug/L	2	ug/L	50.0	ug/L	102	70-135
2-Butanone (MEK)	50.3 ug/L	10	ug/L	50.0	ug/L	101	30-150
2-Chlorotoluene	55.6 ug/L	1	ug/L	50.0	ug/L	111	75-125
2-Hexanone (MBK)	48.5 ug/L	5	ug/L	50.0	ug/L	97.0	55-130
4-Chlorotoluene	54.6 ug/L	1	ug/L	50.0	ug/L	109	75-130
4-Isopropyltoluene	56.2 ug/L	1	ug/L	50.0	ug/L	112	75-130
4-Methyl-2-pentanone (MIBK)	45.5 ug/L	5	ug/L	50.0	ug/L	91.0	60-135
Acetone	45.6 ug/L	10	ug/L	50.0	ug/L	91.3	40-140
Benzene	48.4 ug/L	1	ug/L	50.0	ug/L	96.8	80-120
Bromobenzene	50.8 ug/L	1	ug/L	50.0	ug/L	102	75-125
Bromochloromethane	47.1 ug/L	1	ug/L	50.0	ug/L	94.2	65-130
Bromodichloromethane	47.9 ug/L	0.5	ug/L	50.0	ug/L	95.9	75-120
Bromoform	49.4 ug/L	1	ug/L	50.0	ug/L	98.9	70-130
Bromomethane	42.0 ug/L	1	ug/L	50.0	ug/L	83.9	30-145
Carbon disulfide	41.6 ug/L	10	ug/L	50.0	ug/L	83.2	35-160
Carbon tetrachloride	47.2 ug/L	1	ug/L	50.0	ug/L	94.3	65-140
Chlorobenzene	49.9 ug/L	1	ug/L	50.0	ug/L	99.8	80-120
Chloroethane	44.2 ug/L	1	ug/L	50.0	ug/L	88.4	60-135
Chloroform	43.6 ug/L	0.5	ug/L	50.0	ug/L	87.2	65-135
Chloromethane	35.2 ug/L	1	ug/L	50.0	ug/L	70.5	40-125
cis-1,2-Dichloroethylene	46.8 ug/L	1	ug/L	50.0	ug/L	93.7	70-125
cis-1,3-Dichloropropene	50.1 ug/L	1	ug/L	50.0	ug/L	100	70-130
Dibromochloromethane	48.5 ug/L	1	ug/L	50.0	ug/L	97.0	60-135
Dibromomethane	49.3 ug/L	1	ug/L	50.0	ug/L	98.5	75-125
Dichlorodifluoromethane	36.5 ug/L	1	ug/L	50.0	ug/L	73.0	30-155
Ethylbenzene	49.8 ug/L	1	ug/L	50.0	ug/L	99.6	75-125
Hexachlorobutadiene	52.2 ug/L	1	ug/L	50.0	ug/L	104	50-140
Isopropylbenzene	54.3 ug/L	1	ug/L	50.0	ug/L	109	75-125
m+p-Xylenes	105 ug/L	2	ug/L	100	ug/L	105	75-130



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0087 - SW5030B

LCS (BAJ0087-BS1)

	Prepared & Analyzed: 10/03/2017					
Methylene chloride	46.8 ug/L	4	ug/L	50.0 ug/L	93.6	55-140
Methyl-t-butyl ether (MTBE)	47.7 ug/L	1	ug/L	50.0 ug/L	95.5	65-125
Naphthalene	53.7 ug/L	1	ug/L	50.0 ug/L	107	55-140
n-Butylbenzene	59.2 ug/L	1	ug/L	50.0 ug/L	118	70-135
n-Propylbenzene	55.3 ug/L	1	ug/L	50.0 ug/L	111	70-130
o-Xylene	52.2 ug/L	1	ug/L	50.0 ug/L	104	80-120
sec-Butylbenzene	56.1 ug/L	1	ug/L	50.0 ug/L	112	70-125
Styrene	50.7 ug/L	1	ug/L	50.0 ug/L	101	65-135
tert-Butylbenzene	56.3 ug/L	1	ug/L	50.0 ug/L	113	70-130
Tetrachloroethylene (PCE)	69.0 ug/L	1	ug/L	50.0 ug/L	138	45-150
Toluene	46.5 ug/L	1	ug/L	50.0 ug/L	93.0	75-120
trans-1,2-Dichloroethylene	46.8 ug/L	1	ug/L	50.0 ug/L	93.7	60-140
trans-1,3-Dichloropropene	44.0 ug/L	1	ug/L	50.0 ug/L	88.1	55-140
Trichloroethylene	48.5 ug/L	1	ug/L	50.0 ug/L	97.0	70-125
Trichlorofluoromethane	40.7 ug/L	1	ug/L	50.0 ug/L	81.4	60-145
Vinyl chloride	38.5 ug/L	0.5	ug/L	50.0 ug/L	77.1	50-145
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	48.6		ug/L	50.0 ug/L	97.2	70-120
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	50.9		ug/L	50.0 ug/L	102	75-120
<i>Surr: Dibromofluoromethane (Surr)</i>	48.6		ug/L	50.0 ug/L	97.2	80-119
<i>Surr: Toluene-d8 (Surr)</i>	48.9		ug/L	50.0 ug/L	97.8	85-120

Matrix Spike (BAJ0087-MS1)

	Source: 17J0020-01 Prepared & Analyzed: 10/03/2017					
1,1,1,2-Tetrachloroethane	54.6 ug/L	0.4	ug/L	50.0 <0.4 ug/L	109	80-130
1,1,1-Trichloroethane	53.2 ug/L	1	ug/L	50.0 <1 ug/L	106	65-130
1,1,2,2-Tetrachloroethane	55.3 ug/L	0.4	ug/L	50.0 <0.4 ug/L	111	65-130
1,1,2-Trichloroethane	56.5 ug/L	1	ug/L	50.0 <1 ug/L	113	75-125
1,1-Dichloroethane	60.0 ug/L	1	ug/L	50.0 <1 ug/L	120	70-135
1,1-Dichloroethylene	53.0 ug/L	1	ug/L	50.0 <1 ug/L	106	70-130
1,1-Dichloropropene	54.6 ug/L	1	ug/L	50.0 <1 ug/L	109	75-135
1,2,3-Trichlorobenzene	58.2 ug/L	1	ug/L	50.0 <1 ug/L	116	55-140
1,2,3-Trichloropropane	55.9 ug/L	1	ug/L	50.0 <1 ug/L	112	75-125



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0087 - SW5030B

Matrix Spike (BAJ0087-MS1)	Source: 17J0020-01		Prepared & Analyzed: 10/03/2017				
1,2,4-Trichlorobenzene	58.9 ug/L	1	ug/L	50.0	<1 ug/L	117	65-135
1,2,4-Trimethylbenzene	57.4 ug/L	1	ug/L	50.0	<1 ug/L	114	75-130
1,2-Dibromo-3-chloropropane (DBCP)	56.6 ug/L	4	ug/L	50.0	<4 ug/L	113	50-130
1,2-Dibromoethane (EDB)	56.8 ug/L	1	ug/L	50.0	<1 ug/L	114	80-120
1,2-Dichlorobenzene	57.8 ug/L	1	ug/L	50.0	<1 ug/L	116	70-120
1,2-Dichloroethane	51.9 ug/L	1	ug/L	50.0	<1 ug/L	104	70-130
1,2-Dichloropropane	53.5 ug/L	1	ug/L	50.0	<1 ug/L	107	75-125
1,3,5-Trimethylbenzene	60.9 ug/L	1	ug/L	50.0	<1 ug/L	122	75-125
1,3-Dichlorobenzene	59.5 ug/L	1	ug/L	50.0	<1 ug/L	119	75-125
1,3-Dichloropropane	56.1 ug/L	1	ug/L	50.0	<1 ug/L	112	75-125
1,4-Dichlorobenzene	56.5 ug/L	1	ug/L	50.0	<1 ug/L	113	75-125
2,2-Dichloropropane	55.8 ug/L	2	ug/L	50.0	<2 ug/L	112	70-135
2-Butanone (MEK)	54.4 ug/L	10	ug/L	50.0	<10 ug/L	109	30-150
2-Chlorotoluene	60.8 ug/L	1	ug/L	50.0	<1 ug/L	122	75-125
2-Hexanone (MBK)	51.3 ug/L	5	ug/L	50.0	<5 ug/L	103	55-130
4-Chlorotoluene	60.9 ug/L	1	ug/L	50.0	<1 ug/L	122	75-130
4-Isopropyltoluene	61.0 ug/L	1	ug/L	50.0	<1 ug/L	122	75-130
4-Methyl-2-pentanone (MIBK)	51.6 ug/L	5	ug/L	50.0	<5 ug/L	103	60-135
Acetone	57.2 ug/L	10	ug/L	50.0	<10 ug/L	102	40-140
Benzene	54.9 ug/L	1	ug/L	50.0	<1 ug/L	110	80-120
Bromobenzene	56.4 ug/L	1	ug/L	50.0	<1 ug/L	113	75-125
Bromochloromethane	54.6 ug/L	1	ug/L	50.0	<1 ug/L	109	65-130
Bromodichloromethane	55.2 ug/L	0.5	ug/L	50.0	<0.5 ug/L	110	75-120
Bromoform	53.8 ug/L	1	ug/L	50.0	<1 ug/L	108	70-130
Bromomethane	48.2 ug/L	1	ug/L	50.0	<1 ug/L	96.5	30-145
Carbon disulfide	46.1 ug/L	10	ug/L	50.0	<10 ug/L	91.3	35-160
Carbon tetrachloride	52.8 ug/L	1	ug/L	50.0	<1 ug/L	106	65-140
Chlorobenzene	54.9 ug/L	1	ug/L	50.0	<1 ug/L	110	80-120
Chloroethane	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	60-135
Chloroform	49.3 ug/L	0.5	ug/L	50.0	<0.5 ug/L	98.7	65-135
Chloromethane	42.1 ug/L	1	ug/L	50.0	<1 ug/L	84.1	40-125



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0087 - SW5030B

Matrix Spike (BAJ0087-MS1)	Source: 17J0020-01		Prepared & Analyzed: 10/03/2017							
cis-1,2-Dichloroethylene	54.3 ug/L	1	ug/L	50.0 <1 ug/L	109	70-125				
cis-1,3-Dichloropropene	55.7 ug/L	1	ug/L	50.0 <1 ug/L	111	70-130				
Dibromochloromethane	56.8 ug/L	1	ug/L	50.0 <1 ug/L	114	60-135				
Dibromomethane	58.0 ug/L	1	ug/L	50.0 <1 ug/L	116	75-125				
Dichlorodifluoromethane	41.4 ug/L	1	ug/L	50.0 <1 ug/L	82.9	30-155				
Ethylbenzene	54.1 ug/L	1	ug/L	50.0 <1 ug/L	108	75-125				
Hexachlorobutadiene	57.4 ug/L	1	ug/L	50.0 <1 ug/L	115	50-140				
Isopropylbenzene	58.6 ug/L	1	ug/L	50.0 <1 ug/L	117	75-125				
m+p-Xylenes	113 ug/L	2	ug/L	100 <2 ug/L	113	75-130				
Methylene chloride	53.6 ug/L	4	ug/L	50.0 <4 ug/L	105	55-140				
Methyl-t-butyl ether (MTBE)	54.5 ug/L	1	ug/L	50.0 <1 ug/L	108	65-125				
Naphthalene	60.5 ug/L	1	ug/L	50.0 <1 ug/L	120	55-140				
n-Butylbenzene	61.6 ug/L	1	ug/L	50.0 <1 ug/L	123	70-135				
n-Propylbenzene	59.7 ug/L	1	ug/L	50.0 <1 ug/L	119	70-130				
o-Xylene	57.2 ug/L	1	ug/L	50.0 <1 ug/L	114	80-120				
sec-Butylbenzene	61.8 ug/L	1	ug/L	50.0 <1 ug/L	124	70-125				
Styrene	53.9 ug/L	1	ug/L	50.0 <1 ug/L	108	65-135				
tert-Butylbenzene	62.2 ug/L	1	ug/L	50.0 <1 ug/L	124	70-130				
Tetrachloroethylene (PCE)	73.8 ug/L	1	ug/L	50.0 <1 ug/L	148	45-150				
Toluene	52.2 ug/L	1	ug/L	50.0 <1 ug/L	104	75-120				
trans-1,2-Dichloroethylene	52.6 ug/L	1	ug/L	50.0 <1 ug/L	105	60-140				
trans-1,3-Dichloropropene	50.4 ug/L	1	ug/L	50.0 <1 ug/L	101	55-140				
Trichloroethylene	53.4 ug/L	1	ug/L	50.0 <1 ug/L	107	70-125				
Trichlorofluoromethane	46.6 ug/L	1	ug/L	50.0 <1 ug/L	93.2	60-145				
Vinyl chloride	44.1 ug/L	0.5	ug/L	50.0 <0.5 ug/L	88.2	50-145				
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	50.8		ug/L	50.0 ug/L	102	70-120				
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	49.4		ug/L	50.0 ug/L	98.8	75-120				
<i>Surr: Dibromofluoromethane (Surr)</i>	49.4		ug/L	50.0 ug/L	98.8	80-119				
<i>Surr: Toluene-d8 (Surr)</i>	50.0		ug/L	50.0 ug/L	100	85-120				



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0087 - SW5030B

Matrix Spike Dup (BAJ0087-MSD1)	Source: 17J0020-01			Prepared & Analyzed: 10/03/2017					
1,1,1,2-Tetrachloroethane	55.5 ug/L	0.4	ug/L	50.0	<0.4 ug/L	111	80-130	1.62	30
1,1,1-Trichloroethane	54.3 ug/L	1	ug/L	50.0	<1 ug/L	109	65-130	1.93	30
1,1,2,2-Tetrachloroethane	55.9 ug/L	0.4	ug/L	50.0	<0.4 ug/L	112	65-130	1.08	30
1,1,2-Trichloroethane	56.9 ug/L	1	ug/L	50.0	<1 ug/L	114	75-125	0.705	30
1,1-Dichloroethane	58.4 ug/L	1	ug/L	50.0	<1 ug/L	117	70-135	2.85	30
1,1-Dichloroethylene	54.9 ug/L	1	ug/L	50.0	<1 ug/L	110	70-130	3.63	30
1,1-Dichloropropene	55.6 ug/L	1	ug/L	50.0	<1 ug/L	111	75-135	1.92	30
1,2,3-Trichlorobenzene	60.6 ug/L	1	ug/L	50.0	<1 ug/L	121	55-140	3.91	30
1,2,3-Trichloropropane	56.8 ug/L	1	ug/L	50.0	<1 ug/L	114	75-125	1.62	30
1,2,4-Trichlorobenzene	61.6 ug/L	1	ug/L	50.0	<1 ug/L	123	65-135	4.41	30
1,2,4-Trimethylbenzene	53.2 ug/L	1	ug/L	50.0	<1 ug/L	106	75-130	7.61	30
1,2-Dibromo-3-chloropropane (DBCP)	63.3 ug/L	4	ug/L	50.0	<4 ug/L	127	50-130	11.1	30
1,2-Dibromoethane (EDB)	57.6 ug/L	1	ug/L	50.0	<1 ug/L	115	80-120	1.50	30
1,2-Dichlorobenzene	60.4 ug/L	1	ug/L	50.0	<1 ug/L	121	70-120	4.45	30
1,2-Dichloroethane	53.0 ug/L	1	ug/L	50.0	<1 ug/L	106	70-130	2.00	30
1,2-Dichloropropane	54.5 ug/L	1	ug/L	50.0	<1 ug/L	109	75-125	1.76	30
1,3,5-Trimethylbenzene	54.3 ug/L	1	ug/L	50.0	<1 ug/L	109	75-125	11.4	30
1,3-Dichlorobenzene	60.7 ug/L	1	ug/L	50.0	<1 ug/L	121	75-125	2.05	30
1,3-Dichloropropane	55.7 ug/L	1	ug/L	50.0	<1 ug/L	111	75-125	0.823	30
1,4-Dichlorobenzene	57.6 ug/L	1	ug/L	50.0	<1 ug/L	115	75-125	1.91	30
2,2-Dichloropropane	57.0 ug/L	2	ug/L	50.0	<2 ug/L	114	70-135	2.18	30
2-Butanone (MEK)	55.7 ug/L	10	ug/L	50.0	<10 ug/L	111	30-150	2.38	30
2-Chlorotoluene	62.7 ug/L	1	ug/L	50.0	<1 ug/L	125	75-125	2.96	30
2-Hexanone (MBK)	47.1 ug/L	5	ug/L	50.0	<5 ug/L	94.2	55-130	8.57	30
4-Chlorotoluene	61.7 ug/L	1	ug/L	50.0	<1 ug/L	123	75-130	1.30	30
4-Isopropyltoluene	60.4 ug/L	1	ug/L	50.0	<1 ug/L	121	75-130	0.922	30
4-Methyl-2-pentanone (MIBK)	46.1 ug/L	5	ug/L	50.0	<5 ug/L	92.1	60-135	11.4	30
Acetone	52.4 ug/L	10	ug/L	50.0	<10 ug/L	92.3	40-140	8.82	30
Benzene	54.9 ug/L	1	ug/L	50.0	<1 ug/L	110	80-120	0.0910	30
Bromobenzene	56.9 ug/L	1	ug/L	50.0	<1 ug/L	114	75-125	0.812	30
Bromochloromethane	55.3 ug/L	1	ug/L	50.0	<1 ug/L	111	65-130	1.33	30



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0087 - SW5030B

Matrix Spike Dup (BAJ0087-MSD1)	Source: 17J0020-01			Prepared & Analyzed: 10/03/2017						
Bromodichloromethane	55.2 ug/L	0.5	ug/L	50.0	<0.5 ug/L	110	75-120	0.0362	30	
Bromoform	55.6 ug/L	1	ug/L	50.0	<1 ug/L	111	70-130	3.29	30	
Bromomethane	50.1 ug/L	1	ug/L	50.0	<1 ug/L	100	30-145	3.70	30	
Carbon disulfide	43.5 ug/L	10	ug/L	50.0	<10 ug/L	86.2	35-160	5.72	30	
Carbon tetrachloride	54.2 ug/L	1	ug/L	50.0	<1 ug/L	108	65-140	2.73	30	
Chlorobenzene	56.0 ug/L	1	ug/L	50.0	<1 ug/L	112	80-120	2.00	30	
Chloroethane	53.5 ug/L	1	ug/L	50.0	<1 ug/L	107	60-135	4.83	30	
Chloroform	50.1 ug/L	0.5	ug/L	50.0	<0.5 ug/L	100	65-135	1.47	30	
Chloromethane	45.3 ug/L	1	ug/L	50.0	<1 ug/L	90.6	40-125	7.42	30	
cis-1,2-Dichloroethylene	53.9 ug/L	1	ug/L	50.0	<1 ug/L	108	70-125	0.739	30	
cis-1,3-Dichloropropene	55.9 ug/L	1	ug/L	50.0	<1 ug/L	112	70-130	0.305	30	
Dibromochloromethane	56.9 ug/L	1	ug/L	50.0	<1 ug/L	114	60-135	0.229	30	
Dibromomethane	57.0 ug/L	1	ug/L	50.0	<1 ug/L	114	75-125	1.60	30	
Dichlorodifluoromethane	42.7 ug/L	1	ug/L	50.0	<1 ug/L	85.5	30-155	3.07	30	
Ethylbenzene	54.9 ug/L	1	ug/L	50.0	<1 ug/L	110	75-125	1.51	30	
Hexachlorobutadiene	59.2 ug/L	1	ug/L	50.0	<1 ug/L	118	50-140	2.97	30	
Isopropylbenzene	60.3 ug/L	1	ug/L	50.0	<1 ug/L	121	75-125	2.94	30	
m+p-Xylenes	110 ug/L	2	ug/L	100	<2 ug/L	110	75-130	2.27	30	
Methylene chloride	55.6 ug/L	4	ug/L	50.0	<4 ug/L	109	55-140	3.72	30	
Methyl-t-butyl ether (MTBE)	57.3 ug/L	1	ug/L	50.0	<1 ug/L	114	65-125	4.94	30	
Naphthalene	62.1 ug/L	1	ug/L	50.0	<1 ug/L	123	55-140	2.58	30	
n-Butylbenzene	64.0 ug/L	1	ug/L	50.0	<1 ug/L	128	70-135	3.92	30	
n-Propylbenzene	60.3 ug/L	1	ug/L	50.0	<1 ug/L	121	70-130	1.07	30	
o-Xylene	56.9 ug/L	1	ug/L	50.0	<1 ug/L	114	80-120	0.578	30	
sec-Butylbenzene	63.0 ug/L	1	ug/L	50.0	<1 ug/L	126	70-125	1.84	30	M
Styrene	45.7 ug/L	1	ug/L	50.0	<1 ug/L	91.4	65-135	16.4	30	
tert-Butylbenzene	63.2 ug/L	1	ug/L	50.0	<1 ug/L	126	70-130	1.71	30	
Tetrachloroethylene (PCE)	75.9 ug/L	1	ug/L	50.0	<1 ug/L	152	45-150	2.78	30	M
Toluene	52.4 ug/L	1	ug/L	50.0	<1 ug/L	104	75-120	0.344	30	
trans-1,2-Dichloroethylene	54.6 ug/L	1	ug/L	50.0	<1 ug/L	109	60-140	3.77	30	
trans-1,3-Dichloropropene	49.5 ug/L	1	ug/L	50.0	<1 ug/L	99.0	55-140	1.78	30	



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0087 - SW5030B

Matrix Spike Dup (BAJ0087-MSD1)	Source: 17J0020-01		Prepared & Analyzed: 10/03/2017						
Trichloroethylene	54.1 ug/L	1	ug/L	50.0	<1 ug/L	108	70-125	1.28	30
Trichlorofluoromethane	47.4 ug/L	1	ug/L	50.0	<1 ug/L	94.8	60-145	1.75	30
Vinyl chloride	46.6 ug/L	0.5	ug/L	50.0	<0.5 ug/L	93.3	50-145	5.62	30
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	50.1		ug/L	50.0	ug/L	100	70-120		
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	50.2		ug/L	50.0	ug/L	100	75-120		
<i>Surr: Dibromofluoromethane (Surr)</i>	49.3		ug/L	50.0	ug/L	98.7	80-119		
<i>Surr: Toluene-d8 (Surr)</i>	49.7		ug/L	50.0	ug/L	99.3	85-120		

Batch BAJ0125 - SW5030B

Blank (BAJ0125-BLK1)	Prepared & Analyzed: 10/04/2017						
1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L				
1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L				
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L				
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L				
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L				
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L				
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L				
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L				
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L				
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L				
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L				
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L				
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L				
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L				
1,2,3-Trichlorobenzene	<1.00 ug/L	1.00	ug/L				
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L				
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L				
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L				
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L				
1,2,4-Trimethylbenzene	<1.00 ug/L	1.00	ug/L				



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0125 - SW5030B

Blank (BAJ0125-BLK1) Prepared & Analyzed: 10/04/2017

1,2-Dibromo-3-chloropropane (DBCP)	<1.00 ug/L	1.00	ug/L						
1,2-Dibromoethane (EDB)	<1.00 ug/L	1.00	ug/L						
1,2-Dichlorobenzene	<0.50 ug/L	0.50	ug/L						
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L						
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L						
1,2-Dichloropropane	<0.50 ug/L	0.50	ug/L						
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L						
1,3,5-Trimethylbenzene	<1.00 ug/L	1.00	ug/L						
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L						
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L						
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
2,2-Dichloropropane	<1.00 ug/L	1.00	ug/L						
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L						
2-Butanone (MEK)	<10.0 ug/L	10.0	ug/L						
2-Butanone (MEK)	<5.00 ug/L	5.00	ug/L						
2-Chlorotoluene	<1.00 ug/L	1.00	ug/L						
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L						
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L						
4-Chlorotoluene	<1.00 ug/L	1.00	ug/L						
4-Isopropyltoluene	<1.00 ug/L	1.00	ug/L						
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L						
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L						
Acetone	<10.0 ug/L	10.0	ug/L						
Acetone	<10.0 ug/L	10.0	ug/L						
Acetonitrile	<10.0 ug/L	10.0	ug/L						
Acrolein	<10.0 ug/L	10.0	ug/L						
Acrylonitrile	<5.00 ug/L	5.00	ug/L						



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0125 - SW5030B

Blank (BAJ0125-BLK1) Prepared & Analyzed: 10/04/2017

Allyl chloride	<1.00 ug/L	1.00	ug/L						
Benzene	<1.00 ug/L	1.00	ug/L						
Benzene	<1.00 ug/L	1.00	ug/L						
Bromobenzene	<1.00 ug/L	1.00	ug/L						
Bromochloromethane	<1.00 ug/L	1.00	ug/L						
Bromochloromethane	<1.00 ug/L	1.00	ug/L						
Bromodichloromethane	<0.50 ug/L	0.50	ug/L						
Bromodichloromethane	<0.50 ug/L	0.50	ug/L						
Bromoform	<1.00 ug/L	1.00	ug/L						
Bromoform	<1.00 ug/L	1.00	ug/L						
Bromomethane	<1.00 ug/L	1.00	ug/L						
Bromomethane	<1.00 ug/L	1.00	ug/L						
Carbon disulfide	<10.0 ug/L	10.0	ug/L						
Carbon disulfide	<10.0 ug/L	10.0	ug/L						
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L						
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L						
Chlorobenzene	<1.00 ug/L	1.00	ug/L						
Chlorobenzene	<1.00 ug/L	1.00	ug/L						
Chloroethane	<1.00 ug/L	1.00	ug/L						
Chloroethane	<1.00 ug/L	1.00	ug/L						
Chloroform	<0.50 ug/L	0.50	ug/L						
Chloroform	<0.50 ug/L	0.50	ug/L						
Chloromethane	<1.00 ug/L	1.00	ug/L						
Chloromethane	<1.00 ug/L	1.00	ug/L						
Chloroprene	<5.00 ug/L	5.00	ug/L						
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L						
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L						
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L						
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L						
Dibromochloromethane	<0.50 ug/L	0.50	ug/L						
Dibromochloromethane	<0.50 ug/L	0.50	ug/L						



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0125 - SW5030B

Blank (BAJ0125-BLK1) Prepared & Analyzed: 10/04/2017

Dibromomethane	<1.00 ug/L	1.00	ug/L
Dibromomethane	<1.00 ug/L	1.00	ug/L
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L
Di-isopropyl ether (DIPE)	<5.00 ug/L	5.00	ug/L
Ethyl methacrylate	<5.00 ug/L	5.00	ug/L
Ethylbenzene	<1.00 ug/L	1.00	ug/L
Ethylbenzene	<1.00 ug/L	1.00	ug/L
Hexachlorobutadiene	<0.80 ug/L	0.80	ug/L
Hexachlorobutadiene	<0.80 ug/L	0.80	ug/L
Iodomethane	<10.0 ug/L	10.0	ug/L
Iodomethane	<10.0 ug/L	10.0	ug/L
Isobutyl Alcohol	<40.0 ug/L	40.0	ug/L
Isopropylbenzene	<1.00 ug/L	1.00	ug/L
m+p-Xylenes	<2.00 ug/L	2.00	ug/L
m+p-Xylenes	<2.00 ug/L	2.00	ug/L
Methacrylonitrile	<1.50 ug/L	1.50	ug/L
Methyl methacrylate	<2.00 ug/L	2.00	ug/L
Methylene chloride	<4.00 ug/L	4.00	ug/L
Methylene chloride	<4.00 ug/L	4.00	ug/L
Methyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L
Naphthalene	<1.00 ug/L	1.00	ug/L
n-Butylbenzene	<1.00 ug/L	1.00	ug/L
n-Propylbenzene	<1.00 ug/L	1.00	ug/L
o-Xylene	<1.00 ug/L	1.00	ug/L
o-Xylene	<1.00 ug/L	1.00	ug/L
Propionitrile	<40.0 ug/L	40.0	ug/L
sec-Butylbenzene	<1.00 ug/L	1.00	ug/L
Styrene	<1.00 ug/L	1.00	ug/L
Styrene	<1.00 ug/L	1.00	ug/L
tert-Butylbenzene	<1.00 ug/L	1.00	ug/L



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201 Church Street
Blacksburg VA, 24060

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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0125 - SW5030B

Blank (BAJ0125-BLK1)	Prepared & Analyzed: 10/04/2017					
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L			
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L			
Toluene	<1.00 ug/L	1.00	ug/L			
Toluene	<1.00 ug/L	1.00	ug/L			
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L			
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L			
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L			
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L			
trans-1,4-Dichloro-2-butene	<4.00 ug/L	4.00	ug/L			
Trichloroethylene	<1.00 ug/L	1.00	ug/L			
Trichloroethylene	<1.00 ug/L	1.00	ug/L			
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L			
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L			
Vinyl acetate	<10.0 ug/L	10.0	ug/L			
Vinyl acetate	<10.0 ug/L	10.0	ug/L			
Vinyl chloride	<0.50 ug/L	0.50	ug/L			
Vinyl chloride	<0.50 ug/L	0.50	ug/L			
Xylenes, Total	<3.00 ug/L	3.00	ug/L			
Xylenes, Total	<3.00 ug/L	3.00	ug/L			
Surr: 1,2-Dichloroethane-d4 (Surr)	49.5	ug/L	50.0	99.0	70-120	
Surr: 1,2-Dichloroethane-d4 (Surr)	49.5	ug/L	50.0	99.0	70-120	
Surr: 4-Bromofluorobenzene (Surr)	48.6	ug/L	50.0	97.1	75-120	
Surr: 4-Bromofluorobenzene (Surr)	48.6	ug/L	50.0	97.1	75-120	
Surr: Dibromofluoromethane (Surr)	45.8	ug/L	50.0	91.7	80-119	
Surr: Dibromofluoromethane (Surr)	45.8	ug/L	50.0	91.7	80-119	
Surr: Toluene-d8 (Surr)	49.1	ug/L	50.0	98.2	85-120	
Surr: Toluene-d8 (Surr)	49.1	ug/L	50.0	98.2	85-120	



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0125 - SW5030B

LCS (BAJ0125-BS1)	Prepared & Analyzed: 10/04/2017						
1,1,1,2-Tetrachloroethane	49.6 ug/L	0.4	ug/L	50.0	ug/L	99.3	80-130
1,1,1,2-Tetrachloroethane	49.6 ug/L	0.4	ug/L	50.0	ug/L	99.3	80-130
1,1,1-Trichloroethane	43.4 ug/L	1	ug/L	50.0	ug/L	86.9	65-130
1,1,1-Trichloroethane	43.4 ug/L	1	ug/L	50.0	ug/L	86.9	65-130
1,1,2,2-Tetrachloroethane	48.4 ug/L	0.4	ug/L	50.0	ug/L	96.8	65-130
1,1,2,2-Tetrachloroethane	48.4 ug/L	0.4	ug/L	50.0	ug/L	96.8	65-130
1,1,2-Trichloroethane	46.7 ug/L	1	ug/L	50.0	ug/L	93.5	75-125
1,1,2-Trichloroethane	46.7 ug/L	1	ug/L	50.0	ug/L	93.5	75-125
1,1-Dichloroethane	43.6 ug/L	1	ug/L	50.0	ug/L	87.2	70-135
1,1-Dichloroethane	43.6 ug/L	1	ug/L	50.0	ug/L	87.2	70-135
1,1-Dichloroethylene	44.3 ug/L	1	ug/L	50.0	ug/L	88.6	70-130
1,1-Dichloroethylene	44.3 ug/L	1	ug/L	50.0	ug/L	88.6	70-130
1,1-Dichloropropene	44.3 ug/L	1	ug/L	50.0	ug/L	88.6	75-135
1,1-Dichloropropene	44.3 ug/L	1	ug/L	50.0	ug/L	88.6	75-135
1,2,3-Trichlorobenzene	53.3 ug/L	1	ug/L	50.0	ug/L	107	55-140
1,2,3-Trichloropropane	47.1 ug/L	1	ug/L	50.0	ug/L	94.3	75-125
1,2,3-Trichloropropane	47.1 ug/L	1	ug/L	50.0	ug/L	94.3	75-125
1,2,4-Trichlorobenzene	54.1 ug/L	1	ug/L	50.0	ug/L	108	65-135
1,2,4-Trichlorobenzene	54.1 ug/L	1	ug/L	50.0	ug/L	108	65-135
1,2,4-Trimethylbenzene	50.3 ug/L	1	ug/L	50.0	ug/L	101	75-130
1,2-Dibromo-3-chloropropane (DBCP)	47.2 ug/L	1	ug/L	50.0	ug/L	94.3	50-130
1,2-Dibromoethane (EDB)	48.5 ug/L	1	ug/L	50.0	ug/L	97.0	80-120
1,2-Dichlorobenzene	52.0 ug/L	0.5	ug/L	50.0	ug/L	104	70-120
1,2-Dichlorobenzene	52.0 ug/L	1	ug/L	50.0	ug/L	104	70-120
1,2-Dichloroethane	38.4 ug/L	1	ug/L	50.0	ug/L	76.7	70-130
1,2-Dichloroethane	38.4 ug/L	1	ug/L	50.0	ug/L	76.7	70-130
1,2-Dichloropropene	44.6 ug/L	0.5	ug/L	50.0	ug/L	89.3	75-125
1,2-Dichloropropene	44.6 ug/L	1	ug/L	50.0	ug/L	89.3	75-125
1,3,5-Trimethylbenzene	52.3 ug/L	1	ug/L	50.0	ug/L	105	75-125
1,3-Dichlorobenzene	52.1 ug/L	1	ug/L	50.0	ug/L	104	75-125
1,3-Dichlorobenzene	52.1 ug/L	1	ug/L	50.0	ug/L	104	75-125



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0125 - SW5030B

LCS (BAJ0125-BS1)							Prepared & Analyzed: 10/04/2017			
1,3-Dichloropropane	43.7 ug/L	1	ug/L	50.0	ug/L	87.4	75-125			
1,3-Dichloropropane	43.7 ug/L	1	ug/L	50.0	ug/L	87.4	75-125			
1,4-Dichlorobenzene	51.1 ug/L	1	ug/L	50.0	ug/L	102	75-125			
1,4-Dichlorobenzene	51.1 ug/L	1	ug/L	50.0	ug/L	102	75-125			
2,2-Dichloropropane	49.3 ug/L	1	ug/L	50.0	ug/L	98.6	70-135			
2,2-Dichloropropane	49.3 ug/L	2	ug/L	50.0	ug/L	98.6	70-135			
2-Butanone (MEK)	38.8 ug/L	10	ug/L	50.0	ug/L	77.5	30-150			
2-Butanone (MEK)	38.8 ug/L	5	ug/L	50.0	ug/L	77.5	30-150			
2-Chlorotoluene	54.5 ug/L	1	ug/L	50.0	ug/L	109	75-125			
2-Hexanone (MBK)	45.3 ug/L	5	ug/L	50.0	ug/L	90.7	55-130			
2-Hexanone (MBK)	45.3 ug/L	5	ug/L	50.0	ug/L	90.7	55-130			
4-Chlorotoluene	52.3 ug/L	1	ug/L	50.0	ug/L	105	75-130			
4-Isopropyltoluene	53.2 ug/L	1	ug/L	50.0	ug/L	106	75-130			
4-Methyl-2-pentanone (MIBK)	42.1 ug/L	5	ug/L	50.0	ug/L	84.2	60-135			
4-Methyl-2-pentanone (MIBK)	42.1 ug/L	5	ug/L	50.0	ug/L	84.2	60-135			
Acetone	36.9 ug/L	10	ug/L	50.0	ug/L	73.8	40-140			
Acetone	36.9 ug/L	10	ug/L	50.0	ug/L	73.8	40-140			
Acrylonitrile	196 ug/L	5	ug/L	250	ug/L	78.6	70-130			
Benzene	44.2 ug/L	1	ug/L	50.0	ug/L	88.3	80-120			
Benzene	44.2 ug/L	1	ug/L	50.0	ug/L	88.3	80-120			
Bromobenzene	48.6 ug/L	1	ug/L	50.0	ug/L	97.2	75-125			
Bromochloromethane	41.8 ug/L	1	ug/L	50.0	ug/L	83.5	65-130			
Bromochloromethane	41.8 ug/L	1	ug/L	50.0	ug/L	83.5	65-130			
Bromodichloromethane	44.0 ug/L	0.5	ug/L	50.0	ug/L	87.9	75-120			
Bromodichloromethane	44.0 ug/L	0.5	ug/L	50.0	ug/L	87.9	75-120			
Bromoform	46.1 ug/L	1	ug/L	50.0	ug/L	92.1	70-130			
Bromoform	46.1 ug/L	1	ug/L	50.0	ug/L	92.1	70-130			
Bromomethane	40.3 ug/L	1	ug/L	50.0	ug/L	80.6	30-145			
Bromomethane	40.3 ug/L	1	ug/L	50.0	ug/L	80.6	30-145			
Carbon disulfide	40.2 ug/L	10	ug/L	50.0	ug/L	80.5	35-160			
Carbon disulfide	40.2 ug/L	10	ug/L	50.0	ug/L	80.5	35-160			



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0125 - SW5030B

Prepared & Analyzed: 10/04/2017						
LCS (BAJ0125-BS1)						
Carbon tetrachloride	41.9 ug/L	1	ug/L	50.0 ug/L	83.9	65-140
Carbon tetrachloride	41.9 ug/L	1	ug/L	50.0 ug/L	83.9	65-140
Chlorobenzene	49.0 ug/L	1	ug/L	50.0 ug/L	98.0	80-120
Chlorobenzene	49.0 ug/L	1	ug/L	50.0 ug/L	98.0	80-120
Chloroethane	38.5 ug/L	1	ug/L	50.0 ug/L	77.0	60-135
Chloroethane	38.5 ug/L	1	ug/L	50.0 ug/L	77.0	60-135
Chloroform	38.7 ug/L	0.5	ug/L	50.0 ug/L	77.4	65-135
Chloroform	38.7 ug/L	0.5	ug/L	50.0 ug/L	77.4	65-135
Chloromethane	31.5 ug/L	1	ug/L	50.0 ug/L	62.9	40-125
Chloromethane	31.5 ug/L	1	ug/L	50.0 ug/L	62.9	40-125
cis-1,2-Dichloroethylene	41.2 ug/L	1	ug/L	50.0 ug/L	82.4	70-125
cis-1,2-Dichloroethylene	41.2 ug/L	1	ug/L	50.0 ug/L	82.4	70-125
cis-1,3-Dichloropropene	44.9 ug/L	1	ug/L	50.0 ug/L	89.9	70-130
cis-1,3-Dichloropropene	44.9 ug/L	1	ug/L	50.0 ug/L	89.9	70-130
Dibromochloromethane	39.6 ug/L	0.5	ug/L	50.0 ug/L	79.1	60-135
Dibromochloromethane	39.6 ug/L	0.5	ug/L	50.0 ug/L	79.1	60-135
Dibromomethane	42.0 ug/L	1	ug/L	50.0 ug/L	84.0	75-125
Dibromomethane	42.0 ug/L	1	ug/L	50.0 ug/L	84.0	75-125
Dichlorodifluoromethane	36.5 ug/L	1	ug/L	50.0 ug/L	73.1	30-155
Dichlorodifluoromethane	36.5 ug/L	1	ug/L	50.0 ug/L	73.1	30-155
Ethylbenzene	49.0 ug/L	1	ug/L	50.0 ug/L	97.9	75-125
Ethylbenzene	49.0 ug/L	1	ug/L	50.0 ug/L	97.9	75-125
Hexachlorobutadiene	60.6 ug/L	0.8	ug/L	50.0 ug/L	121	50-140
Hexachlorobutadiene	60.6 ug/L	0.8	ug/L	50.0 ug/L	121	50-140
Isopropylbenzene	52.1 ug/L	1	ug/L	50.0 ug/L	104	75-125
m+p-Xylenes	101 ug/L	2	ug/L	100 ug/L	101	75-130
m+p-Xylenes	101 ug/L	2	ug/L	100 ug/L	101	75-130
Methylene chloride	37.8 ug/L	4	ug/L	50.0 ug/L	75.5	55-140
Methylene chloride	37.8 ug/L	4	ug/L	50.0 ug/L	75.5	55-140
Methyl-t-butyl ether (MTBE)	40.7 ug/L	1	ug/L	50.0 ug/L	81.3	65-125
Naphthalene	50.3 ug/L	1	ug/L	50.0 ug/L	101	55-140



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/12/2017 17:19
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0125 - SW5030B

LCS (BAJ0125-BS1)

Prepared & Analyzed: 10/04/2017

n-Butylbenzene	55.6 ug/L	1	ug/L	50.0 ug/L	111	70-135		
n-Propylbenzene	55.2 ug/L	1	ug/L	50.0 ug/L	110	70-130		
o-Xylene	50.0 ug/L	1	ug/L	50.0 ug/L	100	80-120		
o-Xylene	50.0 ug/L	1	ug/L	50.0 ug/L	100	80-120		
sec-Butylbenzene	53.1 ug/L	1	ug/L	50.0 ug/L	106	70-125		
Styrene	50.0 ug/L	1	ug/L	50.0 ug/L	99.9	65-135		
Styrene	50.0 ug/L	1	ug/L	50.0 ug/L	99.9	65-135		
tert-Butylbenzene	53.5 ug/L	1	ug/L	50.0 ug/L	107	70-130		
Tetrachloroethylene (PCE)	71.3 ug/L	1	ug/L	50.0 ug/L	143	45-150		
Tetrachloroethylene (PCE)	71.3 ug/L	1	ug/L	50.0 ug/L	143	45-150		
Toluene	44.5 ug/L	1	ug/L	50.0 ug/L	89.0	75-120		
Toluene	44.5 ug/L	1	ug/L	50.0 ug/L	89.0	75-120		
trans-1,2-Dichloroethylene	37.3 ug/L	1	ug/L	50.0 ug/L	74.7	60-140		
trans-1,2-Dichloroethylene	37.3 ug/L	1	ug/L	50.0 ug/L	74.7	60-140		
trans-1,3-Dichloropropene	40.1 ug/L	1	ug/L	50.0 ug/L	80.1	55-140		
trans-1,3-Dichloropropene	40.1 ug/L	1	ug/L	50.0 ug/L	80.1	55-140		
Trichloroethylene	45.1 ug/L	1	ug/L	50.0 ug/L	90.2	70-125		
Trichloroethylene	45.1 ug/L	1	ug/L	50.0 ug/L	90.2	70-125		
Trichlorofluoromethane	39.4 ug/L	1	ug/L	50.0 ug/L	78.9	60-145		
Trichlorofluoromethane	39.4 ug/L	1	ug/L	50.0 ug/L	78.9	60-145		
Vinyl chloride	36.4 ug/L	0.5	ug/L	50.0 ug/L	72.9	50-145		
Vinyl chloride	36.4 ug/L	0.5	ug/L	50.0 ug/L	72.9	50-145		
Surr: 1,2-Dichloroethane-d4 (Surr)	47.1		ug/L	50.0 ug/L	94.3	70-120		
Surr: 1,2-Dichloroethane-d4 (Surr)	47.1		ug/L	50.0 ug/L	94.3	70-120		
Surr: 4-Bromofluorobenzene (Surr)	47.4		ug/L	50.0 ug/L	94.8	75-120		
Surr: 4-Bromofluorobenzene (Surr)	47.4		ug/L	50.0 ug/L	94.8	75-120		
Surr: Dibromofluoromethane (Surr)	45.4		ug/L	50.0 ug/L	90.7	80-119		
Surr: Dibromofluoromethane (Surr)	45.4		ug/L	50.0 ug/L	90.7	80-119		
Surr: Toluene-d8 (Surr)	48.2		ug/L	50.0 ug/L	96.4	85-120		
Surr: Toluene-d8 (Surr)	48.2		ug/L	50.0 ug/L	96.4	85-120		



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Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0125 - SW5030B

Duplicate (BAJ0125-DUP1)	Source: 17J0070-01			Prepared & Analyzed: 10/04/2017			
1,1,1,2-Tetrachloroethane	<2.00 ug/L	2.00	ug/L	<2.00 ug/L		NA	30
1,1,1,2-Tetrachloroethane	<2.00 ug/L	2.00	ug/L	<2.00 ug/L		NA	30
1,1,1-Trichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,1,1-Trichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,1,2,2-Tetrachloroethane	<2.00 ug/L	2.00	ug/L	<2.00 ug/L		NA	30
1,1,2,2-Tetrachloroethane	<2.00 ug/L	2.00	ug/L	<2.00 ug/L		NA	30
1,1,2-Trichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,1,2-Trichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,1-Dichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,1-Dichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,1-Dichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,1-Dichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,1-Dichloropropene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,1-Dichloropropene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2,3-Trichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2,3-Trichloropropane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2,3-Trichloropropane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2,4-Trichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2,4-Trichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2,4-Trimethylbenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2-Dibromo-3-chloropropane (DBCP)	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2-Dibromoethane (EDB)	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2-Dichlorobenzene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30
1,2-Dichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2-Dichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2-Dichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,2-Dichloropropene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30
1,2-Dichloropropene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,3,5-Trimethylbenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,3-Dichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
1,3-Dichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30



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Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0125 - SW5030B

Duplicate (BAJ0125-DUP1)	Source: 17J0070-01			Prepared & Analyzed: 10/04/2017				
1,3-Dichloropropane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
1,3-Dichloropropane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
1,4-Dichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
1,4-Dichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
2,2-Dichloropropane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
2,2-Dichloropropane	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
2-Butanone (MEK)	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30	
2-Butanone (MEK)	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
2-Chlorotoluene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
2-Hexanone (MBK)	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
2-Hexanone (MBK)	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
4-Chlorotoluene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
4-Isopropyltoluene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
4-Methyl-2-pentanone (MIBK)	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
4-Methyl-2-pentanone (MIBK)	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
Acetone	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30	
Acetone	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30	
Acetonitrile	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30	
Acrolein	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30	
Acrylonitrile	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
Allyl chloride	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Benzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Benzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Bromobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Bromochloromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Bromochloromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Bromodichloromethane	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30	
Bromodichloromethane	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30	
Bromoform	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Bromoform	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Bromomethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0125 - SW5030B

Duplicate (BAJ0125-DUP1)	Source: 17J0070-01			Prepared & Analyzed: 10/04/2017			
Bromomethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Carbon disulfide	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30
Carbon disulfide	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30
Carbon tetrachloride	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Carbon tetrachloride	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Chlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Chlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Chloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Chloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Chloroform	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30
Chloroform	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30
Chloromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Chloromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Chloroprene	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30
cis-1,2-Dichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
cis-1,2-Dichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
cis-1,3-Dichloropropene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
cis-1,3-Dichloropropene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Dibromochloromethane	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30
Dibromochloromethane	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30
Dibromomethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Dibromomethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Dichlorodifluoromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Dichlorodifluoromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Di-isopropyl ether (DIPE)	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30
Ethyl methacrylate	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30
Ethylbenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Ethylbenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Hexachlorobutadiene	<4.00 ug/L	4.00	ug/L	<4.00 ug/L		NA	30
Hexachlorobutadiene	<4.00 ug/L	4.00	ug/L	<4.00 ug/L		NA	30
Iodomethane	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0125 - SW5030B

Duplicate (BAJ0125-DUP1)	Source: 17J0070-01			Prepared & Analyzed: 10/04/2017				
Iodomethane	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30	
Isobutyl Alcohol	<200 ug/L	200	ug/L	<200 ug/L		NA	30	
Isopropylbenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
m+p-Xylenes	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
m+p-Xylenes	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
Methacrylonitrile	<7.50 ug/L	7.50	ug/L	<7.50 ug/L		NA	30	
Methyl methacrylate	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
Methylene chloride	<20.0 ug/L	20.0	ug/L	<20.0 ug/L		NA	30	
Methylene chloride	<20.0 ug/L	20.0	ug/L	<20.0 ug/L		NA	30	
Methyl-t-butyl ether (MTBE)	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Naphthalene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
n-Butylbenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
n-Propylbenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
o-Xylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
o-Xylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Propionitrile	<200 ug/L	200	ug/L	<200 ug/L		NA	30	
sec-Butylbenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Styrene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Styrene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
tert-Butylbenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Tetrachloroethylene (PCE)	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Tetrachloroethylene (PCE)	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Toluene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Toluene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
trans-1,2-Dichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
trans-1,2-Dichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
trans-1,3-Dichloropropene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
trans-1,3-Dichloropropene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
trans-1,4-Dichloro-2-butene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L		NA	30	
Trichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Trichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0125 - SW5030B

Duplicate (BAJ0125-DUP1)	Source: 17J0070-01			Prepared & Analyzed: 10/04/2017			
Trichlorofluoromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Trichlorofluoromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Vinyl acetate	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30
Vinyl acetate	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30
Vinyl chloride	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30
Vinyl chloride	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30
Xylenes, Total	<15.0 ug/L	15.0	ug/L	<15.0 ug/L		NA	30
Xylenes, Total	<15.0 ug/L	15.0	ug/L	<15.0 ug/L		NA	30
Surr: 1,2-Dichloroethane-d4 (Surr)	247		ug/L	250	ug/L	98.7	70-120
Surr: 1,2-Dichloroethane-d4 (Surr)	247		ug/L	250	ug/L	98.7	70-120
Surr: 4-Bromofluorobenzene (Surr)	248		ug/L	250	ug/L	99.1	75-120
Surr: 4-Bromofluorobenzene (Surr)	248		ug/L	250	ug/L	99.1	75-120
Surr: Dibromofluoromethane (Surr)	225		ug/L	250	ug/L	90.0	80-119
Surr: Dibromofluoromethane (Surr)	225		ug/L	250	ug/L	90.0	80-119
Surr: Toluene-d8 (Surr)	243		ug/L	250	ug/L	97.3	85-120
Surr: Toluene-d8 (Surr)	243		ug/L	250	ug/L	97.3	85-120

Matrix Spike (BAJ0125-MS1)	Source: 17J0082-01			Prepared & Analyzed: 10/04/2017			
1,1,1,2-Tetrachloroethane	48.9 ug/L	0.4	ug/L	50.0	<0.4 ug/L	97.7	80-130
1,1,1,2-Tetrachloroethane	48.9 ug/L	0.4	ug/L	50.0	<0.4 ug/L	97.7	80-130
1,1,1-Trichloroethane	43.7 ug/L	1	ug/L	50.0	<1 ug/L	87.3	65-130
1,1,1-Trichloroethane	43.7 ug/L	1	ug/L	50.0	<1 ug/L	87.3	65-130
1,1,2,2-Tetrachloroethane	47.6 ug/L	0.4	ug/L	50.0	<0.4 ug/L	95.2	65-130
1,1,2,2-Tetrachloroethane	47.6 ug/L	0.4	ug/L	50.0	<0.4 ug/L	95.2	65-130
1,1,2-Trichloroethane	46.7 ug/L	1	ug/L	50.0	<1 ug/L	93.4	75-125
1,1,2-Trichloroethane	46.7 ug/L	1	ug/L	50.0	<1 ug/L	93.4	75-125
1,1-Dichloroethane	44.2 ug/L	1	ug/L	50.0	<1 ug/L	88.3	70-135
1,1-Dichloroethane	44.2 ug/L	1	ug/L	50.0	<1 ug/L	88.3	70-135
1,1-Dichloroethylene	42.6 ug/L	1	ug/L	50.0	<1 ug/L	85.1	70-130
1,1-Dichloroethylene	42.6 ug/L	1	ug/L	50.0	<1 ug/L	85.1	70-130
1,1-Dichloropropene	44.2 ug/L	1	ug/L	50.0	<1 ug/L	88.4	75-135



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0125 - SW5030B

Matrix Spike (BAJ0125-MS1)	Source: 17J0082-01			Prepared & Analyzed: 10/04/2017					
1,1-Dichloropropene	44.2 ug/L	1	ug/L	50.0 <1 ug/L	88.4	75-135			
1,2,3-Trichlorobenzene	52.2 ug/L	1	ug/L	50.0 <1 ug/L	104	55-140			
1,2,3-Trichloropropane	46.2 ug/L	1	ug/L	50.0 <1 ug/L	92.3	75-125			
1,2,3-Trichloropropane	46.2 ug/L	1	ug/L	50.0 <1 ug/L	92.3	75-125			
1,2,4-Trichlorobenzene	53.2 ug/L	1	ug/L	50.0 <1 ug/L	106	65-135			
1,2,4-Trichlorobenzene	53.2 ug/L	1	ug/L	50.0 <1 ug/L	106	65-135			
1,2,4-Trimethylbenzene	49.1 ug/L	1	ug/L	50.0 <1 ug/L	98.2	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	45.4 ug/L	1	ug/L	50.0 <1 ug/L	90.9	50-130			
1,2-Dibromoethane (EDB)	48.5 ug/L	1	ug/L	50.0 <1 ug/L	97.0	80-120			
1,2-Dichlorobenzene	51.7 ug/L	0.5	ug/L	50.0 <0.5 ug/L	103	70-120			
1,2-Dichlorobenzene	51.7 ug/L	1	ug/L	50.0 <1 ug/L	103	70-120			
1,2-Dichloroethane	39.9 ug/L	1	ug/L	50.0 <1 ug/L	79.8	70-130			
1,2-Dichloroethane	39.9 ug/L	1	ug/L	50.0 <1 ug/L	79.8	70-130			
1,2-Dichloropropane	45.2 ug/L	0.5	ug/L	50.0 <0.5 ug/L	90.3	75-125			
1,2-Dichloropropane	45.2 ug/L	1	ug/L	50.0 <1 ug/L	90.3	75-125			
1,3,5-Trimethylbenzene	51.4 ug/L	1	ug/L	50.0 <1 ug/L	103	75-124			
1,3-Dichlorobenzene	52.0 ug/L	1	ug/L	50.0 <1 ug/L	104	75-125			
1,3-Dichlorobenzene	52.0 ug/L	1	ug/L	50.0 <1 ug/L	104	75-125			
1,3-Dichloropropane	44.0 ug/L	1	ug/L	50.0 <1 ug/L	87.9	75-125			
1,3-Dichloropropane	44.0 ug/L	1	ug/L	50.0 <1 ug/L	87.9	75-125			
1,4-Dichlorobenzene	50.9 ug/L	1	ug/L	50.0 <1 ug/L	102	75-125			
1,4-Dichlorobenzene	50.9 ug/L	1	ug/L	50.0 <1 ug/L	102	75-125			
2,2-Dichloropropane	45.2 ug/L	1	ug/L	50.0 <1 ug/L	90.3	70-135			
2,2-Dichloropropane	45.2 ug/L	2	ug/L	50.0 <2 ug/L	90.3	70-135			
2-Butanone (MEK)	33.2 ug/L	10	ug/L	50.0 <10 ug/L	58.7	30-150			
2-Butanone (MEK)	33.2 ug/L	5	ug/L	50.0 <5 ug/L	58.7	30-150			
2-Chlorotoluene	55.1 ug/L	1	ug/L	50.0 <1 ug/L	110	75-125			
2-Hexanone (MBK)	42.9 ug/L	5	ug/L	50.0 <5 ug/L	85.8	55-130			
2-Hexanone (MBK)	42.9 ug/L	5	ug/L	50.0 <5 ug/L	85.8	55-130			
4-Chlorotoluene	51.5 ug/L	1	ug/L	50.0 <1 ug/L	103	75-130			
4-Isopropyltoluene	52.3 ug/L	1	ug/L	50.0 <1 ug/L	105	75-130			



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Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0125 - SW5030B

Matrix Spike (BAJ0125-MS1)	Source: 17J0082-01			Prepared & Analyzed: 10/04/2017			
4-Methyl-2-pentanone (MIBK)	39.8 ug/L	5	ug/L	50.0 <5 ug/L	79.6	60-135	
4-Methyl-2-pentanone (MIBK)	39.8 ug/L	5	ug/L	50.0 <5 ug/L	79.6	60-135	
Acetone	40.8 ug/L	10	ug/L	50.0 <10 ug/L	73.5	40-140	
Acetone	40.8 ug/L	10	ug/L	50.0 <10 ug/L	73.5	40-140	
Acrylonitrile	166 ug/L	5	ug/L	250 <5 ug/L	66.2	70-130	M
Benzene	45.0 ug/L	1	ug/L	50.0 <1 ug/L	89.9	80-120	
Benzene	45.0 ug/L	1	ug/L	50.0 <1 ug/L	89.9	80-120	
Bromobenzene	48.9 ug/L	1	ug/L	50.0 <1 ug/L	97.8	75-125	
Bromoform	42.9 ug/L	1	ug/L	50.0 <1 ug/L	85.7	65-130	
Bromoform	42.9 ug/L	1	ug/L	50.0 <1 ug/L	85.7	65-130	
Bromochloromethane	42.9 ug/L	1	ug/L	50.0 <1 ug/L	90.7	75-120	
Bromodichloromethane	45.3 ug/L	0.5	ug/L	50.0 <0.5 ug/L	90.7	75-120	
Bromodichloromethane	45.3 ug/L	0.5	ug/L	50.0 <0.5 ug/L	90.7	75-120	
Bromoform	44.4 ug/L	1	ug/L	50.0 <1 ug/L	88.8	70-130	
Bromoform	44.4 ug/L	1	ug/L	50.0 <1 ug/L	88.8	70-130	
Bromomethane	36.7 ug/L	1	ug/L	50.0 <1 ug/L	73.3	30-145	
Bromomethane	36.7 ug/L	1	ug/L	50.0 <1 ug/L	73.3	30-145	
Carbon disulfide	36.9 ug/L	10	ug/L	50.0 <10 ug/L	73.8	35-160	
Carbon disulfide	36.9 ug/L	10	ug/L	50.0 <10 ug/L	73.8	35-160	
Carbon tetrachloride	41.9 ug/L	1	ug/L	50.0 <1 ug/L	83.8	65-140	
Carbon tetrachloride	41.9 ug/L	1	ug/L	50.0 <1 ug/L	83.8	65-140	
Chlorobenzene	49.4 ug/L	1	ug/L	50.0 <1 ug/L	98.7	80-120	
Chlorobenzene	49.4 ug/L	1	ug/L	50.0 <1 ug/L	98.7	80-120	
Chloroethane	39.6 ug/L	1	ug/L	50.0 <1 ug/L	79.2	60-135	
Chloroethane	39.6 ug/L	1	ug/L	50.0 <1 ug/L	79.2	60-135	
Chloroform	40.2 ug/L	0.5	ug/L	50.0 <0.5 ug/L	80.5	65-135	
Chloroform	40.2 ug/L	0.5	ug/L	50.0 <0.5 ug/L	80.5	65-135	
Chloromethane	31.3 ug/L	1	ug/L	50.0 <1 ug/L	62.6	40-125	
Chloromethane	31.3 ug/L	1	ug/L	50.0 <1 ug/L	62.6	40-125	
cis-1,2-Dichloroethylene	42.9 ug/L	1	ug/L	50.0 <1 ug/L	85.8	70-125	
cis-1,2-Dichloroethylene	42.9 ug/L	1	ug/L	50.0 <1 ug/L	85.8	70-125	
cis-1,3-Dichloropropene	43.9 ug/L	1	ug/L	50.0 <1 ug/L	87.9	70-130	



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0125 - SW5030B

Matrix Spike (BAJ0125-MS1)	Source: 17J0082-01		Prepared & Analyzed: 10/04/2017				
cis-1,3-Dichloropropene	43.9 ug/L	1	ug/L	50.0	<1 ug/L	87.9	70-130
Dibromochloromethane	39.8 ug/L	0.5	ug/L	50.0	<0.5 ug/L	79.7	60-135
Dibromochloromethane	39.8 ug/L	0.5	ug/L	50.0	<0.5 ug/L	79.7	60-135
Dibromomethane	42.6 ug/L	1	ug/L	50.0	<1 ug/L	85.3	75-125
Dibromomethane	42.6 ug/L	1	ug/L	50.0	<1 ug/L	85.3	75-125
Dichlorodifluoromethane	34.6 ug/L	1	ug/L	50.0	<1 ug/L	69.0	30-155
Dichlorodifluoromethane	34.6 ug/L	1	ug/L	50.0	<1 ug/L	69.0	30-155
Ethylbenzene	48.2 ug/L	1	ug/L	50.0	<1 ug/L	96.3	75-125
Ethylbenzene	48.2 ug/L	1	ug/L	50.0	<1 ug/L	96.3	75-125
Hexachlorobutadiene	54.1 ug/L	0.8	ug/L	50.0	<0.8 ug/L	108	50-140
Hexachlorobutadiene	54.1 ug/L	0.8	ug/L	50.0	<0.8 ug/L	108	50-140
Isopropylbenzene	50.7 ug/L	1	ug/L	50.0	<1 ug/L	101	75-125
m+p-Xylenes	100 ug/L	2	ug/L	100	<2 ug/L	100	75-130
m+p-Xylenes	100 ug/L	2	ug/L	100	<2 ug/L	100	75-130
Methylene chloride	38.6 ug/L	4	ug/L	50.0	<4 ug/L	77.1	55-140
Methylene chloride	38.6 ug/L	4	ug/L	50.0	<4 ug/L	77.1	55-140
Methyl-t-butyl ether (MTBE)	41.7 ug/L	1	ug/L	50.0	<1 ug/L	83.4	65-125
Naphthalene	49.1 ug/L	1	ug/L	50.0	<1 ug/L	98.1	55-140
n-Butylbenzene	53.8 ug/L	1	ug/L	50.0	<1 ug/L	108	70-135
n-Propylbenzene	55.1 ug/L	1	ug/L	50.0	<1 ug/L	110	70-130
o-Xylene	49.7 ug/L	1	ug/L	50.0	<1 ug/L	99.4	80-120
o-Xylene	49.7 ug/L	1	ug/L	50.0	<1 ug/L	99.4	80-120
sec-Butylbenzene	51.5 ug/L	1	ug/L	50.0	<1 ug/L	103	70-125
Styrene	49.1 ug/L	1	ug/L	50.0	<1 ug/L	98.2	65-135
Styrene	49.1 ug/L	1	ug/L	50.0	<1 ug/L	98.2	65-135
tert-Butylbenzene	53.1 ug/L	1	ug/L	50.0	<1 ug/L	106	70-130
Tetrachloroethylene (PCE)	69.1 ug/L	1	ug/L	50.0	<1 ug/L	138	45-150
Tetrachloroethylene (PCE)	69.1 ug/L	1	ug/L	50.0	<1 ug/L	138	45-150
Toluene	45.2 ug/L	1	ug/L	50.0	<1 ug/L	90.3	75-120
Toluene	45.2 ug/L	1	ug/L	50.0	<1 ug/L	90.3	75-120
trans-1,2-Dichloroethylene	39.2 ug/L	1	ug/L	50.0	<1 ug/L	77.6	60-140



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0125 - SW5030B

Matrix Spike (BAJ0125-MS1)	Source: 17J0082-01		Prepared & Analyzed: 10/04/2017				
trans-1,2-Dichloroethylene	39.2 ug/L	1	ug/L	50.0	<1 ug/L	77.6	60-140
trans-1,3-Dichloropropene	38.9 ug/L	1	ug/L	50.0	<1 ug/L	77.8	55-140
trans-1,3-Dichloropropene	38.9 ug/L	1	ug/L	50.0	<1 ug/L	77.8	55-140
Trichloroethylene	44.3 ug/L	1	ug/L	50.0	<1 ug/L	88.6	70-125
Trichloroethylene	44.3 ug/L	1	ug/L	50.0	<1 ug/L	88.6	70-125
Trichlorofluoromethane	39.1 ug/L	1	ug/L	50.0	<1 ug/L	78.3	60-145
Trichlorofluoromethane	39.1 ug/L	1	ug/L	50.0	<1 ug/L	78.3	60-145
Vinyl chloride	36.4 ug/L	0.5	ug/L	50.0	<0.5 ug/L	72.6	50-145
Vinyl chloride	36.4 ug/L	0.5	ug/L	50.0	<0.5 ug/L	72.6	50-145
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	49.1		ug/L	50.0	ug/L	98.2	70-120
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	49.1		ug/L	50.0	ug/L	98.2	70-120
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	47.8		ug/L	50.0	ug/L	95.5	75-120
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	47.8		ug/L	50.0	ug/L	95.5	75-120
<i>Surr: Dibromofluoromethane (Surr)</i>	46.5		ug/L	50.0	ug/L	93.0	80-119
<i>Surr: Dibromofluoromethane (Surr)</i>	46.5		ug/L	50.0	ug/L	93.0	80-119
<i>Surr: Toluene-d8 (Surr)</i>	48.4		ug/L	50.0	ug/L	96.8	85-120
<i>Surr: Toluene-d8 (Surr)</i>	48.4		ug/L	50.0	ug/L	96.8	85-120

Batch BAJ0227 - SW5030B

Blank (BAJ0227-BLK1)	Prepared & Analyzed: 10/06/2017				
1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L		
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L		
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L		
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L		
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L		
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L		
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L		
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L		
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L		
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L		



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0227 - SW5030B

Blank (BAJ0227-BLK1) Prepared & Analyzed: 10/06/2017

1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L						
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L						
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L						
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L						
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L						
2-Butanone (MEK)	<5.00 ug/L	5.00	ug/L						
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L						
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L						
Acetone	<10.0 ug/L	10.0	ug/L						
Acetonitrile	<10.0 ug/L	10.0	ug/L						
Acrolein	<10.0 ug/L	10.0	ug/L						
Acrylonitrile	<5.00 ug/L	5.00	ug/L						
Allyl chloride	<1.00 ug/L	1.00	ug/L						
Benzene	<1.00 ug/L	1.00	ug/L						
Bromochloromethane	<1.00 ug/L	1.00	ug/L						
Bromodichloromethane	<0.50 ug/L	0.50	ug/L						
Bromoform	<1.00 ug/L	1.00	ug/L						
Bromomethane	<1.00 ug/L	1.00	ug/L						
Carbon disulfide	<10.0 ug/L	10.0	ug/L						
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L						
Chlorobenzene	<1.00 ug/L	1.00	ug/L						
Chloroethane	<1.00 ug/L	1.00	ug/L						
Chloroform	<0.50 ug/L	0.50	ug/L						
Chloromethane	<1.00 ug/L	1.00	ug/L						
Chloroprene	<5.00 ug/L	5.00	ug/L						
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L						
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L						
Dibromochloromethane	<0.50 ug/L	0.50	ug/L						
Dibromomethane	<1.00 ug/L	1.00	ug/L						
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L						



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0227 - SW5030B

Blank (BAJ0227-BLK1)							Prepared & Analyzed: 10/06/2017			
Ethyl methacrylate	<5.00 ug/L	5.00	ug/L							
Ethylbenzene	<1.00 ug/L	1.00	ug/L							
Hexachlorobutadiene	<0.80 ug/L	0.80	ug/L							
Iodomethane	<10.0 ug/L	10.0	ug/L							
Isobutyl Alcohol	<40.0 ug/L	40.0	ug/L							
m+p-Xylenes	<2.00 ug/L	2.00	ug/L							
Methacrylonitrile	<1.50 ug/L	1.50	ug/L							
Methyl methacrylate	<2.00 ug/L	2.00	ug/L							
Methylene chloride	<4.00 ug/L	4.00	ug/L							
o-Xylene	<1.00 ug/L	1.00	ug/L							
Propionitrile	<40.0 ug/L	40.0	ug/L							
Styrene	<1.00 ug/L	1.00	ug/L							
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L							
Toluene	<1.00 ug/L	1.00	ug/L							
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L							
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L							
trans-1,4-Dichloro-2-butene	<4.00 ug/L	4.00	ug/L							
Trichloroethylene	<1.00 ug/L	1.00	ug/L							
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L							
Vinyl acetate	<10.0 ug/L	10.0	ug/L							
Vinyl chloride	<0.50 ug/L	0.50	ug/L							
Xylenes, Total	<3.00 ug/L	3.00	ug/L							
Surr: 1,2-Dichloroethane-d4 (Surr)	47.3	ug/L	50.0		94.6	70-120				
Surr: 4-Bromofluorobenzene (Surr)	49.2	ug/L	50.0		98.4	75-120				
Surr: Dibromofluoromethane (Surr)	43.9	ug/L	50.0		87.7	80-119				
Surr: Toluene-d8 (Surr)	48.1	ug/L	50.0		96.2	85-120				

LCS (BAJ0227-BS1)							Prepared & Analyzed: 10/06/2017			
1,1,1,2-Tetrachloroethane	53.5 ug/L	0.4	ug/L	50.0	ug/L		107	80-130		
1,1,1-Trichloroethane	45.7 ug/L	1	ug/L	50.0	ug/L		91.5	65-130		
1,1,2,2-Tetrachloroethane	50.3 ug/L	0.4	ug/L	50.0	ug/L		101	65-130		



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/12/2017 17:19
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0227 - SW5030B

LCS (BAJ0227-BS1)	Prepared & Analyzed: 10/06/2017						
1,1,2-Trichloroethane	50.9 ug/L	1	ug/L	50.0 ug/L	102	75-125	
1,1-Dichloroethane	45.5 ug/L	1	ug/L	50.0 ug/L	91.0	70-135	
1,1-Dichloroethylene	44.5 ug/L	1	ug/L	50.0 ug/L	89.1	70-130	
1,1-Dichloropropene	45.7 ug/L	1	ug/L	50.0 ug/L	91.4	75-135	
1,2,3-Trichloropropane	49.2 ug/L	1	ug/L	50.0 ug/L	98.4	75-125	
1,2,4-Trichlorobenzene	57.0 ug/L	1	ug/L	50.0 ug/L	114	65-135	
1,2-Dichlorobenzene	55.1 ug/L	1	ug/L	50.0 ug/L	110	70-120	
1,2-Dichloroethane	40.3 ug/L	1	ug/L	50.0 ug/L	80.6	70-130	
1,2-Dichloropropane	48.9 ug/L	1	ug/L	50.0 ug/L	97.8	75-125	
1,3-Dichlorobenzene	55.7 ug/L	1	ug/L	50.0 ug/L	111	75-125	
1,3-Dichloropropane	48.7 ug/L	1	ug/L	50.0 ug/L	97.4	75-125	
1,4-Dichlorobenzene	54.0 ug/L	1	ug/L	50.0 ug/L	108	75-125	
2,2-Dichloropropane	51.1 ug/L	2	ug/L	50.0 ug/L	102	70-135	
2-Butanone (MEK)	35.7 ug/L	5	ug/L	50.0 ug/L	71.4	30-150	
2-Hexanone (MBK)	45.1 ug/L	5	ug/L	50.0 ug/L	90.2	55-130	
4-Methyl-2-pentanone (MIBK)	42.7 ug/L	5	ug/L	50.0 ug/L	85.4	60-135	
Acetone	38.6 ug/L	10	ug/L	50.0 ug/L	77.3	40-140	
Acrylonitrile	208 ug/L	5	ug/L	250 ug/L	83.2	70-130	
Benzene	47.9 ug/L	1	ug/L	50.0 ug/L	95.8	80-120	
Bromochloromethane	44.1 ug/L	1	ug/L	50.0 ug/L	88.3	65-130	
Bromodichloromethane	49.4 ug/L	0.5	ug/L	50.0 ug/L	98.8	75-120	
Bromoform	48.4 ug/L	1	ug/L	50.0 ug/L	96.8	70-130	
Bromomethane	37.8 ug/L	1	ug/L	50.0 ug/L	75.6	30-145	
Carbon disulfide	38.2 ug/L	10	ug/L	50.0 ug/L	76.5	35-160	
Carbon tetrachloride	45.7 ug/L	1	ug/L	50.0 ug/L	91.5	65-140	
Chlorobenzene	52.5 ug/L	1	ug/L	50.0 ug/L	105	80-120	
Chloroethane	38.2 ug/L	1	ug/L	50.0 ug/L	76.5	60-135	
Chloroform	40.7 ug/L	0.5	ug/L	50.0 ug/L	81.4	65-135	
Chloromethane	30.3 ug/L	1	ug/L	50.0 ug/L	60.5	40-125	
cis-1,2-Dichloroethylene	43.0 ug/L	1	ug/L	50.0 ug/L	86.0	70-125	
cis-1,3-Dichloropropene	48.9 ug/L	1	ug/L	50.0 ug/L	97.7	70-130	



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Certificate of Analysis

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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0227 - SW5030B

LCS (BAJ0227-BS1)

	Prepared & Analyzed: 10/06/2017					
Dibromochloromethane	43.3 ug/L	0.5	ug/L	50.0 ug/L	86.5	60-135
Dibromomethane	45.8 ug/L	1	ug/L	50.0 ug/L	91.5	75-125
Dichlorodifluoromethane	35.2 ug/L	1	ug/L	50.0 ug/L	70.3	30-155
Ethylbenzene	51.3 ug/L	1	ug/L	50.0 ug/L	103	75-125
Hexachlorobutadiene	62.0 ug/L	0.8	ug/L	50.0 ug/L	124	50-140
m+p-Xylenes	108 ug/L	2	ug/L	100 ug/L	108	75-130
Methylene chloride	37.6 ug/L	4	ug/L	50.0 ug/L	75.2	55-140
o-Xylene	52.7 ug/L	1	ug/L	50.0 ug/L	105	80-120
Styrene	52.5 ug/L	1	ug/L	50.0 ug/L	105	65-135
Tetrachloroethylene (PCE)	75.2 ug/L	1	ug/L	50.0 ug/L	150	45-150
Toluene	48.6 ug/L	1	ug/L	50.0 ug/L	97.1	75-120
trans-1,2-Dichloroethylene	43.4 ug/L	1	ug/L	50.0 ug/L	86.7	60-140
trans-1,3-Dichloropropene	43.2 ug/L	1	ug/L	50.0 ug/L	86.3	55-140
Trichloroethylene	49.6 ug/L	1	ug/L	50.0 ug/L	99.1	70-125
Trichlorofluoromethane	40.0 ug/L	1	ug/L	50.0 ug/L	80.1	60-145
Vinyl chloride	36.0 ug/L	0.5	ug/L	50.0 ug/L	72.0	50-145
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	46.8		ug/L	50.0 ug/L	93.7	70-120
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	46.3		ug/L	50.0 ug/L	92.5	75-120
<i>Surr: Dibromofluoromethane (Surr)</i>	44.8		ug/L	50.0 ug/L	89.5	80-119
<i>Surr: Toluene-d8 (Surr)</i>	49.1		ug/L	50.0 ug/L	98.1	85-120

Duplicate (BAJ0227-DUP1)

Source: 17J0208-01 Prepared & Analyzed: 10/06/2017

1,1,1,2-Tetrachloroethane	<2.00 ug/L	2.00	ug/L	<2.00 ug/L	NA	30
1,1,1-Trichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L	NA	30
1,1,2,2-Tetrachloroethane	<2.00 ug/L	2.00	ug/L	<2.00 ug/L	NA	30
1,1,2-Trichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L	NA	30
1,1-Dichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L	NA	30
1,1-Dichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L	NA	30
1,1-Dichloropropene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L	NA	30
1,2,3-Trichloropropane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L	NA	30
1,2,4-Trichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L	NA	30



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Limit	Qual
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Batch BAJ0227 - SW5030B

Duplicate (BAJ0227-DUP1)	Source: 17J0208-01			Prepared & Analyzed: 10/06/2017				
1,2-Dichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
1,2-Dichloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
1,2-Dichloropropane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
1,3-Dichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
1,3-Dichloropropane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
1,4-Dichlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
2,2-Dichloropropane	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30	
2-Butanone (MEK)	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
2-Hexanone (MBK)	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
4-Methyl-2-pentanone (MIBK)	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
Acetone	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30	
Acetonitrile	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30	
Acrolein	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30	
Acrylonitrile	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
Allyl chloride	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Benzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Bromochloromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Bromodichloromethane	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30	
Bromoform	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Bromomethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Carbon disulfide	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30	
Carbon tetrachloride	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Chlorobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Chloroethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Chloroform	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30	
Chloromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Chloroprene	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30	
cis-1,2-Dichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
cis-1,3-Dichloropropene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	
Dibromochloromethane	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30	
Dibromomethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30	



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Certificate of Analysis

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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0227 - SW5030B

Duplicate (BAJ0227-DUP1)	Source: 17J0208-01			Prepared & Analyzed: 10/06/2017			
Dichlorodifluoromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Ethyl methacrylate	<25.0 ug/L	25.0	ug/L	<25.0 ug/L		NA	30
Ethylbenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Hexachlorobutadiene	4.48 ug/L	4.00	ug/L	4.82 ug/L		7.31	30
Iodomethane	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30
Isobutyl Alcohol	<200 ug/L	200	ug/L	<200 ug/L		NA	30
m+p-Xylenes	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30
Methacrylonitrile	<7.50 ug/L	7.50	ug/L	<7.50 ug/L		NA	30
Methyl methacrylate	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		NA	30
Methylene chloride	<20.0 ug/L	20.0	ug/L	<20.0 ug/L		NA	30
o-Xylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Propionitrile	<200 ug/L	200	ug/L	<200 ug/L		NA	30
Styrene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Tetrachloroethylene (PCE)	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Toluene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
trans-1,2-Dichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
trans-1,3-Dichloropropene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
trans-1,4-Dichloro-2-butene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L		NA	30
Trichloroethylene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Trichlorofluoromethane	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		NA	30
Vinyl acetate	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		NA	30
Vinyl chloride	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		NA	30
Xylenes, Total	<15.0 ug/L	15.0	ug/L	<15.0 ug/L		NA	30
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	246	ug/L	250	ug/L	98.6	70-120	
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	243	ug/L	250	ug/L	97.1	75-120	
<i>Surr: Dibromofluoromethane (Surr)</i>	227	ug/L	250	ug/L	90.8	80-119	
<i>Surr: Toluene-d8 (Surr)</i>	243	ug/L	250	ug/L	97.4	85-120	



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0227 - SW5030B

Matrix Spike (BAJ0227-MS1)	Source: 17J0136-03		Prepared & Analyzed: 10/06/2017				
1,1,1,2-Tetrachloroethane	51.4 ug/L	0.4	ug/L	50.0	<0.4 ug/L	103	80-130
1,1,1-Trichloroethane	45.0 ug/L	1	ug/L	50.0	<1 ug/L	90.0	65-130
1,1,2,2-Tetrachloroethane	49.7 ug/L	0.4	ug/L	50.0	<0.4 ug/L	99.4	65-130
1,1,2-Trichloroethane	49.2 ug/L	1	ug/L	50.0	<1 ug/L	98.5	75-125
1,1-Dichloroethane	59.1 ug/L	1	ug/L	50.0	11.9 ug/L	94.4	70-135
1,1-Dichloroethylene	45.5 ug/L	1	ug/L	50.0	<1 ug/L	90.8	70-130
1,1-Dichloropropene	44.8 ug/L	1	ug/L	50.0	<1 ug/L	89.7	75-135
1,2,3-Trichloropropane	48.9 ug/L	1	ug/L	50.0	<1 ug/L	97.8	75-125
1,2,4-Trichlorobenzene	54.0 ug/L	1	ug/L	50.0	<1 ug/L	108	65-135
1,2-Dichlorobenzene	53.8 ug/L	1	ug/L	50.0	<1 ug/L	107	70-120
1,2-Dichloroethane	40.9 ug/L	1	ug/L	50.0	<1 ug/L	80.3	70-130
1,2-Dichloropropane	48.8 ug/L	1	ug/L	50.0	<1 ug/L	96.0	75-125
1,3-Dichlorobenzene	54.5 ug/L	1	ug/L	50.0	<1 ug/L	109	75-125
1,3-Dichloropropane	46.6 ug/L	1	ug/L	50.0	<1 ug/L	93.3	75-125
1,4-Dichlorobenzene	57.6 ug/L	1	ug/L	50.0	4.94 ug/L	105	75-125
2,2-Dichloropropane	46.4 ug/L	2	ug/L	50.0	<2 ug/L	92.8	70-135
2-Butanone (MEK)	40.1 ug/L	5	ug/L	50.0	<5 ug/L	80.2	30-150
2-Hexanone (MBK)	45.2 ug/L	5	ug/L	50.0	<5 ug/L	90.4	55-130
4-Methyl-2-pentanone (MIBK)	42.5 ug/L	5	ug/L	50.0	<5 ug/L	85.0	60-135
Acetone	38.6 ug/L	10	ug/L	50.0	<10 ug/L	77.1	40-140
Acrylonitrile	182 ug/L	5	ug/L	250	<5 ug/L	72.8	70-130
Benzene	47.5 ug/L	1	ug/L	50.0	1.48 ug/L	92.1	80-120
Bromochloromethane	44.0 ug/L	1	ug/L	50.0	<1 ug/L	88.0	65-130
Bromodichloromethane	47.4 ug/L	0.5	ug/L	50.0	<0.5 ug/L	94.8	75-120
Bromoform	45.9 ug/L	1	ug/L	50.0	<1 ug/L	91.8	70-130
Bromomethane	34.0 ug/L	1	ug/L	50.0	<1 ug/L	68.0	30-145
Carbon disulfide	37.9 ug/L	10	ug/L	50.0	<10 ug/L	75.8	35-160
Carbon tetrachloride	43.7 ug/L	1	ug/L	50.0	<1 ug/L	87.5	65-140
Chlorobenzene	53.4 ug/L	1	ug/L	50.0	2.20 ug/L	102	80-120
Chloroethane	42.2 ug/L	1	ug/L	50.0	2.43 ug/L	79.6	60-135
Chloroform	41.7 ug/L	0.5	ug/L	50.0	<0.5 ug/L	83.3	65-135



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0227 - SW5030B

Matrix Spike (BAJ0227-MS1)	Source: 17J0136-03		Prepared & Analyzed: 10/06/2017				
Chloromethane	31.1 ug/L	1	ug/L	50.0 <1 ug/L	62.2	40-125	
cis-1,2-Dichloroethylene	60.2 ug/L	1	ug/L	50.0 15.9 ug/L	88.5	70-125	
cis-1,3-Dichloropropene	45.8 ug/L	1	ug/L	50.0 <1 ug/L	91.6	70-130	
Dibromochloromethane	41.3 ug/L	0.5	ug/L	50.0 <0.5 ug/L	82.6	60-135	
Dibromomethane	44.8 ug/L	1	ug/L	50.0 <1 ug/L	89.5	75-125	
Dichlorodifluoromethane	32.4 ug/L	1	ug/L	50.0 <1 ug/L	64.8	30-155	
Ethylbenzene	49.4 ug/L	1	ug/L	50.0 <1 ug/L	98.8	75-125	
Hexachlorobutadiene	57.6 ug/L	0.8	ug/L	50.0 <0.8 ug/L	115	50-140	
m+p-Xylenes	103 ug/L	2	ug/L	100 <2 ug/L	103	75-130	
Methylene chloride	40.1 ug/L	4	ug/L	50.0 <4 ug/L	79.4	55-140	
o-Xylene	51.3 ug/L	1	ug/L	50.0 <1 ug/L	103	80-120	
Styrene	51.2 ug/L	1	ug/L	50.0 <1 ug/L	102	65-135	
Tetrachloroethylene (PCE)	71.8 ug/L	1	ug/L	50.0 <1 ug/L	143	45-150	
Toluene	47.1 ug/L	1	ug/L	50.0 <1 ug/L	93.9	75-120	
trans-1,2-Dichloroethylene	39.8 ug/L	1	ug/L	50.0 <1 ug/L	79.0	60-140	
trans-1,3-Dichloropropene	40.4 ug/L	1	ug/L	50.0 <1 ug/L	80.9	55-140	
Trichloroethylene	49.0 ug/L	1	ug/L	50.0 1.75 ug/L	94.5	70-125	
Trichlorofluoromethane	40.4 ug/L	1	ug/L	50.0 <1 ug/L	80.9	60-145	
Vinyl chloride	40.9 ug/L	0.5	ug/L	50.0 3.50 ug/L	74.9	50-145	
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	49.4		ug/L	50.0 ug/L	98.8	70-120	
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	47.3		ug/L	50.0 ug/L	94.5	75-120	
<i>Surr: Dibromofluoromethane (Surr)</i>	47.2		ug/L	50.0 ug/L	94.5	80-119	
<i>Surr: Toluene-d8 (Surr)</i>	49.0		ug/L	50.0 ug/L	98.1	85-120	

Matrix Spike Dup (BAJ0227-MSD1)	Source: 17J0136-03		Prepared & Analyzed: 10/06/2017					
1,1,1,2-Tetrachloroethane	51.9 ug/L	0.4	ug/L	50.0 <0.4 ug/L	104	80-130	1.05	30
1,1,1-Trichloroethane	45.9 ug/L	1	ug/L	50.0 <1 ug/L	91.9	65-130	2.10	30
1,1,2,2-Tetrachloroethane	50.8 ug/L	0.4	ug/L	50.0 <0.4 ug/L	102	65-130	2.26	30
1,1,2-Trichloroethane	50.1 ug/L	1	ug/L	50.0 <1 ug/L	100	75-125	1.69	30
1,1-Dichloroethane	58.6 ug/L	1	ug/L	50.0 11.9 ug/L	93.3	70-135	0.858	30
1,1-Dichloroethylene	44.3 ug/L	1	ug/L	50.0 <1 ug/L	88.4	70-130	2.65	30



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0227 - SW5030B

Matrix Spike Dup (BAJ0227-MSD1)	Source: 17J0136-03			Prepared & Analyzed: 10/06/2017					
1,1-Dichloropropene	45.5 ug/L	1	ug/L	50.0	<1 ug/L	90.9	75-135	1.39	30
1,2,3-Trichloropropane	49.2 ug/L	1	ug/L	50.0	<1 ug/L	98.4	75-125	0.616	30
1,2,4-Trichlorobenzene	54.4 ug/L	1	ug/L	50.0	<1 ug/L	109	65-135	0.714	30
1,2-Dichlorobenzene	53.9 ug/L	1	ug/L	50.0	<1 ug/L	107	70-120	0.204	30
1,2-Dichloroethane	42.2 ug/L	1	ug/L	50.0	<1 ug/L	82.9	70-130	3.13	30
1,2-Dichloropropene	48.5 ug/L	1	ug/L	50.0	<1 ug/L	95.5	75-125	0.481	30
1,3-Dichlorobenzene	53.9 ug/L	1	ug/L	50.0	<1 ug/L	108	75-125	1.13	30
1,3-Dichloropropane	46.9 ug/L	1	ug/L	50.0	<1 ug/L	93.8	75-125	0.577	30
1,4-Dichlorobenzene	57.6 ug/L	1	ug/L	50.0	4.94 ug/L	105	75-125	0.00694	30
2,2-Dichloropropene	46.9 ug/L	2	ug/L	50.0	<2 ug/L	93.8	70-135	1.03	30
2-Butanone (MEK)	35.6 ug/L	5	ug/L	50.0	<5 ug/L	71.3	30-150	11.8	30
2-Hexanone (MBK)	45.9 ug/L	5	ug/L	50.0	<5 ug/L	91.7	55-130	1.48	30
4-Methyl-2-pentanone (MIBK)	42.7 ug/L	5	ug/L	50.0	<5 ug/L	85.3	60-135	0.449	30
Acetone	36.4 ug/L	10	ug/L	50.0	<10 ug/L	72.7	40-140	5.85	30
Acrylonitrile	166 ug/L	5	ug/L	250	<5 ug/L	66.4	70-130	9.20	30
Benzene	48.5 ug/L	1	ug/L	50.0	1.48 ug/L	94.1	80-120	2.07	30
Bromochloromethane	45.1 ug/L	1	ug/L	50.0	<1 ug/L	90.1	65-130	2.34	30
Bromodichloromethane	48.0 ug/L	0.5	ug/L	50.0	<0.5 ug/L	96.1	75-120	1.33	30
Bromoform	47.2 ug/L	1	ug/L	50.0	<1 ug/L	94.3	70-130	2.65	30
Bromomethane	36.9 ug/L	1	ug/L	50.0	<1 ug/L	73.8	30-145	8.17	30
Carbon disulfide	36.0 ug/L	10	ug/L	50.0	<10 ug/L	71.9	35-160	5.25	30
Carbon tetrachloride	43.9 ug/L	1	ug/L	50.0	<1 ug/L	87.7	65-140	0.308	30
Chlorobenzene	53.0 ug/L	1	ug/L	50.0	2.20 ug/L	102	80-120	0.786	30
Chloroethane	39.9 ug/L	1	ug/L	50.0	2.43 ug/L	74.9	60-135	5.66	30
Chloroform	42.2 ug/L	0.5	ug/L	50.0	<0.5 ug/L	84.4	65-135	1.34	30
Chloromethane	30.7 ug/L	1	ug/L	50.0	<1 ug/L	61.4	40-125	1.31	30
cis-1,2-Dichloroethylene	59.7 ug/L	1	ug/L	50.0	15.9 ug/L	87.6	70-125	0.732	30
cis-1,3-Dichloropropene	46.7 ug/L	1	ug/L	50.0	<1 ug/L	93.5	70-130	2.03	30
Dibromochloromethane	42.2 ug/L	0.5	ug/L	50.0	<0.5 ug/L	84.4	60-135	2.16	30
Dibromomethane	46.0 ug/L	1	ug/L	50.0	<1 ug/L	91.9	75-125	2.62	30
Dichlorodifluoromethane	34.0 ug/L	1	ug/L	50.0	<1 ug/L	68.0	30-155	4.92	30



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0227 - SW5030B

Matrix Spike Dup (BAJ0227-MSD1)	Source: 17J0136-03			Prepared & Analyzed: 10/06/2017					
Ethylbenzene	50.8 ug/L	1	ug/L	50.0	<1 ug/L	102	75-125	2.77	30
Hexachlorobutadiene	57.6 ug/L	0.8	ug/L	50.0	<0.8 ug/L	115	50-140	0.106	30
m+p-Xylenes	105 ug/L	2	ug/L	100	<2 ug/L	105	75-130	1.12	30
Methylene chloride	39.9 ug/L	4	ug/L	50.0	<4 ug/L	79.0	55-140	0.540	30
o-Xylene	52.5 ug/L	1	ug/L	50.0	<1 ug/L	105	80-120	2.34	30
Styrene	52.6 ug/L	1	ug/L	50.0	<1 ug/L	105	65-135	2.62	30
Tetrachloroethylene (PCE)	73.1 ug/L	1	ug/L	50.0	<1 ug/L	146	45-150	1.73	30
Toluene	47.7 ug/L	1	ug/L	50.0	<1 ug/L	95.2	75-120	1.36	30
trans-1,2-Dichloroethylene	45.5 ug/L	1	ug/L	50.0	<1 ug/L	90.4	60-140	13.3	30
trans-1,3-Dichloropropene	41.9 ug/L	1	ug/L	50.0	<1 ug/L	83.8	55-140	3.49	30
Trichloroethylene	49.4 ug/L	1	ug/L	50.0	1.75 ug/L	95.4	70-125	0.935	30
Trichlorofluoromethane	40.3 ug/L	1	ug/L	50.0	<1 ug/L	80.6	60-145	0.352	30
Vinyl chloride	39.8 ug/L	0.5	ug/L	50.0	3.50 ug/L	72.6	50-145	2.81	30
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	48.8		ug/L	50.0	ug/L	97.6	70-120		
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	47.9		ug/L	50.0	ug/L	95.8	75-120		
<i>Surr: Dibromofluoromethane (Surr)</i>	47.1		ug/L	50.0	ug/L	94.2	80-119		
<i>Surr: Toluene-d8 (Surr)</i>	49.5		ug/L	50.0	ug/L	99.1	85-120		



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0133 - SW3510C

Blank (BAJ0133-BLK1) Prepared & Analyzed: 10/05/2017

2,3,7,8-TCDD (SIM)	Not Detected -	-							
1,2,4,5-Tetrachlorobenzene	<10.0 ug/L	10.0	ug/L						
1,3,5-Trinitrobenzene	<5.00 ug/L	5.00	ug/L						
1,3-Dinitrobenzene	<2.50 ug/L	2.50	ug/L						
1,4-Naphthoquinone	<10.0 ug/L	10.0	ug/L						
1-Naphthylamine	<10.0 ug/L	10.0	ug/L						
2,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L						
2,4,5-Trichlorophenol	<10.0 ug/L	10.0	ug/L						
2,4,6-Trichlorophenol	<10.0 ug/L	10.0	ug/L						
2,4-Dichlorophenol	<10.0 ug/L	10.0	ug/L						
2,4-Dimethylphenol	<0.50 ug/L	0.50	ug/L						
2,4-Dinitrophenol	<50.0 ug/L	50.0	ug/L						
2,4-Dinitrotoluene	<10.0 ug/L	10.0	ug/L						
2,6-Dichlorophenol	<10.0 ug/L	10.0	ug/L						
2,6-Dinitrotoluene	<10.0 ug/L	10.0	ug/L						
2-Acetylaminofluorene	<2.50 ug/L	2.50	ug/L						
2-Chloronaphthalene	<10.0 ug/L	10.0	ug/L						
2-Chlorophenol	<10.0 ug/L	10.0	ug/L						
2-Methylnaphthalene	<10.0 ug/L	10.0	ug/L						
2-Naphthylamine	<10.0 ug/L	10.0	ug/L						
2-Nitroaniline	<20.0 ug/L	20.0	ug/L						
2-Nitrophenol	<10.0 ug/L	10.0	ug/L						
3,3'-Dichlorobenzidine	<10.0 ug/L	10.0	ug/L						
3,3'-Dimethylbenzidine	<2.50 ug/L	2.50	ug/L						
3-Methylcholanthrene	<10.0 ug/L	10.0	ug/L						
3-Nitroaniline	<20.0 ug/L	20.0	ug/L						
4,6-Dinitro-2-methylphenol	<50.0 ug/L	50.0	ug/L						
4-Aminobiphenyl	<10.0 ug/L	10.0	ug/L						
4-Bromophenyl phenyl ether	<10.0 ug/L	10.0	ug/L						
4-Chloroaniline	<10.0 ug/L	10.0	ug/L						
4-Chlorophenyl phenyl ether	<10.0 ug/L	10.0	ug/L						



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0133 - SW3510C

Blank (BAJ0133-BLK1) Prepared & Analyzed: 10/05/2017

4-Nitroaniline	<20.0 ug/L	20.0	ug/L
4-Nitrophenol	<50.0 ug/L	50.0	ug/L
5-Nitro-o-toluidine	<10.0 ug/L	10.0	ug/L
7,12-Dimethylbenz (a) anthracene	<10.0 ug/L	10.0	ug/L
Acenaphthene	<10.0 ug/L	10.0	ug/L
Acenaphthylene	<10.0 ug/L	10.0	ug/L
Acetophenone	<20.0 ug/L	20.0	ug/L
Anthracene	<10.0 ug/L	10.0	ug/L
Benzo (a) anthracene	<0.05 ug/L	0.05	ug/L
Benzo (a) pyrene	<0.10 ug/L	0.10	ug/L
Benzo (b) fluoranthene	<10.0 ug/L	10.0	ug/L
Benzo (g,h,i) perylene	<10.0 ug/L	10.0	ug/L
Benzo (k) fluoranthene	<10.0 ug/L	10.0	ug/L
Benzyl alcohol	<20.0 ug/L	20.0	ug/L
bis (2-Chloroethoxy) methane	<10.0 ug/L	10.0	ug/L
bis (2-Chloroethyl) ether	<10.0 ug/L	10.0	ug/L
2,2'-Oxybis (1-chloropropane)	<10.0 ug/L	10.0	ug/L
bis (2-Ethylhexyl) phthalate	<2.50 ug/L	2.50	ug/L
Butyl benzyl phthalate	<10.0 ug/L	10.0	ug/L
Chlorobenzilate	<2.50 ug/L	2.50	ug/L
Chrysene	<10.0 ug/L	10.0	ug/L
Diallate	<2.50 ug/L	2.50	ug/L
Dibenz (a,h) anthracene	<10.0 ug/L	10.0	ug/L
Dibenzofuran	<5.00 ug/L	5.00	ug/L
Diethyl phthalate	<10.0 ug/L	10.0	ug/L
Dimethoate	<2.50 ug/L	2.50	ug/L
Dimethyl phthalate	<10.0 ug/L	10.0	ug/L
Di-n-butyl phthalate	<10.0 ug/L	10.0	ug/L
Di-n-octyl phthalate	<10.0 ug/L	10.0	ug/L
Diphenylamine	<10.0 ug/L	10.0	ug/L
Disulfoton	<2.50 ug/L	2.50	ug/L



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0133 - SW3510C

Blank (BAJ0133-BLK1) Prepared & Analyzed: 10/05/2017

Ethyl methanesulfonate	<20.0 ug/L	20.0	ug/L						
Ethyl parathion	<2.50 ug/L	2.50	ug/L						
Famphur	<2.50 ug/L	2.50	ug/L						
Fluoranthene	<10.0 ug/L	10.0	ug/L						
Fluorene	<10.0 ug/L	10.0	ug/L						
Hexachlorobenzene	<0.05 ug/L	0.05	ug/L						
Hexachlorobutadiene	<10.0 ug/L	10.0	ug/L						
Hexachlorocyclopentadiene	<10.0 ug/L	10.0	ug/L						
Hexachloroethane	<10.0 ug/L	10.0	ug/L						
Hexachloropropene	<2.50 ug/L	2.50	ug/L						
Indeno (1,2,3-cd) pyrene	<10.0 ug/L	10.0	ug/L						
Isodrin	<10.0 ug/L	10.0	ug/L						
Isophorone	<10.0 ug/L	10.0	ug/L						
Isosafrole	<10.0 ug/L	10.0	ug/L						
Kepone	<2.50 ug/L	2.50	ug/L						
m+p-Cresols	<10.0 ug/L	10.0	ug/L						
Methapyrilene	<10.0 ug/L	10.0	ug/L						
Methyl methanesulfonate	<10.0 ug/L	10.0	ug/L						
Methyl parathion	<2.50 ug/L	2.50	ug/L						
Naphthalene	<10.0 ug/L	10.0	ug/L						
Nitrobenzene	<10.0 ug/L	10.0	ug/L						
n-Nitrosodiethylamine	<2.50 ug/L	2.50	ug/L						
n-Nitrosodimethylamine	<10.0 ug/L	10.0	ug/L						
n-Nitrosodi-n-butylamine	<10.0 ug/L	10.0	ug/L						
n-Nitrosodi-n-propylamine	<10.0 ug/L	10.0	ug/L						
n-Nitrosodiphenylamine	<10.0 ug/L	10.0	ug/L						
n-Nitrosomethylalkylamine	<2.50 ug/L	2.50	ug/L						
n-Nitrosopiperidine	<10.0 ug/L	10.0	ug/L						
n-Nitrosopyrrolidine	<2.50 ug/L	2.50	ug/L						
o,o,o-Triethyl phosphorothioate	<10.0 ug/L	10.0	ug/L						
o,o-Diethyl o-2-pyrazinyl phosphorothioate	<10.0 ug/L	10.0	ug/L						



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Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0133 - SW3510C

Blank (BAJ0133-BLK1)							Prepared & Analyzed: 10/05/2017			
o+m+p-Cresols	<10.0 ug/L	10.0	ug/L							
o-Cresol	<10.0 ug/L	10.0	ug/L							
o-Toluidine	<2.50 ug/L	2.50	ug/L							
p-(Dimethylamino) azobenzene	<2.50 ug/L	2.50	ug/L							
p-Chloro-m-cresol	<10.0 ug/L	10.0	ug/L							
Pentachlorobenzene	<10.0 ug/L	10.0	ug/L							
Pentachloronitrobenzene (quintozone)	<1.00 ug/L	1.00	ug/L							
Phenacetin	<10.0 ug/L	10.0	ug/L							
Phenanthrene	<10.0 ug/L	10.0	ug/L							
Phenol	<10.0 ug/L	10.0	ug/L							
Phorate	<2.50 ug/L	2.50	ug/L							
p-Phenylenediamine	<10.0 ug/L	10.0	ug/L							
Pronamide	<10.0 ug/L	10.0	ug/L							
Pyrene	<10.0 ug/L	10.0	ug/L							
Safrole	<2.50 ug/L	2.50	ug/L							
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	47.9	ug/L	200			23.9	20-86			
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	35.7	ug/L	100			35.7	23-87			
<i>Surr: 2-Fluorophenol (Surr)</i>	44.8	ug/L	200			22.4	10-52			
<i>Surr: Nitrobenzene-d5 (Surr)</i>	48.1	ug/L	100			48.1	10-98.5			
<i>Surr: Phenol-d5 (Surr)</i>	37.8	ug/L	200			18.9	5-33			
<i>Surr: p-Terphenyl-d14 (Surr)</i>	44.3	ug/L	100			44.3	27-133			

LCS (BAJ0133-BS1)							Prepared & Analyzed: 10/05/2017			
1,2,4-Trichlorobenzene	58.3 ug/L	10.0	ug/L	100	ug/L	58.3	21.8-66.7			
1,2-Dichlorobenzene	59.1 ug/L	10.0	ug/L	100	ug/L	59.1	22-60			
1,3-Dichlorobenzene	52.6 ug/L	10.0	ug/L	100	ug/L	52.6	22-60			
1,4-Dichlorobenzene	56.0 ug/L	10.0	ug/L	100	ug/L	56.0	13-68			
1-Chloronaphthalene	61.2 ug/L	10.0	ug/L		ug/L		0-200			
2,4,6-Trichlorophenol	71.9 ug/L	10.0	ug/L	100	ug/L	71.9	50-115			
2,4-Dichlorophenol	66.6 ug/L	10.0	ug/L	100	ug/L	66.6	50-105			
2,4-Dimethylphenol	74.2 ug/L	0.50	ug/L	100	ug/L	74.2	30-110			



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0133 - SW3510C

LCS (BAJ0133-BS1)	Prepared & Analyzed: 10/05/2017						
2,4-Dinitrophenol	80.7 ug/L	50.0	ug/L	100	ug/L	80.7	15-140
2,4-Dinitrotoluene	82.5 ug/L	10.0	ug/L	100	ug/L	82.5	21-99
2,6-Dinitrotoluene	76.6 ug/L	10.0	ug/L	100	ug/L	76.6	15-140
2-Chloronaphthalene	62.7 ug/L	10.0	ug/L	100	ug/L	62.7	45-105
2-Chlorophenol	64.2 ug/L	10.0	ug/L	100	ug/L	64.2	15-74
2-Nitrophenol	66.1 ug/L	10.0	ug/L	100	ug/L	66.1	40-115
3,3'-Dichlorobenzidine	72.8 ug/L	10.0	ug/L	100	ug/L	72.8	20-110
4,6-Dinitro-2-methylphenol	87.8 ug/L	50.0	ug/L	100	ug/L	87.8	40-130
4-Bromophenyl phenyl ether	68.6 ug/L	10.0	ug/L	100	ug/L	68.6	15-110
4-Chlorophenyl phenyl ether	76.3 ug/L	10.0	ug/L	100	ug/L	76.3	15-110
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	ug/L	32.2	0-125
Acenaphthene	71.6 ug/L	10.0	ug/L	100	ug/L	71.6	27.7-85.5
Acenaphthylene	72.1 ug/L	10.0	ug/L	100	ug/L	72.1	50-105
Acetophenone	57.6 ug/L	20.0	ug/L	100	ug/L	57.6	0-200
alpha-Terpineol	79.8 ug/L	2.50	ug/L	100	ug/L	79.8	0-200
Anthracene	68.9 ug/L	10.0	ug/L	100	ug/L	68.9	55-110
Benzidine	<50.0 ug/L	50.0	ug/L	100	ug/L		0-130
Benzo (a) anthracene	79.7 ug/L	0.05	ug/L	100	ug/L	79.7	55-110
Benzo (a) pyrene	75.9 ug/L	0.10	ug/L	100	ug/L	75.9	55-110
Benzo (b) fluoranthene	77.5 ug/L	10.0	ug/L	100	ug/L	77.5	45-120
Benzo (g,h,i) perylene	88.7 ug/L	10.0	ug/L	100	ug/L	88.7	40-125
Benzo (k) fluoranthene	70.6 ug/L	10.0	ug/L	100	ug/L	70.6	45-125
bis (2-Chloroethoxy) methane	72.2 ug/L	10.0	ug/L	100	ug/L	72.2	40-125
bis (2-Chloroethyl) ether	67.7 ug/L	10.0	ug/L	100	ug/L	67.7	40-125
2,2'-Oxybis (1-chloropropane)	75.0 ug/L	10.0	ug/L	100	ug/L	75.0	40-125
bis (2-Ethylhexyl) phthalate	80.0 ug/L	2.50	ug/L	100	ug/L	80.0	40-125
Butyl benzyl phthalate	78.0 ug/L	10.0	ug/L	100	ug/L	78.0	45-115
Carbazole	76.8 ug/L	2.50	ug/L	100	ug/L	76.8	0-200
Chrysene	83.8 ug/L	10.0	ug/L	100	ug/L	83.8	55-110
Dibenz (a,h) anthracene	85.3 ug/L	10.0	ug/L	100	ug/L	85.3	40-125
Diethyl phthalate	77.7 ug/L	10.0	ug/L	100	ug/L	77.7	40-120



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0133 - SW3510C

LCS (BAJ0133-BS1)

Prepared & Analyzed: 10/05/2017

Dimethyl phthalate	73.2 ug/L	10.0	ug/L	100	ug/L	73.2	25-125
Di-n-butyl phthalate	77.7 ug/L	10.0	ug/L	100	ug/L	77.7	55-115
Di-n-octyl phthalate	70.4 ug/L	10.0	ug/L	100	ug/L	70.4	35-135
Fluoranthene	78.2 ug/L	10.0	ug/L	100	ug/L	78.2	55-115
Fluorene	73.4 ug/L	10.0	ug/L	100	ug/L	73.4	50-110
Hexachlorobenzene	60.0 ug/L	0.05	ug/L	100	ug/L	60.0	25-125
Hexachlorobutadiene	72.6 ug/L	10.0	ug/L	100	ug/L	72.6	25-125
Hexachlorocyclopentadiene	47.6 ug/L	10.0	ug/L	100	ug/L	47.6	25-125
Hexachloroethane	59.5 ug/L	10.0	ug/L	100	ug/L	59.5	25-125
Indeno (1,2,3-cd) pyrene	82.2 ug/L	10.0	ug/L	100	ug/L	82.2	45-125
Isophorone	83.2 ug/L	10.0	ug/L	100	ug/L	83.2	10-110
Naphthalene	60.5 ug/L	10.0	ug/L	100	ug/L	60.5	40-100
Nitrobenzene	78.3 ug/L	10.0	ug/L	100	ug/L	78.3	40-100
n-Nitrosodimethylamine	43.8 ug/L	10.0	ug/L	100	ug/L	43.8	25-110
n-Nitrosodi-n-propylamine	82.9 ug/L	10.0	ug/L	100	ug/L	82.9	12-97
n-Nitrosodiphenylamine	64.6 ug/L	10.0	ug/L	100	ug/L	64.6	12-97
p-Chloro-m-cresol	82.6 ug/L	10.0	ug/L	100	ug/L	82.6	10-91
Pentachlorophenol	56.9 ug/L	20.0	ug/L	100	ug/L	56.9	30-109
Phenanthrene	77.1 ug/L	10.0	ug/L	100	ug/L	77.1	50-115
Phenol	31.7 ug/L	10.0	ug/L	101	ug/L	31.4	0-115
Pyrene	69.2 ug/L	10.0	ug/L	100	ug/L	69.2	27-110
Pyridine	43.1 ug/L	10.0	ug/L	100	ug/L	43.1	0-200
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	48.8		ug/L	200	ug/L	24.4	20-86
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	31.1		ug/L	100	ug/L	31.1	23-87
<i>Surr: 2-Fluorophenol (Surr)</i>	45.4		ug/L	200	ug/L	22.7	10-52
<i>Surr: Nitrobenzene-d5 (Surr)</i>	41.2		ug/L	100	ug/L	41.2	10-98.5
<i>Surr: Phenol-d5 (Surr)</i>	32.3		ug/L	200	ug/L	16.2	5-33
<i>Surr: p-Terphenyl-d14 (Surr)</i>	36.8		ug/L	100	ug/L	36.8	27-133



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0224 - SW3510C

Blank (BAJ0224-BLK1)	Prepared: 10/09/2017 Analyzed: 10/10/2017								
2,3,7,8-TCDD (SIM)	Not Detected -		-						
1,2,4,5-Tetrachlorobenzene	<10.0 ug/L	10.0	ug/L						
1,3,5-Trinitrobenzene	<5.00 ug/L	5.00	ug/L						
1,3-Dinitrobenzene	<2.50 ug/L	2.50	ug/L						
1,4-Naphthoquinone	<10.0 ug/L	10.0	ug/L						
1-Naphthylamine	<10.0 ug/L	10.0	ug/L						
2,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L						
2,4,5-Trichlorophenol	<10.0 ug/L	10.0	ug/L						
2,4,6-Trichlorophenol	<10.0 ug/L	10.0	ug/L						
2,4-Dichlorophenol	<10.0 ug/L	10.0	ug/L						
2,4-Dimethylphenol	<0.50 ug/L	0.50	ug/L						
2,4-Dinitrophenol	<50.0 ug/L	50.0	ug/L						
2,4-Dinitrotoluene	<10.0 ug/L	10.0	ug/L						
2,6-Dichlorophenol	<10.0 ug/L	10.0	ug/L						
2,6-Dinitrotoluene	<10.0 ug/L	10.0	ug/L						
2-Acetylaminofluorene	<2.50 ug/L	2.50	ug/L						
2-Chloronaphthalene	<10.0 ug/L	10.0	ug/L						
2-Chlorophenol	<10.0 ug/L	10.0	ug/L						
2-Methylnaphthalene	<10.0 ug/L	10.0	ug/L						
2-Naphthylamine	<10.0 ug/L	10.0	ug/L						
2-Nitroaniline	<20.0 ug/L	20.0	ug/L						
2-Nitrophenol	<10.0 ug/L	10.0	ug/L						
3,3'-Dichlorobenzidine	<10.0 ug/L	10.0	ug/L						
3,3'-Dimethylbenzidine	<2.50 ug/L	2.50	ug/L						
3-Methylcholanthrene	<10.0 ug/L	10.0	ug/L						
3-Nitroaniline	<20.0 ug/L	20.0	ug/L						
4,6-Dinitro-2-methylphenol	<50.0 ug/L	50.0	ug/L						
4-Aminobiphenyl	<10.0 ug/L	10.0	ug/L						
4-Bromophenyl phenyl ether	<10.0 ug/L	10.0	ug/L						
4-Chloroaniline	<10.0 ug/L	10.0	ug/L						
4-Chlorophenyl phenyl ether	<10.0 ug/L	10.0	ug/L						



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0224 - SW3510C

Blank (BAJ0224-BLK1) Prepared & Analyzed: 10/09/2017

4-Nitroaniline	<20.0 ug/L	20.0	ug/L
4-Nitrophenol	<50.0 ug/L	50.0	ug/L
5-Nitro-o-toluidine	<10.0 ug/L	10.0	ug/L
7,12-Dimethylbenz (a) anthracene	<10.0 ug/L	10.0	ug/L
Acenaphthene	<10.0 ug/L	10.0	ug/L
Acenaphthylene	<10.0 ug/L	10.0	ug/L
Acetophenone	<20.0 ug/L	20.0	ug/L
Anthracene	<10.0 ug/L	10.0	ug/L
Benzo (a) anthracene	<0.05 ug/L	0.05	ug/L
Benzo (a) pyrene	<0.10 ug/L	0.10	ug/L
Benzo (b) fluoranthene	<10.0 ug/L	10.0	ug/L
Benzo (g,h,i) perylene	<10.0 ug/L	10.0	ug/L
Benzo (k) fluoranthene	<10.0 ug/L	10.0	ug/L
Benzyl alcohol	<20.0 ug/L	20.0	ug/L
bis (2-Chloroethoxy) methane	<10.0 ug/L	10.0	ug/L
bis (2-Chloroethyl) ether	<10.0 ug/L	10.0	ug/L
2,2'-Oxybis (1-chloropropane)	<10.0 ug/L	10.0	ug/L
bis (2-Ethylhexyl) phthalate	<2.50 ug/L	2.50	ug/L
Butyl benzyl phthalate	<10.0 ug/L	10.0	ug/L
Chlorobenzilate	<2.50 ug/L	2.50	ug/L
Chrysene	<10.0 ug/L	10.0	ug/L
Diallate	<2.50 ug/L	2.50	ug/L
Dibenz (a,h) anthracene	<10.0 ug/L	10.0	ug/L
Dibenzofuran	<5.00 ug/L	5.00	ug/L
Diethyl phthalate	<10.0 ug/L	10.0	ug/L
Dimethoate	<2.50 ug/L	2.50	ug/L
Dimethyl phthalate	<10.0 ug/L	10.0	ug/L
Di-n-butyl phthalate	<10.0 ug/L	10.0	ug/L
Di-n-octyl phthalate	<10.0 ug/L	10.0	ug/L
Diphenylamine	<10.0 ug/L	10.0	ug/L
Disulfoton	<2.50 ug/L	2.50	ug/L



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0224 - SW3510C

Blank (BAJ0224-BLK1) Prepared & Analyzed: 10/09/2017

Ethyl methanesulfonate	<20.0 ug/L	20.0	ug/L
Ethyl parathion	<2.50 ug/L	2.50	ug/L
Famphur	<2.50 ug/L	2.50	ug/L
Fluoranthene	<10.0 ug/L	10.0	ug/L
Fluorene	<10.0 ug/L	10.0	ug/L
Hexachlorobenzene	<0.05 ug/L	0.05	ug/L
Hexachlorobutadiene	<10.0 ug/L	10.0	ug/L
Hexachlorocyclopentadiene	<10.0 ug/L	10.0	ug/L
Hexachloroethane	<10.0 ug/L	10.0	ug/L
Hexachloropropene	<2.50 ug/L	2.50	ug/L
Indeno (1,2,3-cd) pyrene	<10.0 ug/L	10.0	ug/L
Isodrin	<10.0 ug/L	10.0	ug/L
Isophorone	<10.0 ug/L	10.0	ug/L
Isosafrole	<10.0 ug/L	10.0	ug/L
Kepone	<2.50 ug/L	2.50	ug/L
m+p-Cresols	<10.0 ug/L	10.0	ug/L
Methapyrilene	<10.0 ug/L	10.0	ug/L
Methyl methanesulfonate	<10.0 ug/L	10.0	ug/L
Methyl parathion	<2.50 ug/L	2.50	ug/L
Naphthalene	<10.0 ug/L	10.0	ug/L
Nitrobenzene	<10.0 ug/L	10.0	ug/L
n-Nitrosodiethylamine	<2.50 ug/L	2.50	ug/L
n-Nitrosodimethylamine	<10.0 ug/L	10.0	ug/L
n-Nitrosodi-n-butylamine	<10.0 ug/L	10.0	ug/L
n-Nitrosodi-n-propylamine	<10.0 ug/L	10.0	ug/L
n-Nitrosodiphenylamine	<10.0 ug/L	10.0	ug/L
n-Nitrosomethylalkylamine	<2.50 ug/L	2.50	ug/L
n-Nitrosopiperidine	<10.0 ug/L	10.0	ug/L
n-Nitrosopyrrolidine	<2.50 ug/L	2.50	ug/L
o,o,o-Triethyl phosphorothioate	<10.0 ug/L	10.0	ug/L
o,o-Diethyl o-2-pyrazinyl phosphorothioate	<10.0 ug/L	10.0	ug/L



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0224 - SW3510C

Blank (BAJ0224-BLK1)		Prepared & Analyzed: 10/09/2017						
o+m+p-Cresols	<10.0 ug/L	10.0	ug/L					
o-Cresol	<10.0 ug/L	10.0	ug/L					
o-Toluidine	<2.50 ug/L	2.50	ug/L					
p-(Dimethylamino) azobenzene	<2.50 ug/L	2.50	ug/L					
p-Chloro-m-cresol	<10.0 ug/L	10.0	ug/L					
Pentachlorobenzene	<10.0 ug/L	10.0	ug/L					
Pentachloronitrobenzene (quintozone)	<1.00 ug/L	1.00	ug/L					
Phenacetin	<10.0 ug/L	10.0	ug/L					
Phenanthrene	<10.0 ug/L	10.0	ug/L					
Phenol	<10.0 ug/L	10.0	ug/L					
Phorate	<2.50 ug/L	2.50	ug/L					
p-Phenylenediamine	<10.0 ug/L	10.0	ug/L					
Pronamide	<10.0 ug/L	10.0	ug/L					
Pyrene	<10.0 ug/L	10.0	ug/L					
Safrole	<2.50 ug/L	2.50	ug/L					
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	41.1	ug/L	100		41.1	20-86		
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	30.2	ug/L	50.0		60.4	23-87		
<i>Surr: 2-Fluorophenol (Surr)</i>	37.6	ug/L	100		37.6	10-52		
<i>Surr: Nitrobenzene-d5 (Surr)</i>	42.4	ug/L	50.0		84.8	10-98.5		
<i>Surr: Phenol-d5 (Surr)</i>	36.0	ug/L	100		36.0	5-33		S
<i>Surr: p-Terphenyl-d14 (Surr)</i>	45.6	ug/L	50.0		91.1	27-133		

LCS (BAJ0224-BS1)		Prepared & Analyzed: 10/09/2017					
1,1-Biphenyl	<10.0 ug/L	10.0	ug/L	ug/L		0-200	
1,2,4,5-Tetrachlorobenzene	<10.0 ug/L	10.0	ug/L	ug/L		0-200	
1,2,4-Trichlorobenzene	40.7 ug/L	10.0	ug/L	100 ug/L	40.7	21.8-66.7	
1,2-Dichlorobenzene	43.0 ug/L	10.0	ug/L	100 ug/L	43.0	22-60	
1,2-Dinitrobenzene	<2.50 ug/L	2.50	ug/L	ug/L		0-200	
1,2-Diphenylhydrazine	<10.0 ug/L	10.0	ug/L	ug/L		0-200	
1,3,5-Trinitrobenzene	<5.00 ug/L	5.00	ug/L	ug/L		0-200	
1,3-Dichlorobenzene	38.8 ug/L	10.0	ug/L	100 ug/L	38.8	22-60	



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0224 - SW3510C

LCS (BAJ0224-BS1)

Prepared & Analyzed: 10/09/2017

1,3-Dinitrobenzene	<2.50 ug/L	2.50	ug/L		ug/L		0-200	
1,4-Dichlorobenzene	39.6 ug/L	10.0	ug/L	100	ug/L	39.6	13-68	
1,4-Dinitrobenzene	<2.50 ug/L	2.50	ug/L		ug/L		0-200	
1,4-Dioxane	<50.0 ug/L	50.0	ug/L		ug/L		0-200	
1,4-Naphthoquinone	<10.0 ug/L	10.0	ug/L		ug/L		0-200	
1-Chloronaphthalene	47.4 ug/L	10.0	ug/L		ug/L		0-200	
1-Methylnaphthalene	<10.0 ug/L	10.0	ug/L		ug/L		0-200	
1-Naphthylamine	<10.0 ug/L	10.0	ug/L		ug/L		0-200	
2,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L		ug/L		0-200	
2,3,5,6-Tetrachlorophenol	<2.50 ug/L	2.50	ug/L		ug/L		0-200	
2,3,7,8-TCDD (SIM)	<10.0 ug/L	10.0	ug/L		ug/L		0-200	
2,3-Dichloroaniline	<2.50 ug/L	2.50	ug/L	100	ug/L		0-200	
2,4,5-Trichlorophenol	<10.0 ug/L	10.0	ug/L		ug/L		50-110	
2,4,6-Trichlorophenol	53.3 ug/L	10.0	ug/L	100	ug/L	53.3	50-115	
2,4-Dichlorophenol	51.0 ug/L	10.0	ug/L	100	ug/L	51.0	50-105	
2,4-Dimethylphenol	61.3 ug/L	0.50	ug/L	100	ug/L	61.3	30-110	
2,4-Dinitrophenol	84.1 ug/L	50.0	ug/L	100	ug/L	84.1	15-140	
2,4-Dinitrotoluene	83.7 ug/L	10.0	ug/L	100	ug/L	83.7	21-99	
2,6-Dichlorophenol	<10.0 ug/L	10.0	ug/L		ug/L		0-200	
2,6-Dinitrotoluene	74.0 ug/L	10.0	ug/L	100	ug/L	74.0	15-140	
2-Acetylaminofluorene	<2.50 ug/L	2.50	ug/L		ug/L		0-200	
2-Chloronaphthalene	48.3 ug/L	10.0	ug/L	100	ug/L	48.3	45-105	
2-Chlorophenol	43.5 ug/L	10.0	ug/L	100	ug/L	43.5	15-74	
2-Methylnaphthalene	<10.0 ug/L	10.0	ug/L		ug/L		45-105	
2-Naphthylamine	<10.0 ug/L	10.0	ug/L		ug/L		0-200	
2-Nitroaniline	<20.0 ug/L	20.0	ug/L		ug/L		0-200	
2-Nitrophenol	54.9 ug/L	10.0	ug/L	100	ug/L	54.9	40-115	
2-Picoline	<2.50 ug/L	2.50	ug/L		ug/L		0-200	
3,3'-Dichlorobenzidine	67.8 ug/L	10.0	ug/L	100	ug/L	67.8	20-110	
3,3'-Dimethylbenzidine	<2.50 ug/L	2.50	ug/L		ug/L		0-200	
3-Methylcholanthrene	<10.0 ug/L	10.0	ug/L		ug/L		0-200	



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0224 - SW3510C

LCS (BAJ0224-BS1)							Prepared & Analyzed: 10/09/2017			
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual		
3-Nitroaniline	<20.0 ug/L	20.0	ug/L		ug/L		0-200			
4,4'-DDE	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
4,6-Dinitro-2-methylphenol	90.7 ug/L	50.0	ug/L	100	ug/L	90.7	40-130			
4-Aminobiphenyl	<10.0 ug/L	10.0	ug/L		ug/L		0-200			
4-Bromophenyl phenyl ether	59.0 ug/L	10.0	ug/L	100	ug/L	59.0	15-110			
4-Chloroaniline	<10.0 ug/L	10.0	ug/L		ug/L		15-110			
4-Chlorophenyl phenyl ether	65.7 ug/L	10.0	ug/L	100	ug/L	65.7	15-110			
4-Nitroaniline	<20.0 ug/L	20.0	ug/L		ug/L		0-200			
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	ug/L	27.1	0-125			
4-Nitroquinoline-1-oxide	<40.0 ug/L	40.0	ug/L		ug/L		0-200			
5-Nitro-o-toluidine	<10.0 ug/L	10.0	ug/L		ug/L		0-200			
7,12-Dimethylbenz (a) anthracene	<10.0 ug/L	10.0	ug/L		ug/L		0-200			
Acenaphthene	56.8 ug/L	10.0	ug/L	100	ug/L	56.8	27.7-85.5			
Acenaphthylene	59.8 ug/L	10.0	ug/L	100	ug/L	59.8	50-105			
Acetochlor	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Acetophenone	52.3 ug/L	20.0	ug/L	100	ug/L	52.3	0-200			
Alachlor	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Aldrin	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
alpha,alpha-Dimethyl phenethylamine	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
alpha-Terpineol	59.2 ug/L	2.50	ug/L	100	ug/L	59.2	0-200			
Aniline	<50.0 ug/L	50.0	ug/L		ug/L		0-200			
Anthracene	65.9 ug/L	10.0	ug/L	100	ug/L	65.9	55-110			
Aramite	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Atrazine	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Benzaldehyde	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Benzidine	<50.0 ug/L	50.0	ug/L	100	ug/L		0-130			
Benzo (a) anthracene	77.8 ug/L	0.05	ug/L	100	ug/L	77.8	55-110			
Benzo (a) pyrene	72.9 ug/L	0.10	ug/L	100	ug/L	72.9	55-110			
Benzo (b) fluoranthene	75.4 ug/L	10.0	ug/L	100	ug/L	75.4	45-120			
Benzo (g,h,i) perylene	78.8 ug/L	10.0	ug/L	100	ug/L	78.8	40-125			
Benzo (k) fluoranthene	70.6 ug/L	10.0	ug/L	100	ug/L	70.6	45-125			



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Certificate of Analysis

Final Report

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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0224 - SW3510C

LCS (BAJ0224-BS1)							Prepared & Analyzed: 10/09/2017			
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual	
Benzoic acid	<50.0 ug/L	50.0	ug/L		ug/L		0-125			
Benzyl alcohol	<20.0 ug/L	20.0	ug/L		ug/L		0-200			
bis (2-Chloroethoxy) methane	59.0 ug/L	10.0	ug/L	100	ug/L	59.0	40-125			
bis (2-Chloroethyl) ether	61.3 ug/L	10.0	ug/L	100	ug/L	61.3	40-125			
2,2'-Oxybis (1-chloropropane)	63.5 ug/L	10.0	ug/L	100	ug/L	63.5	40-125			
bis (2-Ethylhexyl) adipate	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
bis (2-Ethylhexyl) phthalate	78.0 ug/L	2.50	ug/L	100	ug/L	78.0	40-125			
Butachlor	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Butyl benzyl phthalate	80.8 ug/L	10.0	ug/L	100	ug/L	80.8	45-115			
Caprolactam	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Carbazole	76.4 ug/L	2.50	ug/L	100	ug/L	76.4	0-200			
Catechol	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Chlorobenzilate	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Chrysene	82.7 ug/L	10.0	ug/L	100	ug/L	82.7	55-110			
Diallate	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Dibenz (a,h) anthracene	75.3 ug/L	10.0	ug/L	100	ug/L	75.3	40-125			
Dibenz (a,j) acridine	<10.0 ug/L	10.0	ug/L		ug/L		0-200			
Dibenzo furan	<5.00 ug/L	5.00	ug/L		ug/L		0-200			
Dieldrin	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Diethyl phthalate	75.0 ug/L	10.0	ug/L	100	ug/L	75.0	40-120			
Dimethoate	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Dimethyl phthalate	68.9 ug/L	10.0	ug/L	100	ug/L	68.9	25-125			
Dimethylphenethylamine	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Di-n-butyl phthalate	73.8 ug/L	10.0	ug/L	100	ug/L	73.8	55-115			
Di-n-octyl phthalate	75.0 ug/L	10.0	ug/L	100	ug/L	75.0	35-135			
Dinoseb	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Diphenyl ether	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Diphenylamine	<10.0 ug/L	10.0	ug/L		ug/L		0-200			
Disulfoton	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
Endrin	<2.50 ug/L	2.50	ug/L		ug/L		0-200			
EPTC	<2.50 ug/L	2.50	ug/L		ug/L		0-200			



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0224 - SW3510C

LCS (BAJ0224-BS1)	Prepared & Analyzed: 10/09/2017					
Ethyl methacrylate	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Ethyl methanesulfonate	<20.0 ug/L	20.0	ug/L		ug/L	0-200
Ethyl parathion	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Famphur	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Fluoranthene	75.2 ug/L	10.0	ug/L	100	ug/L	75.2 55-115
Fluorene	66.2 ug/L	10.0	ug/L	100	ug/L	66.2 50-110
gamma-BHC (Lindane)	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Heptachlor	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Heptachlor epoxide	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Hexachlorobenzene	53.1 ug/L	0.05	ug/L	100	ug/L	53.1 25-125
Hexachlorobutadiene	45.2 ug/L	10.0	ug/L	100	ug/L	45.2 25-125
Hexachlorocyclopentadiene	31.0 ug/L	10.0	ug/L	100	ug/L	31.0 25-125
Hexachloroethane	43.7 ug/L	10.0	ug/L	100	ug/L	43.7 25-125
Hexachlorophene	<50.0 ug/L	50.0	ug/L		ug/L	0-200
Hexachloropropene	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Indeno (1,2,3-cd) pyrene	72.6 ug/L	10.0	ug/L	100	ug/L	72.6 45-125
Isodrin	<10.0 ug/L	10.0	ug/L		ug/L	0-200
Isophorone	65.6 ug/L	10.0	ug/L	100	ug/L	65.6 10-110
Isosafrole	<10.0 ug/L	10.0	ug/L		ug/L	0-200
Kepone	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Library Search	<0.00 ug/L	0.00	ug/L		ug/L	0-200
m+p-Cresols	<10.0 ug/L	10.0	ug/L		ug/L	30-110
Methapyrilene	<10.0 ug/L	10.0	ug/L		ug/L	0-200
Methoxychlor	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Methyl methacrylate	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Methyl methanesulfonate	<10.0 ug/L	10.0	ug/L		ug/L	0-200
Methyl parathion	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Metolachlor	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Metribuzin	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Molinate	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Naphthalene	43.9 ug/L	10.0	ug/L	100	ug/L	43.9 40-100



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0224 - SW3510C

LCS (BAJ0224-BS1)

Prepared & Analyzed: 10/09/2017

n-Decane	<2.50 ug/L	2.50	ug/L	100	ug/L	0-200		
Nicotine	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
Nitrobenzene	68.7 ug/L	10.0	ug/L	100	ug/L	68.7	40-100	
n-Nitrosodiethylamine	<2.50 ug/L	2.50	ug/L		ug/L	0-200		
n-Nitrosodimethylamine	27.0 ug/L	10.0	ug/L	100	ug/L	27.0	25-110	
n-Nitrosodi-n-butylamine	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
n-Nitrosodi-n-propylamine	66.6 ug/L	10.0	ug/L	100	ug/L	66.6	12-97	
n-Nitrosodiphenylamine	62.0 ug/L	10.0	ug/L	100	ug/L	62.0	12-97	
n-Nitrosomethylethylamine	<2.50 ug/L	2.50	ug/L		ug/L	0-200		
n-Nitrosomorpholine	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
n-Nitrosopiperidine	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
n-Nitrosopyrrolidine	<2.50 ug/L	2.50	ug/L		ug/L	0-200		
Nonylphenol	<50.0 ug/L	50.0	ug/L		ug/L	0-200		
o,o,o-Triethyl phosphorothioate	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
o,o-Diethyl o-2-pyrazinyl phosphorothioate	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
o+m+p-Cresols	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
o-Cresol	<10.0 ug/L	10.0	ug/L		ug/L	40-110		
o-Toluidine	<2.50 ug/L	2.50	ug/L		ug/L	0-200		
p-(Dimethylamino) azobenzene	<2.50 ug/L	2.50	ug/L		ug/L	0-200		
p-Chloro-m-cresol	68.9 ug/L	10.0	ug/L	100	ug/L	68.9	10-91	
Pentachlorobenzene	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
Pentachloroethane	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
Pentachloronitrobenzene (quintozene)	<1.00 ug/L	1.00	ug/L		ug/L	0-200		
Pentachlorophenol	53.9 ug/L	20.0	ug/L	100	ug/L	53.9	30-109	
Phenacetin	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
Phenanthrene	73.7 ug/L	10.0	ug/L	100	ug/L	73.7	50-115	
Phenol	25.4 ug/L	10.0	ug/L	101	ug/L	25.1	0-115	
Phorate	<2.50 ug/L	2.50	ug/L		ug/L	0-200		
p-Phenylenediamine	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
Pronamide	<10.0 ug/L	10.0	ug/L		ug/L	0-200		
Propachlor	<2.50 ug/L	2.50	ug/L		ug/L	0-200		



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0224 - SW3510C

LCS (BAJ0224-BS1)

	Prepared & Analyzed: 10/09/2017					
Pyrene	73.3 ug/L	10.0	ug/L	100	ug/L	73.3 27-110
Pyridine	25.3 ug/L	10.0	ug/L	100	ug/L	25.3 0-200
Safrole	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Simazine	<2.50 ug/L	2.50	ug/L		ug/L	0-200
Sulfotep	<10.0 ug/L	10.0	ug/L		ug/L	0-200
Terbacil	<2.50 ug/L	2.50	ug/L		ug/L	0-200
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	43.0		ug/L	100	ug/L	43.0 20-86
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	24.3		ug/L	50.0	ug/L	48.6 23-87
<i>Surr: 2-Fluorophenol (Surr)</i>	30.8		ug/L	100	ug/L	30.8 10-52
<i>Surr: Nitrobenzene-d5 (Surr)</i>	35.1		ug/L	50.0	ug/L	70.3 10-98.5
<i>Surr: Phenol-d5 (Surr)</i>	20.7		ug/L	100	ug/L	20.7 5-33
<i>Surr: p-Terphenyl-d14 (Surr)</i>	38.3		ug/L	50.0	ug/L	76.7 27-133

Matrix Spike (BAJ0224-MS1)

	Source: 17J0136-03 Prepared & Analyzed: 10/09/2017					
1,1-Biphenyl	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200
1,2,4,5-Tetrachlorobenzene	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200
1,2,4-Trichlorobenzene	58.3 ug/L	10.0	ug/L	100 <10.0 ug/L	58.3	21.8-66.7
1,2-Dichlorobenzene	59.7 ug/L	10.0	ug/L	100 <10.0 ug/L	59.7	22-60
1,2-Dinitrobenzene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200
1,2-Diphenylhydrazine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200
1,3,5-Trinitrobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L		0-200
1,3-Dichlorobenzene	54.5 ug/L	10.0	ug/L	100 <10.0 ug/L	54.5	22-60
1,3-Dinitrobenzene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200
1,4-Dichlorobenzene	57.0 ug/L	10.0	ug/L	100 <10.0 ug/L	54.4	22-60
1,4-Dinitrobenzene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200
1,4-Dioxane	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		0-200
1,4-Naphthoquinone	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200
1-Chloronaphthalene	62.7 ug/L	10.0	ug/L	<10.0 ug/L		0-200
1-Methylnaphthalene	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200
1-Naphthylamine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200
2,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0224 - SW3510C

Matrix Spike (BAJ0224-MS1)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017				
2,3,5,6-Tetrachlorophenol	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
2,3,7,8-TCDD (SIM)	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200	
2,3-Dichloroaniline	<2.50 ug/L	2.50	ug/L	100	<2.50 ug/L		0-200	
2,4,5-Trichlorophenol	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		50-110	
2,4,6-Trichlorophenol	70.6 ug/L	10.0	ug/L	100	<10.0 ug/L	70.6	50-115	
2,4-Dichlorophenol	66.8 ug/L	10.0	ug/L	100	<10.0 ug/L	66.8	50-105	
2,4-Dimethylphenol	76.7 ug/L	0.50	ug/L	100	<0.50 ug/L	76.7	30-110	
2,4-Dinitrophenol	101 ug/L	50.0	ug/L	100	<50.0 ug/L	101	15-140	
2,4-Dinitrotoluene	85.9 ug/L	10.0	ug/L	100	<10.0 ug/L	85.9	17-111	
2,6-Dichlorophenol	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200	
2,6-Dinitrotoluene	78.9 ug/L	10.0	ug/L	100	<10.0 ug/L	78.9	15-140	
2-Acetylaminofluorene	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
2-Chloronaphthalene	64.3 ug/L	10.0	ug/L	100	<10.0 ug/L	64.3	45-105	
2-Chlorophenol	65.2 ug/L	10.0	ug/L	100	<10.0 ug/L	65.2	19-64	M
2-Methylnaphthalene	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		45-105	
2-Naphthylamine	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200	
2-Nitroaniline	<20.0 ug/L	20.0	ug/L		<20.0 ug/L		0-200	
2-Nitrophenol	69.7 ug/L	10.0	ug/L	100	<10.0 ug/L	69.7	40-115	
2-Picoline	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
3,3'-Dichlorobenzidine	51.4 ug/L	10.0	ug/L	100	<10.0 ug/L	51.4	20-110	
3,3'-Dimethylbenzidine	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
3-Methylcholanthrene	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200	
3-Nitroaniline	<20.0 ug/L	20.0	ug/L		<20.0 ug/L		0-200	
4,4'-DDE	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
4,6-Dinitro-2-methylphenol	98.6 ug/L	50.0	ug/L	100	<50.0 ug/L	98.6	40-130	
4-Aminobiphenyl	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200	
4-Bromophenyl phenyl ether	64.1 ug/L	10.0	ug/L	100	<10.0 ug/L	64.1	15-110	
4-Chloroaniline	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		15-110	
4-Chlorophenyl phenyl ether	74.0 ug/L	10.0	ug/L	100	<10.0 ug/L	74.0	15-110	
4-Nitroaniline	<20.0 ug/L	20.0	ug/L		<20.0 ug/L		0-200	
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	<50.0 ug/L	3.83	0-125	



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0224 - SW3510C

Matrix Spike (BAJ0224-MS1)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017				
4-Nitroquinoline-1-oxide	<40.0 ug/L	40.0	ug/L		<40.0 ug/L		0-200	
5-Nitro-o-toluidine	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200	
7,12-Dimethylbenz (a) anthracene	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200	
Acenaphthene	71.0 ug/L	10.0	ug/L	100	<10.0 ug/L	71.0	24-90	
Acenaphthylene	73.0 ug/L	10.0	ug/L	100	<10.0 ug/L	73.0	50-105	
Acetochlor	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
Acetophenone	63.3 ug/L	20.0	ug/L	100	<20.0 ug/L	63.3	0-200	
Alachlor	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
Aldrin	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
alpha,alpha-Dimethyl phenethylamine	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
alpha-Terpineol	75.5 ug/L	2.50	ug/L	100	<2.50 ug/L	75.5	0-200	
Aniline	<50.0 ug/L	50.0	ug/L		<50.0 ug/L		0-200	
Anthracene	67.5 ug/L	10.0	ug/L	100	<10.0 ug/L	67.5	55-110	
Aramite	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
Atrazine	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
Benzaldehyde	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
Benzidine	<50.0 ug/L	50.0	ug/L	100	<50.0 ug/L		0-130	
Benzo (a) anthracene	75.6 ug/L	0.05	ug/L	100	<0.05 ug/L	75.6	55-110	
Benzo (a) pyrene	73.4 ug/L	0.10	ug/L	100	<0.10 ug/L	73.4	55-110	
Benzo (b) fluoranthene	72.1 ug/L	10.0	ug/L	100	<10.0 ug/L	72.1	45-120	
Benzo (g,h,i) perylene	74.8 ug/L	10.0	ug/L	100	<10.0 ug/L	74.8	40-125	
Benzo (k) fluoranthene	72.5 ug/L	10.0	ug/L	100	<10.0 ug/L	72.5	45-125	
Benzoic acid	<50.0 ug/L	50.0	ug/L		<50.0 ug/L		0-125	
Benzyl alcohol	<20.0 ug/L	20.0	ug/L		<20.0 ug/L		0-200	
bis (2-Chloroethoxy) methane	72.8 ug/L	10.0	ug/L	100	<10.0 ug/L	72.8	40-125	
bis (2-Chloroethyl) ether	75.3 ug/L	10.0	ug/L	100	<10.0 ug/L	75.3	40-125	
2,2'-Oxybis (1-chloropropane)	80.3 ug/L	10.0	ug/L	100	<10.0 ug/L	80.3	40-125	
bis (2-Ethylhexyl) adipate	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
bis (2-Ethylhexyl) phthalate	71.1 ug/L	2.50	ug/L	100	<2.50 ug/L	69.9	40-125	
Butachlor	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200	
Butyl benzyl phthalate	73.7 ug/L	10.0	ug/L	100	<10.0 ug/L	73.7	45-115	



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0224 - SW3510C

Matrix Spike (BAJ0224-MS1)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017				
Caprolactam	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		79.1	0-200	
Carbazole	79.1 ug/L	2.50	ug/L	100	<2.50 ug/L		0-200	
Catechol	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Chlorobenzilate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Chrysene	81.0 ug/L	10.0	ug/L	100	<10.0 ug/L	81.0	55-110	
Diallate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Dibenz (a,h) anthracene	74.1 ug/L	10.0	ug/L	100	<10.0 ug/L	74.1	40-125	
Dibenz (a,j) acridine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L			0-200	
Dibenzo furan	<5.00 ug/L	5.00	ug/L	<5.00 ug/L			0-200	
Dieldrin	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Diethyl phthalate	77.9 ug/L	10.0	ug/L	100	<10.0 ug/L	77.9	40-120	
Dimethoate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Dimethyl phthalate	72.6 ug/L	10.0	ug/L	100	<10.0 ug/L	72.6	25-125	
Dimethylphenethylamine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Di-n-butyl phthalate	72.5 ug/L	10.0	ug/L	100	<10.0 ug/L	72.5	55-115	
Di-n-octyl phthalate	69.7 ug/L	10.0	ug/L	100	<10.0 ug/L	69.7	35-135	
Dinoseb	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Diphenyl ether	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Diphenylamine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L			0-200	
Disulfoton	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Endrin	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
EPTC	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Ethyl methacrylate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Ethyl methanesulfonate	<20.0 ug/L	20.0	ug/L	<20.0 ug/L			0-200	
Ethyl parathion	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Famphur	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Fluoranthene	76.0 ug/L	10.0	ug/L	100	<10.0 ug/L	74.1	55-115	
Fluorene	73.3 ug/L	10.0	ug/L	100	<10.0 ug/L	73.3	50-110	
gamma-BHC (Lindane)	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Heptachlor	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	
Heptachlor epoxide	<2.50 ug/L	2.50	ug/L	<2.50 ug/L			0-200	



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0224 - SW3510C

Matrix Spike (BAJ0224-MS1)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017			
Hexachlorobenzene	54.8 ug/L	0.05	ug/L	100	<0.05 ug/L	54.8	25-125
Hexachlorobutadiene	68.8 ug/L	10.0	ug/L	100	<10.0 ug/L	68.8	25-125
Hexachlorocyclopentadiene	48.7 ug/L	10.0	ug/L	100	<10.0 ug/L	48.7	25-125
Hexachloroethane	60.6 ug/L	10.0	ug/L	100	<10.0 ug/L	60.6	25-125
Hexachlorophene	<50.0 ug/L	50.0	ug/L		<50.0 ug/L		0-200
Hexachloropropene	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200
Indeno (1,2,3-cd) pyrene	71.3 ug/L	10.0	ug/L	100	<10.0 ug/L	71.3	45-125
Isodrin	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200
Isophorone	82.0 ug/L	10.0	ug/L	100	<10.0 ug/L	82.0	10-110
Isosafrole	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200
Kepone	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200
Library Search	<0.00 ug/L	0.00	ug/L		<0.00 ug/L		0-200
m+p-Cresols	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		30-110
Methapyrilene	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200
Methoxychlor	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200
Methyl methacrylate	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200
Methyl methanesulfonate	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200
Methyl parathion	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200
Metolachlor	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200
Metribuzin	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200
Molinate	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200
Naphthalene	60.5 ug/L	10.0	ug/L	100	<10.0 ug/L	59.1	40-100
n-Decane	<2.50 ug/L	2.50	ug/L	100	<2.50 ug/L		0-200
Nicotine	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200
Nitrobenzene	81.9 ug/L	10.0	ug/L	100	<10.0 ug/L	81.9	40-100
n-Nitrosodiethylamine	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		0-200
n-Nitrosodimethylamine	32.0 ug/L	10.0	ug/L	100	<10.0 ug/L	32.0	25-110
n-Nitrosodi-n-butylamine	<10.0 ug/L	10.0	ug/L		<10.0 ug/L		0-200
n-Nitrosodi-n-propylamine	82.4 ug/L	10.0	ug/L	100	<10.0 ug/L	82.4	12-97
n-Nitrosodiphenylamine	65.6 ug/L	10.0	ug/L	100	<10.0 ug/L	65.6	12-97
n-Nitrosomethylalkylamine	<2.50 ug/L	2.50	ug/L		<2.50 ug/L		25-110



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0224 - SW3510C

Matrix Spike (BAJ0224-MS1)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017			
n-Nitrosomorpholine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
n-Nitrosopiperidine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
n-Nitrosopyrrolidine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200	
Nonylphenol	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		0-200	
o,o,o-Triethyl phosphorothioate	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
o,o-Diethyl o-2-pyrazinyl phosphorothioate	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
o+m+p-Cresols	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
o-Cresol	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		40-110	
o-Tolidine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200	
p-(Dimethylamino) azobenzene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200	
p-Chloro-m-cresol	85.6 ug/L	10.0	ug/L	100	<10.0 ug/L	85.6	10-91
Pentachlorobenzene	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
Pentachloroethane	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
Pentachloronitrobenzene (quintozone)	<1.00 ug/L	1.00	ug/L	<1.00 ug/L		0-200	
Pentachlorophenol	64.0 ug/L	20.0	ug/L	100	<20.0 ug/L	64.0	27-109
Phenacetin	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
Phenanthrene	75.6 ug/L	10.0	ug/L	100	<10.0 ug/L	75.6	50-115
Phenol	30.6 ug/L	10.0	ug/L	101	<10.0 ug/L	30.3	0-115
Phorate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200	
p-Phenylenediamine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
Pronamide	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
Propachlor	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200	
Pyrene	69.1 ug/L	10.0	ug/L	100	<10.0 ug/L	69.1	23-110
Pyridine	31.7 ug/L	10.0	ug/L	100	<10.0 ug/L	31.7	0-200
Safrole	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200	
Simazine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200	
Sulfotep	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200	
Terbacil	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200	
Surr: 2,4,6-Tribromophenol (Surr)	48.4		ug/L	100	ug/L	48.4	20-86
Surr: 2-Fluorobiphenyl (Surr)	31.1		ug/L	50.0	ug/L	62.2	23-87
Surr: 2-Fluorophenol (Surr)	35.4		ug/L	100	ug/L	35.4	10-52



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0224 - SW3510C

Matrix Spike (BAJ0224-MS1)	Source: 17J0136-03		Prepared & Analyzed: 10/09/2017				
Surr: Nitrobenzene-d5 (Surr)	42.0	ug/L	50.0	ug/L	83.9	10-98.5	
Surr: Phenol-d5 (Surr)	31.3	ug/L	100	ug/L	31.3	5-33	
Surr: p-Terphenyl-d14 (Surr)	29.0	ug/L	50.0	ug/L	57.9	27-133	

Matrix Spike Dup (BAJ0224-MSD1)	Source: 17J0136-03		Prepared & Analyzed: 10/09/2017					
1,1-Biphenyl	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
1,2,4,5-Tetrachlorobenzene	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
1,2,4-Trichlorobenzene	58.7 ug/L	10.0	ug/L	100 <10.0 ug/L	58.7	21.8-66.7	0.615	20
1,2-Dichlorobenzene	61.0 ug/L	10.0	ug/L	100 <10.0 ug/L	61.0	22-60	2.09	20
1,2-Dinitrobenzene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
1,2-Diphenylhydrazine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
1,3,5-Trinitrobenzene	<5.00 ug/L	5.00	ug/L	<5.00 ug/L	0-200		20	
1,3-Dichlorobenzene	55.3 ug/L	10.0	ug/L	100 <10.0 ug/L	55.3	22-60	1.49	20
1,3-Dinitrobenzene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
1,4-Dichlorobenzene	58.9 ug/L	10.0	ug/L	100 <10.0 ug/L	56.3	22-60	3.22	20
1,4-Dinitrobenzene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
1,4-Dioxane	<50.0 ug/L	50.0	ug/L	<50.0 ug/L	0-200		20	
1,4-Naphthoquinone	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
1-Chloronaphthalene	63.9 ug/L	10.0	ug/L	<10.0 ug/L	0-200	1.94	20	
1-Methylnaphthalene	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
1-Naphthylamine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
2,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
2,3,5,6-Tetrachlorophenol	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
2,3,7,8-TCDD (SIM)	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
2,3-Dichloroaniline	<2.50 ug/L	2.50	ug/L	100 <2.50 ug/L	0-200		20	
2,4,5-Trichlorophenol	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	50-110		20	
2,4,6-Trichlorophenol	72.3 ug/L	10.0	ug/L	100 <10.0 ug/L	72.3	50-115	2.38	20
2,4-Dichlorophenol	68.5 ug/L	10.0	ug/L	100 <10.0 ug/L	68.5	50-105	2.54	20
2,4-Dimethylphenol	80.2 ug/L	0.50	ug/L	100 <0.50 ug/L	80.2	30-110	4.52	20
2,4-Dinitrophenol	106 ug/L	50.0	ug/L	100 <50.0 ug/L	106	15-140	4.58	20
2,4-Dinitrotoluene	89.1 ug/L	10.0	ug/L	100 <10.0 ug/L	89.1	17-111	3.66	20



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0224 - SW3510C

Matrix Spike Dup (BAJ0224-MSD1)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017					
2,6-Dichlorophenol	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20	
2,6-Dinitrotoluene	80.7 ug/L	10.0	ug/L	100 <10.0 ug/L	80.7	15-140	2.33	20	
2-Acetylaminofluorene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20	
2-Chloronaphthalene	65.6 ug/L	10.0	ug/L	100 <10.0 ug/L	65.6	45-105	2.00	20	
2-Chlorophenol	67.4 ug/L	10.0	ug/L	100 <10.0 ug/L	67.4	19-64	3.33	20	M
2-Methylnaphthalene	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	45-105			20	
2-Naphthylamine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20	
2-Nitroaniline	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	0-200			20	
2-Nitrophenol	71.3 ug/L	10.0	ug/L	100 <10.0 ug/L	71.3	40-115	2.17	20	
2-Picoline	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20	
3,3'-Dichlorobenzidine	51.7 ug/L	10.0	ug/L	100 <10.0 ug/L	51.7	20-110	0.621	20	
3,3'-Dimethylbenzidine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20	
3-Methylcholanthrene	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20	
3-Nitroaniline	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	0-200			20	
4,4'-DDE	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20	
4,6-Dinitro-2-methylphenol	102 ug/L	50.0	ug/L	100 <50.0 ug/L	102	40-130	3.42	20	
4-Aminobiphenyl	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20	
4-Bromophenyl phenyl ether	64.7 ug/L	10.0	ug/L	100 <10.0 ug/L	64.7	15-110	0.916	20	
4-Chloroaniline	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	15-110			20	
4-Chlorophenyl phenyl ether	75.3 ug/L	10.0	ug/L	100 <10.0 ug/L	75.3	15-110	1.81	20	
4-Nitroaniline	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	0-200			20	
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100 <50.0 ug/L	37.6	0-125	163	20	P
4-Nitroquinoline-1-oxide	<40.0 ug/L	40.0	ug/L	<40.0 ug/L	0-200			20	
5-Nitro-o-toluidine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20	
7,12-Dimethylbenz (a) anthracene	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20	
Acenaphthene	71.8 ug/L	10.0	ug/L	100 <10.0 ug/L	71.8	24-90	1.06	20	
Acenaphthylene	73.8 ug/L	10.0	ug/L	100 <10.0 ug/L	73.8	50-105	1.21	20	
Acetochlor	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20	
Acetophenone	59.0 ug/L	20.0	ug/L	100 <20.0 ug/L	59.0	0-200	7.12	20	
Alachlor	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20	
Aldrin	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20	



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0224 - SW3510C

Matrix Spike Dup (BAJ0224-MSD1)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017				
alpha,alpha-Dimethyl phenethylamine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
alpha-Terpineol	75.9 ug/L	2.50	ug/L	100 <2.50 ug/L	75.9	0-200	0.555	20
Aniline	<50.0 ug/L	50.0	ug/L	<50.0 ug/L	0-200			20
Anthracene	69.7 ug/L	10.0	ug/L	100 <10.0 ug/L	69.7	55-110	3.24	20
Aramite	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Atrazine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Benzaldehyde	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Benzidine	<50.0 ug/L	50.0	ug/L	100 <50.0 ug/L	0-130			20
Benzo (a) anthracene	77.2 ug/L	0.05	ug/L	100 <0.05 ug/L	77.2	55-110	2.07	20
Benzo (a) pyrene	76.2 ug/L	0.10	ug/L	100 <0.10 ug/L	76.2	55-110	3.77	20
Benzo (b) fluoranthene	79.1 ug/L	10.0	ug/L	100 <10.0 ug/L	79.1	45-120	9.31	20
Benzo (g,h,i) perylene	79.3 ug/L	10.0	ug/L	100 <10.0 ug/L	79.3	40-125	5.79	20
Benzo (k) fluoranthene	70.7 ug/L	10.0	ug/L	100 <10.0 ug/L	70.7	45-125	2.53	20
Benzoic acid	<50.0 ug/L	50.0	ug/L	<50.0 ug/L	0-125			20
Benzyl alcohol	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	0-200			20
bis (2-Chloroethoxy) methane	74.1 ug/L	10.0	ug/L	100 <10.0 ug/L	74.1	40-125	1.76	20
bis (2-Chloroethyl) ether	76.8 ug/L	10.0	ug/L	100 <10.0 ug/L	76.8	40-125	2.04	20
2,2'-Oxybis (1-chloropropane)	80.6 ug/L	10.0	ug/L	100 <10.0 ug/L	80.6	40-125	0.423	20
bis (2-Ethylhexyl) adipate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
bis (2-Ethylhexyl) phthalate	71.0 ug/L	2.50	ug/L	100 <2.50 ug/L	69.8	40-125	0.0704	20
Butachlor	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Butyl benzyl phthalate	72.3 ug/L	10.0	ug/L	100 <10.0 ug/L	72.3	45-115	1.85	20
Caprolactam	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Carbazole	83.1 ug/L	2.50	ug/L	100 <2.50 ug/L	83.1	0-200	4.91	20
Catechol	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Chlorobenzilate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Chrysene	79.3 ug/L	10.0	ug/L	100 <10.0 ug/L	79.3	55-110	2.12	20
Diallate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Dibenz (a,h) anthracene	79.3 ug/L	10.0	ug/L	100 <10.0 ug/L	79.3	40-125	6.78	20
Dibenz (a,j) acridine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20
Dibenzo furan	<5.00 ug/L	5.00	ug/L	<5.00 ug/L	0-200			20



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Certificate of Analysis

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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0224 - SW3510C

Matrix Spike Dup (BAJ0224-MSD1)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017					
Dieldrin	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Diethyl phthalate	79.3 ug/L	10.0	ug/L	100 <10.0 ug/L	79.3	40-120	1.78	20	
Dimethoate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Dimethyl phthalate	74.1 ug/L	10.0	ug/L	100 <10.0 ug/L	74.1	25-125	2.11	20	
Dimethylphenethylamine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Di-n-butyl phthalate	72.6 ug/L	10.0	ug/L	100 <10.0 ug/L	72.6	55-115	0.138	20	
Di-n-octyl phthalate	70.6 ug/L	10.0	ug/L	100 <10.0 ug/L	70.6	35-135	1.30	20	
Dinoseb	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Diphenyl ether	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Diphenylamine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200		20	
Disulfoton	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Endrin	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
EPTC	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Ethyl methacrylate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Ethyl methanesulfonate	<20.0 ug/L	20.0	ug/L	<20.0 ug/L		0-200		20	
Ethyl parathion	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Famphur	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Fluoranthene	77.9 ug/L	10.0	ug/L	100 <10.0 ug/L	76.0	55-115	2.53	20	
Fluorene	73.8 ug/L	10.0	ug/L	100 <10.0 ug/L	73.8	50-110	0.679	20	
gamma-BHC (Lindane)	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Heptachlor	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Heptachlor epoxide	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Hexachlorobenzene	55.6 ug/L	0.05	ug/L	100 <0.05 ug/L	55.6	25-125	1.39	20	
Hexachlorobutadiene	69.9 ug/L	10.0	ug/L	100 <10.0 ug/L	69.9	25-125	1.53	20	
Hexachlorocyclopentadiene	50.1 ug/L	10.0	ug/L	100 <10.0 ug/L	50.1	25-125	2.79	20	
Hexachloroethane	61.6 ug/L	10.0	ug/L	100 <10.0 ug/L	61.6	25-125	1.65	20	
Hexachlorophene	<50.0 ug/L	50.0	ug/L	<50.0 ug/L		0-200		20	
Hexachloropropene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L		0-200		20	
Indeno (1,2,3-cd) pyrene	76.9 ug/L	10.0	ug/L	100 <10.0 ug/L	76.9	45-125	7.57	20	
Isodrin	<10.0 ug/L	10.0	ug/L	<10.0 ug/L		0-200		20	
Isophorone	84.2 ug/L	10.0	ug/L	100 <10.0 ug/L	84.2	10-110	2.60	20	



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Certificate of Analysis

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0224 - SW3510C

Matrix Spike Dup (BAJ0224-MSD1)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017				
Isosafrole	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
Kepone	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
Library Search	<0.00 ug/L	0.00	ug/L	<0.00 ug/L	0-200		20	
m+p-Cresols	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	30-110		20	
Methapyriline	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
Methoxychlor	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
Methyl methacrylate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
Methyl methanesulfonate	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
Methyl parathion	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
Metolachlor	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
Metribuzin	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
Molinate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
Naphthalene	61.4 ug/L	10.0	ug/L	100 <10.0 ug/L	60.0	40-100	1.43	20
n-Decane	<2.50 ug/L	2.50	ug/L	100 <2.50 ug/L	0-200		20	
Nicotine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
Nitrobenzene	83.4 ug/L	10.0	ug/L	100 <10.0 ug/L	83.4	40-100	1.79	20
n-Nitrosodiethylamine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
n-Nitrosodimethylamine	33.7 ug/L	10.0	ug/L	100 <10.0 ug/L	33.7	25-110	5.36	20
n-Nitrosodi-n-butylamine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
n-Nitrosodi-n-propylamine	83.7 ug/L	10.0	ug/L	100 <10.0 ug/L	83.7	12-97	1.66	20
n-Nitrosodiphenylamine	67.0 ug/L	10.0	ug/L	100 <10.0 ug/L	67.0	12-97	2.10	20
n-Nitrosomethylamine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	25-110		20	
n-Nitrosomorpholine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
n-Nitrosopiperidine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
n-Nitrosopyrrolidine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	
Nonylphenol	<50.0 ug/L	50.0	ug/L	<50.0 ug/L	0-200		20	
o,o,o-Triethyl phosphorothioate	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
o,o-Diethyl o-2-pyrazinyl phosphorothioate	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
o+m+p-Cresols	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200		20	
o-Cresol	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	40-110		20	
o-Toluidine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200		20	



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0224 - SW3510C

Matrix Spike Dup (BAJ0224-MSD1)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017				
p-(Dimethylamino) azobenzene	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
p-Chloro-m-cresol	86.8 ug/L	10.0	ug/L	100 <10.0 ug/L	86.8	10-91	1.35	20
Pentachlorobenzene	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20
Pentachloroethane	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20
Pentachloronitrobenzene (quintozene)	<1.00 ug/L	1.00	ug/L	<1.00 ug/L	0-200			20
Pentachlorophenol	65.2 ug/L	20.0	ug/L	100 <20.0 ug/L	65.2	27-109	1.76	20
Phenacetin	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20
Phenanthrene	77.9 ug/L	10.0	ug/L	100 <10.0 ug/L	77.9	50-115	2.96	20
Phenol	34.3 ug/L	10.0	ug/L	101 <10.0 ug/L	34.0	0-115	11.4	20
Phorate	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
p-Phenylenediamine	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20
Pronamide	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20
Propachlor	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Pyrene	68.5 ug/L	10.0	ug/L	100 <10.0 ug/L	68.5	23-110	0.843	20
Pyridine	30.7 ug/L	10.0	ug/L	100 <10.0 ug/L	30.7	0-200	3.11	20
Safrole	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Simazine	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
Sulfotep	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	0-200			20
Terbacil	<2.50 ug/L	2.50	ug/L	<2.50 ug/L	0-200			20
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	50.1		ug/L	100 ug/L	50.1	20-86		
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	31.7		ug/L	50.0 ug/L	63.4	23-87		
<i>Surr: 2-Fluorophenol (Surr)</i>	41.4		ug/L	100 ug/L	41.4	10-52		
<i>Surr: Nitrobenzene-d5 (Surr)</i>	43.2		ug/L	50.0 ug/L	86.4	10-98.5		
<i>Surr: Phenol-d5 (Surr)</i>	34.1		ug/L	100 ug/L	34.1	5-33		
<i>Surr: p-Terphenyl-d14 (Surr)</i>	28.9		ug/L	50.0 ug/L	57.8	27-133		S



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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0075 - SW3510C

Blank (BAJ0075-BLK1)							Prepared & Analyzed: 10/03/2017		
TPH-Semi-Volatiles (DRO)	<0.500 mg/L	0.500	mg/L						
Surr: Pentacosane (Surr)	0.155		mg/L	0.250		61.8	40-160		
LCS (BAJ0075-BS1)							Prepared & Analyzed: 10/03/2017		
TPH-Semi-Volatiles (DRO)	3.0 mg/L	0.500	mg/L	5.00	mg/L	60.5	40-160		
Surr: Pentacosane (Surr)	0.151		mg/L	0.250	mg/L	60.4	40-160		
Matrix Spike (BAJ0075-MS1)							Source: 17I0885-01 Prepared & Analyzed: 10/03/2017		
TPH-Semi-Volatiles (DRO)	2.5 mg/L	0.510	mg/L	5.10	<0.510 mg/L	50.0	40-160		
Surr: Pentacosane (Surr)	0.158		mg/L	0.255	mg/L	61.9	40-160		
Matrix Spike Dup (BAJ0075-MSD1)							Source: 17I0885-01 Prepared & Analyzed: 10/03/2017		
TPH-Semi-Volatiles (DRO)	2.3 mg/L	0.515	mg/L	5.15	<0.515 mg/L	45.5	40-160	8.24	20
Surr: Pentacosane (Surr)	0.149		mg/L	0.258	mg/L	57.9	40-160		

Batch BAJ0225 - SW3510C

Blank (BAJ0225-BLK1)							Prepared & Analyzed: 10/09/2017		
TPH-Semi-Volatiles (DRO)	<0.500 mg/L	0.500	mg/L						
Surr: Pentacosane (Surr)	0.194		mg/L	0.250		77.5	40-160		
LCS (BAJ0225-BS1)							Prepared & Analyzed: 10/09/2017		
TPH-Semi-Volatiles (DRO)	3.8 mg/L	0.500	mg/L	5.00	mg/L	76.6	40-160		
Surr: Pentacosane (Surr)	0.189		mg/L	0.250	mg/L	75.8	40-160		
Matrix Spike (BAJ0225-MS1)							Source: 17J0233-01 Prepared & Analyzed: 10/09/2017		
TPH-Semi-Volatiles (DRO)	<0.500 mg/L	0.500	mg/L	5.00	<0.500 mg/L		40-160		M4
Surr: Pentacosane (Surr)	0.235		mg/L	0.250	mg/L	94.1	40-160		



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Semivolatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0225 - SW3510C

Matrix Spike Dup (BAJ0225-MSD1)	Source: 17J0233-01			Prepared & Analyzed: 10/09/2017				
TPH-Semi-Volatiles (DRO)	<0.500 mg/L	0.500	mg/L	5.00	<0.500 mg/L	40-160		20 M4
<i>Surr: Pentacosane (Surr)</i>	0.290		mg/L	0.250	mg/L	116	40-160	



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAJ0182 - SW3510C

Blank (BAJ0182-BLK1)		Prepared & Analyzed: 10/06/2017					
4,4'-DDD	<0.050 ug/L	0.050	ug/L				
4,4'-DDE	<0.050 ug/L	0.050	ug/L				
4,4'-DDT	<0.050 ug/L	0.050	ug/L				
Aldrin	<0.050 ug/L	0.050	ug/L				
alpha-BHC	<0.050 ug/L	0.050	ug/L				
beta-BHC	<0.050 ug/L	0.050	ug/L				
Chlordane	<0.200 ug/L	0.200	ug/L				
delta-BHC	<0.050 ug/L	0.050	ug/L				
Dieldrin	<0.050 ug/L	0.050	ug/L				
Endosulfan I	<0.050 ug/L	0.050	ug/L				
Endosulfan II	<0.050 ug/L	0.050	ug/L				
Endosulfan sulfate	<0.050 ug/L	0.050	ug/L				
Endrin	<0.050 ug/L	0.050	ug/L				
Endrin aldehyde	<0.050 ug/L	0.050	ug/L				
gamma-BHC (Lindane)	<0.050 ug/L	0.050	ug/L				
Heptachlor	<0.050 ug/L	0.050	ug/L				
Heptachlor epoxide	<0.050 ug/L	0.050	ug/L				
Methoxychlor	<0.050 ug/L	0.050	ug/L				
Toxaphene	<1.00 ug/L	1.00	ug/L				
Surr: TCMX	0.130		ug/L	0.200		65.0	18-112
Surr: DCB	0.180		ug/L	0.200		90.0	27-131

LCS (BAJ0182-BS1)		Prepared & Analyzed: 10/06/2017					
4,4'-DDD	0.090 ug/L	0.050	ug/L	0.100 ug/L		90.0	23-134
4,4'-DDE	0.080 ug/L	0.050	ug/L	0.100 ug/L		80.0	23-134
4,4'-DDT	0.090 ug/L	0.050	ug/L	0.100 ug/L		90.0	23-134
Aldrin	0.070 ug/L	0.050	ug/L	0.100 ug/L		70.0	23-134
alpha-BHC	0.080 ug/L	0.050	ug/L	0.100 ug/L		80.0	23-134
beta-BHC	0.100 ug/L	0.050	ug/L	0.100 ug/L		100	23-134
delta-BHC	0.110 ug/L	0.050	ug/L	0.100 ug/L		110	23-134
Dieldrin	0.080 ug/L	0.050	ug/L	0.100 ug/L		80.0	23-134



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAJ0182 - SW3510C

LCS (BAJ0182-BS1)						
Prepared & Analyzed: 10/06/2017						
Endosulfan I	0.090 ug/L	0.050	ug/L	0.100 ug/L	90.0	23-134
Endosulfan II	0.090 ug/L	0.050	ug/L	0.100 ug/L	90.0	23-134
Endosulfan sulfate	0.090 ug/L	0.050	ug/L	0.100 ug/L	90.0	23-134
Endrin	0.110 ug/L	0.050	ug/L	0.100 ug/L	110	23-134
Endrin aldehyde	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134
gamma-BHC (Lindane)	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134
Heptachlor	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134
Heptachlor epoxide	0.080 ug/L	0.050	ug/L	0.100 ug/L	80.0	23-134
Methoxychlor	0.120 ug/L	0.050	ug/L	0.100 ug/L	120	23-134
Mirex	0.090 ug/L	0.050	ug/L	0.100 ug/L	90.0	23-134
Surr: TCMX	0.120		ug/L	0.200 ug/L	60.0	18-112
Surr: DCB	0.160		ug/L	0.200 ug/L	80.0	27-131
LCS (BAJ0182-BS2)						
Prepared & Analyzed: 10/06/2017						
PCB as Aroclor 1016	0.850 ug/L	0.200	ug/L	1.00 ug/L	85.0	40-90
PCB as Aroclor 1260	0.760 ug/L	0.200	ug/L	1.00 ug/L	76.0	40-90
Surr: DCB	0.150		ug/L	0.200 ug/L	75.0	30-105
Surr: TCMX	0.120		ug/L	0.200 ug/L	60.0	30-105
LCS (BAJ0182-BS3)						
Prepared & Analyzed: 10/06/2017						
Toxaphene	1.80 ug/L	1.00	ug/L	2.50 ug/L	72.0	23-134
LCS (BAJ0182-BS4)						
Prepared & Analyzed: 10/06/2017						
Chlordane	1.78 ug/L	0.200	ug/L	2.50 ug/L	71.2	23-134
Matrix Spike (BAJ0182-MS1)						
Source: 17J0136-03 Prepared & Analyzed: 10/06/2017						
4,4'-DDD	0.122 ug/L	0.056	ug/L	0.111 <0.056 ug/L	110	23-134
4,4'-DDE	0.078 ug/L	0.056	ug/L	0.111 <0.056 ug/L	70.0	23-134
4,4'-DDT	0.100 ug/L	0.056	ug/L	0.111 <0.056 ug/L	90.0	23-134
Aldrin	0.111 ug/L	0.056	ug/L	0.111 <0.056 ug/L	100	23-134
alpha-BHC	0.144 ug/L	0.056	ug/L	0.111 <0.056 ug/L	130	23-134
beta-BHC	0.267 ug/L	0.056	ug/L	0.111 <0.056 ug/L	240	23-134
delta-BHC	0.133 ug/L	0.056	ug/L	0.111 <0.056 ug/L	120	23-134



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Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0182 - SW3510C

Matrix Spike (BAJ0182-MS1)	Source: 17J0136-03		Prepared & Analyzed: 10/06/2017						
Dieldrin	0.122 ug/L	0.056	ug/L	0.111 <0.056 ug/L	110	23-134			
Endosulfan I	0.133 ug/L	0.056	ug/L	0.111 <0.056 ug/L	120	23-134			
Endosulfan II	0.122 ug/L	0.056	ug/L	0.111 <0.056 ug/L	110	23-134			
Endosulfan sulfate	0.111 ug/L	0.056	ug/L	0.111 <0.056 ug/L	100	23-134			
Endrin	0.167 ug/L	0.056	ug/L	0.111 <0.056 ug/L	150	23-134			M
Endrin aldehyde	0.100 ug/L	0.056	ug/L	0.111 <0.056 ug/L	90.0	23-134			
gamma-BHC (Lindane)	0.167 ug/L	0.056	ug/L	0.111 <0.056 ug/L	150	23-134			M
Heptachlor	0.122 ug/L	0.056	ug/L	0.111 <0.056 ug/L	110	23-134			
Heptachlor epoxide	0.100 ug/L	0.056	ug/L	0.111 <0.056 ug/L	90.0	23-134			
Methoxychlor	0.144 ug/L	0.056	ug/L	0.111 <0.056 ug/L	130	23-134			
Mirex	0.078 ug/L	0.056	ug/L	0.111 <0.056 ug/L	70.0	23-134			
<i>Surr: TCMX</i>	0.156		ug/L	0.222 ug/L	70.0	18-112			
<i>Surr: DCB</i>	0.144		ug/L	0.222 ug/L	65.0	27-131			

Matrix Spike Dup (BAJ0182-MSD1)	Source: 17J0136-03		Prepared & Analyzed: 10/06/2017					
4,4'-DDD	0.120 ug/L	0.054	ug/L	0.109 <0.054 ug/L	110	23-134	2.20	20
4,4'-DDE	0.087 ug/L	0.054	ug/L	0.109 <0.054 ug/L	80.0	23-134	11.1	20
4,4'-DDT	0.087 ug/L	0.054	ug/L	0.109 <0.054 ug/L	80.0	23-134	14.0	20
Aldrin	0.098 ug/L	0.054	ug/L	0.109 <0.054 ug/L	90.0	23-134	12.7	20
alpha-BHC	0.141 ug/L	0.054	ug/L	0.109 <0.054 ug/L	130	23-134	2.20	20
beta-BHC	0.272 ug/L	0.054	ug/L	0.109 <0.054 ug/L	250	23-134	1.88	20
delta-BHC	0.120 ug/L	0.054	ug/L	0.109 <0.054 ug/L	110	23-134	10.9	20
Dieldrin	0.130 ug/L	0.054	ug/L	0.109 <0.054 ug/L	120	23-134	6.50	20
Endosulfan I	0.098 ug/L	0.054	ug/L	0.109 <0.054 ug/L	90.0	23-134	30.7	20
Endosulfan II	0.130 ug/L	0.054	ug/L	0.109 <0.054 ug/L	120	23-134	6.50	20
Endosulfan sulfate	0.120 ug/L	0.054	ug/L	0.109 <0.054 ug/L	110	23-134	7.33	20
Endrin	0.174 ug/L	0.054	ug/L	0.109 <0.054 ug/L	160	23-134	4.26	20
Endrin aldehyde	0.076 ug/L	0.054	ug/L	0.109 <0.054 ug/L	70.0	23-134	27.2	20
gamma-BHC (Lindane)	0.174 ug/L	0.054	ug/L	0.109 <0.054 ug/L	160	23-134	4.26	20
Heptachlor	0.130 ug/L	0.054	ug/L	0.109 <0.054 ug/L	120	23-134	6.50	20
Heptachlor epoxide	0.087 ug/L	0.054	ug/L	0.109 <0.054 ug/L	80.0	23-134	14.0	20



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Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAJ0182 - SW3510C

Matrix Spike Dup (BAJ0182-MSD1)	Source: 17J0136-03			Prepared & Analyzed: 10/06/2017						
Methoxychlor	0.152 ug/L	0.054	ug/L	0.109	<0.054 ug/L	140	23-134	5.21	20	M
Mirex	0.076 ug/L	0.054	ug/L	0.109	<0.054 ug/L	70.0	23-134	2.20	20	
<i>Surr: TCMX</i>	0.185		ug/L	0.217	ug/L	85.0	18-112			
<i>Surr: DCB</i>	0.185		ug/L	0.217	ug/L	85.0	27-131			



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Organochlorine Herbicides by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAJ0144 - SW3510C

Blank (BAJ0144-BLK1)		Prepared: 10/05/2017 Analyzed: 10/10/2017						
2,4,5-T	<0.500 ug/L	0.500	ug/L					
2,4,5-TP (Silvex)	<0.500 ug/L	0.500	ug/L					
2,4-D	<0.500 ug/L	0.500	ug/L					
Dinoseb	<0.500 ug/L	0.500	ug/L					
Pentachlorophenol	<0.500 ug/L	0.500	ug/L					
Surr: DCAA (Surr)	0.667		ug/L	1.11		60.0	60-112	

LCS (BAJ0144-BS1)		Prepared: 10/05/2017 Analyzed: 10/10/2017						
2,4,5-T	0.500 ug/L	0.500	ug/L	0.556	ug/L	90.0	53-144	
2,4,5-TP (Silvex)	<0.500 ug/L	0.500	ug/L	0.556	ug/L	70.0	52-129	
2,4-D	<0.500 ug/L	0.500	ug/L	0.556	ug/L	70.0	53-126	
Dinoseb	0.500 ug/L	0.500	ug/L	0.556	ug/L	90.0	60-137	
Pentachlorophenol	<0.500 ug/L	0.500	ug/L	0.556	ug/L	70.0	52-124	
Surr: DCAA (Surr)	0.611		ug/L	1.11	ug/L	55.0	60-112	S

Matrix Spike (BAJ0144-MS1)		Source: 17J0136-03 Prepared: 10/05/2017 Analyzed: 10/10/2017						
2,4,5-T	0.556 ug/L	0.500	ug/L	0.556	<0.500 ug/L	100	53-144	
2,4,5-TP (Silvex)	0.611 ug/L	0.500	ug/L	0.556	<0.500 ug/L	80.0	52-129	
2,4-D	0.556 ug/L	0.500	ug/L	0.556	<0.500 ug/L	100	53-126	
Dinoseb	0.611 ug/L	0.500	ug/L	0.556	<0.500 ug/L	110	60-137	
Pentachlorophenol	<0.500 ug/L	0.500	ug/L	0.556	<0.500 ug/L	80.0	52-124	
Surr: DCAA (Surr)	2.22		ug/L	1.11	ug/L	200	60-112	S

Matrix Spike Dup (BAJ0144-MSD1)		Source: 17J0136-03 Prepared: 10/05/2017 Analyzed: 10/10/2017						
2,4,5-T	0.722 ug/L	0.500	ug/L	0.556	<0.500 ug/L	130	53-144	26.1
2,4,5-TP (Silvex)	0.722 ug/L	0.500	ug/L	0.556	<0.500 ug/L	100	52-129	16.7
2,4-D	0.556 ug/L	0.500	ug/L	0.556	<0.500 ug/L	100	53-126	0.00
Dinoseb	0.722 ug/L	0.500	ug/L	0.556	<0.500 ug/L	130	60-137	16.7
Pentachlorophenol	0.556 ug/L	0.500	ug/L	0.556	<0.500 ug/L	100	52-124	22.2
Surr: DCAA (Surr)	2.33		ug/L	1.11	ug/L	210	60-112	S



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Micro-extractables by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0184 - SW8011

Blank (BAJ0184-BLK1)		Prepared: 10/06/2017 Analyzed: 10/07/2017						
1,2-Dibromoethane (EDB)	<0.010 ug/L	0.010	ug/L					
1,2,3-Trichloropropane	<0.010 ug/L	0.010	ug/L					
1,2-Dibromo-3-chloropropane (DBCP)	<0.010 ug/L	0.010	ug/L					

LCS (BAJ0184-BS1)		Prepared: 10/06/2017 Analyzed: 10/07/2017						
1,2-Dibromoethane (EDB)	0.251 ug/L	0.010	ug/L	0.250 ug/L	100	65-135		
1,2,3-Trichloropropane	0.262 ug/L	0.010	ug/L	0.250 ug/L	105	65-135		
1,2-Dibromo-3-chloropropane (DBCP)	0.245 ug/L	0.010	ug/L	0.250 ug/L	98.1	65-135		

LCS Dup (BAJ0184-BSD1)		Prepared: 10/06/2017 Analyzed: 10/07/2017						
1,2-Dibromoethane (EDB)	0.277 ug/L	0.010	ug/L	0.250 ug/L	111	65-135	9.88	20
1,2,3-Trichloropropane	0.283 ug/L	0.010	ug/L	0.250 ug/L	113	65-135	7.59	20
1,2-Dibromo-3-chloropropane (DBCP)	0.273 ug/L	0.010	ug/L	0.250 ug/L	109	65-135	10.8	20

Matrix Spike (BAJ0184-MS1)		Source: 17J0136-03 Prepared: 10/06/2017 Analyzed: 10/07/2017						
1,2-Dibromoethane (EDB)	0.181 ug/L	0.010	ug/L	0.249 <0.010 ug/L	72.7	65-135		
1,2,3-Trichloropropane	0.180 ug/L	0.010	ug/L	0.249 <0.010 ug/L	72.3	65-135		
1,2-Dibromo-3-chloropropane (DBCP)	0.228 ug/L	0.010	ug/L	0.249 <0.010 ug/L	91.7	65-135		

Matrix Spike Dup (BAJ0184-MSD1)		Source: 17J0136-03 Prepared: 10/06/2017 Analyzed: 10/07/2017						
1,2-Dibromoethane (EDB)	0.164 ug/L	0.010	ug/L	0.247 <0.010 ug/L	66.4	65-135	10.0	20
1,2,3-Trichloropropane	0.159 ug/L	0.010	ug/L	0.247 <0.010 ug/L	64.4	65-135	12.5	20
1,2-Dibromo-3-chloropropane (DBCP)	0.206 ug/L	0.010	ug/L	0.247 <0.010 ug/L	83.7	65-135	10.1	20

Batch BAJ0313 - SW8011

Blank (BAJ0313-BLK1)		Prepared & Analyzed: 10/11/2017						
1,2-Dibromoethane (EDB)	<0.010 ug/L	0.010	ug/L					
1,2,3-Trichloropropane	<0.010 ug/L	0.010	ug/L					
1,2-Dibromo-3-chloropropane (DBCP)	<0.010 ug/L	0.010	ug/L					



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Micro-extractables by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0313 - SW8011

LCS (BAJ0313-BS1)						
Prepared & Analyzed: 10/11/2017						
1,2-Dibromoethane (EDB)	0.250 ug/L	0.010	ug/L	0.250 ug/L	100	65-135
1,2,3-Trichloropropane	0.206 ug/L	0.010	ug/L	0.250 ug/L	82.5	65-135
1,2-Dibromo-3-chloropropane (DBCP)	0.205 ug/L	0.010	ug/L	0.250 ug/L	82.0	65-135

LCS Dup (BAJ0313-BSD1)						
Prepared & Analyzed: 10/11/2017						
1,2-Dibromoethane (EDB)	0.332 ug/L	0.010	ug/L	0.250 ug/L	133	65-135
1,2,3-Trichloropropane	0.332 ug/L	0.010	ug/L	0.250 ug/L	133	65-135
1,2-Dibromo-3-chloropropane (DBCP)	0.311 ug/L	0.010	ug/L	0.250 ug/L	124	65-135

Matrix Spike (BAJ0313-MS1)						
Source: 17J0294-03 Prepared & Analyzed: 10/11/2017						
1,2-Dibromoethane (EDB)	0.311 ug/L	0.010	ug/L	0.247 <0.010 ug/L	126	65-135
1,2,3-Trichloropropane	0.324 ug/L	0.010	ug/L	0.247 <0.010 ug/L	131	65-135
1,2-Dibromo-3-chloropropane (DBCP)	0.306 ug/L	0.010	ug/L	0.247 <0.010 ug/L	124	65-135

Matrix Spike Dup (BAJ0313-MSD1)						
Source: 17J0294-03 Prepared: 10/11/2017 Analyzed: 10/12/2017						
1,2-Dibromoethane (EDB)	0.275 ug/L	0.010	ug/L	0.246 <0.010 ug/L	112	65-135
1,2,3-Trichloropropane	0.260 ug/L	0.010	ug/L	0.246 <0.010 ug/L	106	65-135
1,2-Dibromo-3-chloropropane (DBCP)	0.226 ug/L	0.010	ug/L	0.246 <0.010 ug/L	91.9	65-135



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/12/2017 17:19
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAJ0174 - No Prep Wet Chem

Blank (BAJ0174-BLK1)										Prepared & Analyzed: 10/05/2017
Chromium, Hexavalent	<0.005 mg/L	0.005	mg/L							
LCS (BAJ0174-BS1)										Prepared & Analyzed: 10/05/2017
Chromium, Hexavalent	0.101 mg/L	0.005	mg/L	0.100	mg/L	101	80-120			
Matrix Spike (BAJ0174-MS1)		Source: 17J0112-01								Prepared & Analyzed: 10/05/2017
Chromium, Hexavalent	0.098 mg/L	0.005	mg/L	0.100	<0.005 mg/L	98.0	80-120			
Matrix Spike (BAJ0174-MS2)		Source: 17J0143-01								Prepared & Analyzed: 10/05/2017
Chromium, Hexavalent	<0.005 mg/L	0.005	mg/L	0.100	<0.005 mg/L	80-120				M
Matrix Spike Dup (BAJ0174-MSD1)		Source: 17J0112-01								Prepared & Analyzed: 10/05/2017
Chromium, Hexavalent	0.099 mg/L	0.005	mg/L	0.100	<0.005 mg/L	99.0	80-120	1.02	20	
Matrix Spike Dup (BAJ0174-MSD2)		Source: 17J0143-01								Prepared & Analyzed: 10/05/2017
Chromium, Hexavalent	<0.005 mg/L	0.005	mg/L	0.100	<0.005 mg/L	80-120		20		M

Batch BAJ0197 - No Prep Wet Chem

Blank (BAJ0197-BLK1)										Prepared & Analyzed: 10/06/2017
Cyanide	<0.01 mg/L	0.01	mg/L							
LCS (BAJ0197-BS1)										Prepared & Analyzed: 10/06/2017
Cyanide	0.24 mg/L	0.01	mg/L	0.250	mg/L	94.1	80-120			

LCS Dup (BAJ0197-BSD1)

Cyanide	0.25 mg/L	0.01	mg/L	0.250	mg/L	100	80-120	6.26	20
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Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0197 - No Prep Wet Chem

Matrix Spike (BAJ0197-MS1)	Source: 17J0112-08			Prepared & Analyzed: 10/06/2017				
Cyanide	0.22 mg/L	0.01	mg/L	0.250	<0.01 mg/L	87.5	80-120	
Matrix Spike (BAJ0197-MS2)	Source: 17J0208-01			Prepared & Analyzed: 10/06/2017				
Cyanide	0.17 mg/L	0.01	mg/L	0.250	<0.01 mg/L	68.5	80-120	M
Matrix Spike Dup (BAJ0197-MSD1)	Source: 17J0112-08			Prepared & Analyzed: 10/06/2017				
Cyanide	0.23 mg/L	0.01	mg/L	0.250	<0.01 mg/L	91.5	80-120	4.51
Matrix Spike Dup (BAJ0197-MSD2)	Source: 17J0208-01			Prepared & Analyzed: 10/06/2017				
Cyanide	0.22 mg/L	0.01	mg/L	0.250	<0.01 mg/L	89.5	80-120	26.6
								P

Batch BAJ0230 - No Prep Wet Chem

Blank (BAJ0230-BLK1)	Prepared & Analyzed: 10/09/2017					
Sulfide	<1.00 mg/L	1.00	mg/L			
LCS (BAJ0230-BS1)	Prepared & Analyzed: 10/09/2017					
Sulfide	4.68 mg/L	1	mg/L	5.00 mg/L	93.6 80-120	
LCS Dup (BAJ0230-BSD1)	Prepared & Analyzed: 10/09/2017					
Sulfide	4.85 mg/L	1	mg/L	5.00 mg/L	97.0 80-120	
					3.57 20	
Matrix Spike (BAJ0230-MS1)	Source: 17J0120-17			Prepared & Analyzed: 10/09/2017		
Sulfide	5.48 mg/L	1.00	mg/L	5.00 <1.00 mg/L	110	75-125
Matrix Spike (BAJ0230-MS2)	Source: 17J0136-03			Prepared & Analyzed: 10/09/2017		
Sulfide	2.87 mg/L	1.00	mg/L	5.00 <1.00 mg/L	57.4	75-125
						M



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Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAJ0230 - No Prep Wet Chem

Matrix Spike Dup (BAJ0230-MSD1)		Source: 17J0120-17		Prepared & Analyzed: 10/09/2017					
Sulfide	5.26 mg/L	1.00	mg/L	5.00	<1.00 mg/L	105	75-125	4.10	20
Matrix Spike Dup (BAJ0230-MSD2)		Source: 17J0136-03		Prepared & Analyzed: 10/09/2017					
Sulfide	3.83 mg/L	1.00	mg/L	5.00	<1.00 mg/L	76.6	75-125	28.7	20 P

Batch BAJ0231 - No Prep Wet Chem

Blank (BAJ0231-BLK1)		Prepared & Analyzed: 10/09/2017					
Sulfide	<1.00 mg/L	1.00	mg/L				
LCS (BAJ0231-BS1)		Prepared & Analyzed: 10/09/2017					
Sulfide	4.53 mg/L	1	mg/L	5.00	mg/L	90.6	80-120
LCS Dup (BAJ0231-BSD1)		Prepared & Analyzed: 10/09/2017					
Sulfide	4.58 mg/L	1	mg/L	5.00	mg/L	91.6	80-120
Matrix Spike (BAJ0231-MS1)		Source: 17J0155-06 Prepared & Analyzed: 10/09/2017					
Sulfide	4.81 mg/L	1.00	mg/L	5.00	<1.00 mg/L	96.2	75-125
Matrix Spike Dup (BAJ0231-MSD1)		Source: 17J0155-06		Prepared & Analyzed: 10/09/2017			
Sulfide	4.93 mg/L	1.00	mg/L	5.00	<1.00 mg/L	98.6	75-125
						2.46	20



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Certified Analyses included in this Report

Analyte	Certifications
<i>SW6010C in Non-Potable Water</i>	
Arsenic	VELAP,WVDEP
Barium	VELAP,WVDEP
Beryllium	VELAP,WVDEP
Cadmium	VELAP,WVDEP
Chromium	VELAP,WVDEP
Cobalt	VELAP,WVDEP
Copper	VELAP,WVDEP
Lead	VELAP,WVDEP
Nickel	VELAP,WVDEP
Selenium	VELAP,WVDEP
Silver	VELAP,WVDEP
Tin	VELAP,WVDEP
Vanadium	VELAP,WVDEP
Zinc	VELAP,WVDEP
<i>SW6020A in Non-Potable Water</i>	
Antimony	VELAP,NC,WVDEP
Arsenic	VELAP,WVDEP
Thallium	VELAP,WVDEP
<i>SW7196A in Non-Potable Water</i>	
Chromium, Hexavalent	VELAP
<i>SW7470A in Non-Potable Water</i>	
Mercury	VELAP,NC,WVDEP
<i>SW8011 in Non-Potable Water</i>	
1,2-Dibromoethane (EDB)	VELAP,NC
1,2,3-Trichloropropane	VELAP,NC
1,2-Dibromo-3-chloropropane (DBCP)	VELAP,NC
<i>SW8015C in Non-Potable Water</i>	
TPH-Semi-Volatiles (DRO)	VELAP,NC,WVDEP
TPH-Volatiles (GRO)	VELAP,NC,WVDEP
<i>SW8081B in Non-Potable Water</i>	
4,4'-DDD	NC,VELAP,WVDEP
4,4'-DDE	NC,VELAP,WVDEP
4,4'-DDT	NC,VELAP,WVDEP
Aldrin	NC,VELAP,WVDEP
alpha-BHC	NC,VELAP,WVDEP



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Certified Analyses included in this Report

Analyte	Certifications
beta-BHC	NC, VELAP, WVDEP
Chlordane	NC, VELAP, WVDEP
delta-BHC	NC, VELAP, WVDEP
Dieldrin	NC, VELAP, WVDEP
Endosulfan I	NC, VELAP, WVDEP
Endosulfan II	NC, VELAP, WVDEP
Endosulfan sulfate	NC, VELAP, WVDEP
Endrin	NC, VELAP, WVDEP
Endrin aldehyde	NC, VELAP, WVDEP
gamma-BHC (Lindane)	NC, VELAP, WVDEP
Heptachlor	NC, VELAP, WVDEP
Heptachlor epoxide	NC, VELAP, WVDEP
Methoxychlor	NC, VELAP, WVDEP
Toxaphene	NC, VELAP, WVDEP
SW8082A in Non-Potable Water	
PCB as Aroclor 1016	VELAP, NC, WVDEP
PCB as Aroclor 1221	VELAP, NC, WVDEP
PCB as Aroclor 1232	VELAP, NC, WVDEP
PCB as Aroclor 1242	VELAP, NC, WVDEP
PCB as Aroclor 1248	VELAP, NC, WVDEP
PCB as Aroclor 1254	VELAP, NC, WVDEP
PCB as Aroclor 1260	VELAP, NC, WVDEP
SW8151A in Non-Potable Water	
2,4,5-T	VELAP, NC
2,4,5-TP (Silvex)	VELAP, NC
2,4-D	VELAP, NC
Dinoseb	VELAP, NC
Pentachlorophenol	VELAP, NC
SW8260B in Non-Potable Water	
1,1,1,2-Tetrachloroethane	NC, VELAP, WVDEP
1,1,1-Trichloroethane	NC, VELAP, WVDEP
1,1,2,2-Tetrachloroethane	NC, VELAP, WVDEP
1,1,2-Trichloroethane	NC, VELAP, WVDEP
1,1-Dichloroethane	NC, VELAP, WVDEP
1,1-Dichloroethylene	NC, VELAP, WVDEP
1,1-Dichloropropene	NC, VELAP, WVDEP
1,2,3-Trichlorobenzene	NC, VELAP, WVDEP



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Certified Analyses included in this Report

Analyte	Certifications
1,2,3-Trichloropropane	NC, VELAP, WVDEP
1,2,4-Trichlorobenzene	NC, VELAP, WVDEP
1,2,4-Trimethylbenzene	NC, VELAP, WVDEP
1,2-Dibromo-3-chloropropane (DBCP)	NC, VELAP, WVDEP
1,2-Dibromoethane (EDB)	NC, VELAP, WVDEP
1,2-Dichlorobenzene	NC, VELAP, WVDEP
1,2-Dichloroethane	NC, VELAP, WVDEP
1,2-Dichloropropane	NC, VELAP, WVDEP
1,3,5-Trimethylbenzene	NC, VELAP, WVDEP
1,3,5-Trimethylbenzene	NC, WVDEP
1,3-Dichlorobenzene	NC, VELAP, WVDEP
1,3-Dichloropropane	NC, VELAP, WVDEP
1,4-Dichlorobenzene	NC, VELAP, WVDEP
2,2-Dichloropropane	NC, VELAP, WVDEP
2-Butanone (MEK)	NC, VELAP, WVDEP
2-Chlorotoluene	NC, VELAP, WVDEP
2-Hexanone (MBK)	NC, VELAP, WVDEP
4-Chlorotoluene	NC, VELAP, WVDEP
4-Isopropyltoluene	NC, VELAP, WVDEP
4-Methyl-2-pentanone (MIBK)	NC, VELAP, WVDEP
Acetone	NC, VELAP, WVDEP
Acetonitrile	NC, VELAP, WVDEP
Acrolein	NC, VELAP, WVDEP
Acrylonitrile	NC, VELAP, WVDEP
Allyl chloride	NC, VELAP, WVDEP
Benzene	NC, VELAP, WVDEP
Bromobenzene	NC, VELAP, WVDEP
Bromochloromethane	NC, VELAP, WVDEP
Bromodichloromethane	NC, VELAP, WVDEP
Bromoform	NC, VELAP, WVDEP
Bromomethane	NC, VELAP, WVDEP
Carbon disulfide	NC, VELAP, WVDEP
Carbon tetrachloride	NC, VELAP, WVDEP
Chlorobenzene	NC, VELAP, WVDEP
Chloroethane	NC, VELAP, WVDEP
Chloroform	NC, VELAP, WVDEP
Chloromethane	NC, VELAP, WVDEP
Chloroprene	NC, VELAP, WVDEP



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Analyte	Certifications
cis-1,2-Dichloroethylene	NC, VELAP, WVDEP
cis-1,3-Dichloropropene	NC, VELAP, WVDEP
Dibromochloromethane	NC, VELAP, WVDEP
Dibromomethane	NC, VELAP, WVDEP
Dichlorodifluoromethane	NC, VELAP, WVDEP
Di-isopropyl ether (DIPE)	NC, VELAP, WVDEP
Ethyl methacrylate	NC, VELAP, WVDEP
Ethylbenzene	NC, VELAP, WVDEP
Hexachlorobutadiene	NC, VELAP, WVDEP
Iodomethane	NC, VELAP, WVDEP
Isobutyl Alcohol	NC, VELAP, WVDEP
Isopropylbenzene	NC, VELAP, WVDEP
m+p-Xylenes	NC, VELAP, WVDEP
m+p-Xylenes	NC, VELAP, WVDEP
Methacrylonitrile	NC, VELAP, WVDEP
Methyl methacrylate	NC, VELAP, WVDEP
Methylene chloride	NC, VELAP, WVDEP
Methylene chloride	NC, VELAP, WVDEP
Methyl-t-butyl ether (MTBE)	NC, VELAP, WVDEP
Naphthalene	NC, VELAP, WVDEP
n-Butylbenzene	NC, VELAP, WVDEP
n-Propylbenzene	NC, VELAP, WVDEP
o-Xylene	NC, VELAP, WVDEP
o-Xylene	NC, VELAP, WVDEP
Propionitrile	NC, VELAP, WVDEP
sec-Butylbenzene	NC, VELAP, WVDEP
Styrene	NC, VELAP, WVDEP
Styrene	NC, VELAP, WVDEP
tert-Butylbenzene	NC, VELAP, WVDEP
Tetrachloroethylene (PCE)	NC, VELAP, WVDEP
Tetrachloroethylene (PCE)	NC, VELAP, WVDEP
Toluene	NC, VELAP, WVDEP
Toluene	NC, VELAP, WVDEP
trans-1,2-Dichloroethylene	NC, VELAP, WVDEP
trans-1,2-Dichloroethylene	NC, VELAP, WVDEP
trans-1,3-Dichloropropene	NC, VELAP, WVDEP
trans-1,3-Dichloropropene	NC, VELAP, WVDEP
trans-1,4-Dichloro-2-butene	NC, VELAP, WVDEP



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Analyte	Certifications
Trichloroethylene	NC, VELAP, WVDEP
Trichloroethylene	NC, VELAP, WVDEP
Trichlorofluoromethane	NC, VELAP, WVDEP
Trichlorofluoromethane	NC, VELAP, WVDEP
Vinyl acetate	NC, VELAP, WVDEP
Vinyl acetate	NC, VELAP, WVDEP
Vinyl chloride	NC, VELAP, WVDEP
Vinyl chloride	NC, VELAP, WVDEP
Xylenes, Total	NC, VELAP, WVDEP
Xylenes, Total	NC, VELAP, WVDEP
SW8270D in Non-Potable Water	
1,2,4,5-Tetrachlorobenzene	NC, VELAP, WVDEP
1,3,5-Trinitrobenzene	NC, VELAP, WVDEP
1,3-Dinitrobenzene	NC, VELAP, WVDEP
1,4-Naphthoquinone	NC, VELAP, WVDEP
1-Naphthylamine	NC, VELAP, WVDEP
2,3,4,6-Tetrachlorophenol	NC, VELAP, WVDEP
2,4,5-Trichlorophenol	NC, VELAP, WVDEP
2,4,6-Trichlorophenol	NC, VELAP, WVDEP
2,4-Dichlorophenol	NC, VELAP, WVDEP
2,4-Dimethylphenol	NC, VELAP, WVDEP
2,4-Dinitrophenol	NC, VELAP, WVDEP
2,4-Dinitrotoluene	NC, VELAP, WVDEP
2,6-Dichlorophenol	NC, VELAP, WVDEP
2,6-Dinitrotoluene	NC, VELAP, WVDEP
2-Acetylaminofluorene	NC, VELAP, WVDEP
2-Chloronaphthalene	NC, VELAP, WVDEP
2-Chlorophenol	NC, VELAP, WVDEP
2-Methylnaphthalene	NC, VELAP, WVDEP
2-Naphthylamine	NC, VELAP, WVDEP
2-Nitroaniline	NC, VELAP, WVDEP
2-Nitrophenol	NC, VELAP, WVDEP
3,3'-Dichlorobenzidine	NC, VELAP, WVDEP
3,3'-Dimethylbenzidine	NC, VELAP, WVDEP
3-Methylcholanthrene	NC, VELAP, WVDEP
3-Nitroaniline	NC, VELAP, WVDEP
4,6-Dinitro-2-methylphenol	NC, VELAP, WVDEP



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Certified Analyses included in this Report

Analyte	Certifications
4-Aminobiphenyl	NC, VELAP, WVDEP
4-Bromophenyl phenyl ether	NC, VELAP, WVDEP
4-Chloroaniline	NC, VELAP, WVDEP
4-Chlorophenyl phenyl ether	NC, VELAP, WVDEP
4-Nitroaniline	NC, VELAP, WVDEP
4-Nitrophenol	NC, VELAP, WVDEP
5-Nitro-o-toluidine	NC, VELAP, WVDEP
7,12-Dimethylbenz (a) anthracene	NC, VELAP, WVDEP
Acenaphthene	NC, VELAP, WVDEP
Acenaphthylene	NC, VELAP, WVDEP
Acetophenone	NC, VELAP, WVDEP
Anthracene	NC, VELAP, WVDEP
Benzo (a) anthracene	NC, VELAP, WVDEP
Benzo (a) pyrene	NC, VELAP, WVDEP
Benzo (b) fluoranthene	NC, VELAP, WVDEP
Benzo (g,h,i) perylene	NC, VELAP, WVDEP
Benzo (k) fluoranthene	NC, VELAP, WVDEP
Benzyl alcohol	NC, VELAP, WVDEP
bis (2-Chloroethoxy) methane	NC, VELAP, WVDEP
bis (2-Chloroethyl) ether	NC, VELAP, WVDEP
2,2'-Oxybis (1-chloropropane)	NC, VELAP, WVDEP
bis (2-Ethylhexyl) phthalate	NC, VELAP, WVDEP
Butyl benzyl phthalate	NC, VELAP, WVDEP
Chlorobenzilate	NC, VELAP, WVDEP
Chrysene	NC, VELAP, WVDEP
Diallate	NC, VELAP, WVDEP
Dibenz (a,h) anthracene	NC, VELAP, WVDEP
Dibenzofuran	NC, VELAP, WVDEP
Diethyl phthalate	NC, VELAP, WVDEP
Dimethoate	NC, VELAP, WVDEP
Dimethyl phthalate	NC, VELAP, WVDEP
Di-n-butyl phthalate	NC, VELAP, WVDEP
Di-n-octyl phthalate	NC, VELAP, WVDEP
Diphenylamine	NC, VELAP, WVDEP
Disulfoton	NC, VELAP, WVDEP
Ethyl methanesulfonate	NC, VELAP, WVDEP
Ethyl parathion	NC, VELAP, WVDEP
Famphur	NC, VELAP, WVDEP



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Certified Analyses included in this Report

Analyte	Certifications
Fluoranthene	NC, VELAP, WVDEP
Fluorene	NC, VELAP, WVDEP
Hexachlorobenzene	NC, VELAP, WVDEP
Hexachlorobutadiene	NC, VELAP, WVDEP
Hexachlorocyclopentadiene	NC, VELAP, WVDEP
Hexachloroethane	NC, VELAP, WVDEP
Hexachloropropene	NC, VELAP, WVDEP
Indeno (1,2,3-cd) pyrene	NC, VELAP, WVDEP
Isodrin	NC, VELAP, WVDEP
Isophorone	NC, VELAP, WVDEP
Isosafrole	NC, VELAP, WVDEP
Kepone	NC, VELAP, WVDEP
m+p-Cresols	NC, VELAP, WVDEP
Methapyrilene	NC, VELAP, WVDEP
Methyl methanesulfonate	NC, VELAP, WVDEP
Methyl parathion	NC, VELAP, WVDEP
Naphthalene	NC, VELAP, WVDEP
Nitrobenzene	NC, VELAP, WVDEP
n-Nitrosodiethylamine	NC, VELAP, WVDEP
n-Nitrosodimethylamine	NC, VELAP, WVDEP
n-Nitrosodi-n-butylamine	NC, VELAP, WVDEP
n-Nitrosodi-n-propylamine	NC, VELAP, WVDEP
n-Nitrosodiphenylamine	NC, VELAP, WVDEP
n-Nitrosomethylalkylamine	NC, VELAP, WVDEP
n-Nitrosopiperidine	NC, VELAP, WVDEP
n-Nitrosopyrrolidine	NC, VELAP, WVDEP
o,o,o-Triethyl phosphorothioate	NC, VELAP, WVDEP
o,o-Diethyl o-2-pyrazinyl phosphorothioate	NC, VELAP, WVDEP
o+m+p-Cresols	VELAP, WVDEP
o-Cresol	NC, VELAP, WVDEP
o-Toluidine	NC, VELAP, WVDEP
p-(Dimethylamino) azobenzene	NC, VELAP, WVDEP
p-Chloro-m-cresol	NC, VELAP, WVDEP
Pentachlorobenzene	NC, VELAP, WVDEP
Pentachloronitrobenzene (quintozone)	NC, VELAP, WVDEP
Phenacetin	NC, VELAP, WVDEP
Phenanthrone	NC, VELAP, WVDEP
Phenol	NC, VELAP, WVDEP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Certified Analyses included in this Report

Analyte	Certifications		
Phorate	NC,VELAP,WVDEP		
p-Phenylenediamine	NC,VELAP,WVDEP		
Pronamide	NC,VELAP,WVDEP		
Pyrene	NC,VELAP,WVDEP		
Safrole	NC,VELAP,WVDEP		
SW9012B in Non-Potable Water			
Cyanide	VELAP		
SW9215 in Non-Potable Water			
Sulfide	VELAP		
Code	Description	Lab Number	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2017
NC	North Carolina DENR	495	12/31/2017
PADEP	NELAC-Pennsylvania	001	10/31/2017
VELAP	NELAC-Virginia Certificate #9439	460021	06/14/2018
WVDEP	West Virginia DEP	350	11/30/2017



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Certificate of Analysis

Final Report

Client Name:	EEE Consulting (Blacksburg, VA) 201 Church Street Blacksburg VA, 24060	Date Issued:	10/12/2017 17:19
Submitted To:	Jeff Fisher	Project Number:	17-802
Client Site I.D.:	CVTC	Purchase Order:	CVTC 17-802

Summary of Data Qualifiers

- C Continuing calibration verification response for this analyte is outside specifications.
- CI Residual Chlorine or other oxidizing agent was detected in the container used to analyze this sample.
- DND Not Detected
- E Estimated concentration, outside calibration range
- H Analysis was performed outside of the method prescribed holding time.
- M Matrix spike recovery is outside established acceptance limits
- M4 MS/MSD was not spiked
- P Duplicate analysis does not meet the acceptance criteria for precision
- S Surrogate recovery was outside acceptance criteria
- RPD Relative Percent Difference
- Qual Qualifiers
- RE Denotes sample was re-analyzed
- D.F. Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.
- TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library . A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.
- PCBs, Total Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.



1941 REYMET ROAD
RICHMOND, VIRGINIA 23237
(804) 358-8295 PHONE
(804) 358-8297 FAX

Chain of Custody
Form #: D1331
Rev. 1.0
Effective: Feb 14, 2014

CHAIN OF CUSTODY

COMPANY NAME:	EEE Consulting	INVOICE TO:	Same	PROJECT NAME/Quote #:	CVTC
CONTACT:	Jeff Fisher	INVOICE CONTACT:		SITE NAME:	CVTC
ADDRESS:	201 Church Street, Blacksburg, VA 24060	INVOICE ADDRESS:		PROJECT NUMBER:	17-802
PHONE #:	1-540-953-0170	INVOICE PHONE #:		P.O. #:	
FAX #:	540 953 0171	EMAIL:	jfisher@eee-consulting.com	Pretreatment Program:	
Is sample for compliance reporting? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		Is sample from a chlorinated supply? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		PWS I.D. #: 5	
SAMPLER NAME (PRINT): Josh Hepler		SAMPLER SIGNATURE:		Turn Around Time: 10 Day(s)	

CLIENT SAMPLE I.D.	Grab Composite Field Filtered (Dissolved Metals)	Composite Start Date <i>7:30</i>	Grab Date or Composite Stop Date <i>7:30</i>	Grab Time or Composite Stop Time <i>-</i>	Time Preserved <i>-</i>	Matrix (See Codes)	Number of Containers <i>16</i>	ANALYSIS / (PRESERVATIVE)						COMMENTS		
								VSWMR App II Tbl 3.1 B <i>X</i>	VOC 8260 <i>X</i>	2,3,7,8-TCDD SIM <i>X</i>	DRO <i>X</i>	GRO <i>X</i>	Cr VI <i>X</i>		RCRA Metals <i></i>	EDB-TCP-DBCP SW8011 <i></i>
1) 30-2	<input checked="" type="checkbox"/>	-	-	3:40	-	GW	16									
2) 30-1	<input checked="" type="checkbox"/>	-	-	-	-	GW	16	X	X	X	X					
3)																
4)																
5)																
6)																
7)																
8)																
9)																
10)																
NO SEAC ON ICIE																
REQUISITIONED: <i>Courier</i>	DATE / TIME <i>10-2 1600</i>	RECEIVED: <i>Courier</i>	DATE / TIME	C Data Packag	LAB USE ONLY	COOLER TEMP	<i>1.1</i>	°C								
REQUISITIONED: <i>Courier</i>	DATE / TIME	RECEIVED: <i>Jeff 3 Oct 2017 8:00</i>	DATE / TIME	Level I <input type="checkbox"/>		EEE-Blackburg CVTC	17J0020									
REQUISITIONED: <i>Courier</i>	DATE / TIME	RECEIVED:	Level II <input checked="" type="checkbox"/>													
			Level III <input type="checkbox"/>													
			Level IV <input type="checkbox"/>													
Recd: 10/03/2017 Due: 10/10/2017								v130325002								
								GW.xls								



Order ID 17J0020

17J0020

Sample Preservation Log

Date Performed: 10/3/17

Sample Preservation Log
Form #: F1301
Rev # 7.0
Effective: Feb 21, 2017
Page 1 of 1

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NaOH ID: _____

HNO₃ ID:

| CrVI preserved date/time: _____ Analyst Initials: _____

H₂SO₄ ID:

Na₂S₂O₃ ID:

*** pH must be adjusted between 9.3 - 9.7**

Buffer Sol'n ID: _____

HCL ID:

Na_2SO_3 ID:

1N NaOH ID:

5N NaOH:

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E1301 Sample Preservation Log 7.0.xls



1941 REYMET ROAD
RICHMOND, VIRGINIA 23237
(804) 358-8295 PHONE
(804)358-8297 FAX

Chain of Custody
Form #: D1331
Rev. 1.0
Effective: Feb 14, 2014

CHAIN OF CUSTODY

COMPANY NAME:	EEE Consulting	INVOICE TO:	Same	PROJECT NAME/Quote #:	CVTC
CONTACT:	Jeff Fisher	INVOICE CONTACT:		SITE NAME:	CVTC
ADDRESS:	201 Church Street, Blacksburg, VA 24060	INVOICE ADDRESS:		PROJECT NUMBER:	17-802
PHONE #:	1-540-953-0170	INVOICE PHONE #:		P.O. #:	
FAX #:		EMAIL:	jfisher@eee-consulting.com	Pretreatment Program:	

Is sample for compliance reporting? YES NO

Is sample from a chlorinated supply? YES NO

PWS ID #:

SAMPLER NAME (PRINT): Josh Hepler

SAMPLER SIGNATURE:

Turn Around Time: 3 Day(s)

Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other

COMMENTS

CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered (Dissolved Metals)	ANALYSIS / (PRESERVATIVE)								Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol					
				Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	VSWMR App II Tbl 3.1 B	VOC 8260	2,3,7,8-TCDD SIM	DRO	GRO	Cr VI	RCRA Metals
1) 10 - 1	X	X					4:40										
2) 10 - 2	X						5:40										
3) 10 - 3	X						6:30										
4) 14 - 1	X						9:18										
5) 14 - 2	X						10:32										
6) 14 - 3	X						11:59										
7) 15 - 1	X						1:39										
8) 16 - 1	X						3:41										
9)																	
10)																	No Sc / On Ice

No Scan
Police

INQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME	C Data Package	LAB USE ONLY	COOL/FRT TEMP
	10-3 1615			Level I	<input type="checkbox"/>	17J0112
INQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME	Level II	<input checked="" type="checkbox"/>	EEE-Blacksburg
Larry J. Orr	10-3 174:30pm	Lorraine		Level III	<input type="checkbox"/>	CVTC
INQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME	Level IV	<input type="checkbox"/>	Recd: 10/04/2017 Due: 10/11/2017
			10/4/17 8:00			v130325002



17J0112

Order ID _____

Sample Preservation Log

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Effective: Feb-21-2017
Page 1 of 1

Date Performed: 04 OCT 2017

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Analyst Performing Check: JX

Sample ID	Container ID	Metals		Cyanide		Sulfide		Ammonia		TKN		Phos, Tot		NO3+NO2		DRO		Pesticide (8081/608/508)		SVOC (525.2/8270/625)		CrVI*						
		pH as Received		Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	Res.Cl as Received	Res.Cl as Received	Res.Cl as Received	Res.Cl as Received	pH as Received	Adjusted final pH	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)		
		< 2	Other	> 12	Other	> 9	Other	< 2	Other	Present	Absent	Present	Absent	Other	Final pH (if adjust.)	Other	Final pH (if adjust.)	Other	Final pH (if adjust.)									
01 B																												
01 E																												
01 I																												
02 B																												
02 E																												
03 B																												
03 E																												
04 B																												
04 C																												
04 F																												
04 I																												
05 A																												
05 B																												
05 C																												
05 I																												

NaOH ID: _____

HNO3 ID: _____

CrVI preserved date/time: _____

Analyst Initials: _____

H2SO4 ID: _____

Na2S2O3 ID: _____

* pH must be adjusted between 9.3 - 9.7

Buffer Sol'n ID: _____

HCl ID: _____

Na2SO3 ID: _____

1N NaOH ID: _____

5N NaOH: _____

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Sample Preservation Log

Order ID _____

—17J0112

Date Performed: 04 OCT 201

Sample Preservation Log
Form #: F1301
Rev # 7.0
Effective: Feb 21, 2017
Page 1 of 1

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NaOH ID: _____

HNO₃ ID:

|CrVI preserved date/time: Analyst Initials:

H₂SO₄ ID:

Na₂S₂O₃ ID:

Buffer Sol'n ID:

HCL ID:

Na₂SO₃ ID:

1N NaOH ID:

5N NaOH:

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F1301 Sample Preservation Log 7 0.xls



1941 REYMET ROAD
RICHMOND, VIRGINIA 23237
(804) 358-8295 PHONE
(804)358-8297 FAX

Chain of Custody
Form #: D1331
Rev. 1.0
Effective: Feb 14, 2014

CHAIN OF CUSTODY

COMPANY NAME: EEE Consulting			INVOICE TO: Same				PROJECT NAME/Quote #: CVTC						
CONTACT: Jeff Fisher			INVOICE CONTACT:				SITE NAME: CVTC						
ADDRESS: 201 Church Street, Blacksburg, VA 24060			INVOICE ADDRESS:				PROJECT NUMBER: 17-802						
PHONE #: 1-540-953-0170			INVOICE PHONE #:				P.O. #: CVTC 17-802						
FAX #:			EMAIL: jfisher@eee-consulting.com				Pretreatment Program:						
Is sample for compliance reporting? YES NO			Is sample from a chlorinated supply? YES NO				PWS I.D. #:						
SAMPLER NAME (PRINT): Roger Harris			SAMPLER SIGNATURE:				Turn Around Time: 10 Day(s)						
Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other										COMMENTS			
CLIENT SAMPLE I.D.		Grab	Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	ANALYSIS / (PRESERVATIVE)			Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol
										VSWMR App II Tbl 3.1 B	VOC 8260	2,3,7,8-TCDD SIM	
1) 16-1	X	N			10-3-17	1541	6W	11	X	X	DRO		
2) 16-2	X				10-3-17	1712		11	X	X	GRO		
3) 16-3	X				10-3-17	1830		11	X	X	Cr VI		
4) 16-4	X				10-4-17	1110		11	X	X	RCRA Metals		
5) 16-5	X				10-4-17	1225		11	X	X	EDB-TCP-DBCP SW8011		
6) 13-1	X				10-4-17	1515		12	X	X			
7) 13-2	X				10-4-17	1605		11	X	X		NECS Duplicate	
8)												No Soln	
9)												On Ice	
10)													
RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		C Data Packag	LAB USE ONLY			COOLER TEMP		1.8 °C	
	10-4-17 /1843					Level I							
RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		Level II	<input checked="" type="checkbox"/>					EEE-Blacksburg	
	10-4-17 4:45pm					Level III	<input type="checkbox"/>					CVTC	
RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		Level IV	<input type="checkbox"/>					17J0155	
	10-4-17			10-4-17								Recd: 10/05/2017 Due: 10/19/2017	



Sample Preservation Log

Sample Preservation Log
 Form #: F1301
 Rev # 7.0
 Effective: Feb 21, 2017
 Page 1 of 1

Order ID_ 17J0155

Date Performed: 10/5/17

Analyst Performing Check: JPN

Sample ID	Container ID	Metals		Cyanide		Sulfide		Ammonia		TKN		Phos, Tot		NO3+NO2		DRO		PCB/Pesticide (8081/608/508)		SVOC (525.2/8270/625)		CrVI*	SW8151 HCPB					
		pH as Received		Final pH (if adjust.)		pH as Received		Final pH (if adjust.)		pH as Received		Final pH (if adjust.)		pH as Received		Final pH (if adjust.)		Res.Cl as Received	Res.Cl as Received	Res.Cl as Received	Res.Cl as Received	pH as Received	Adjusted final pH	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	
		< 2 Other	> 12 Other			> 9 Other	Final pH (if adjust.)	< 2 Other	> 9 Other	Final pH (if adjust.)		< 2 Other	> 9 Other	Final pH (if adjust.)	< 2 Other	> 9 Other	Final pH (if adjust.)	Present Absent	Present Absent	Present Absent	Present Absent	Final pH (if adjust.)						
-01	A																											
-01	B																											
-01	C																											
-01	F																											
-01	G																											
-01	H																											
-01	I																											
-01	J																											
-01	K																											
-01	L																											
-01	M																											
-02	A																											
-02	B																											
-02	C																											
-02	F																											
-02	G																											
-02	H																											
-02	I																											

NaOH ID: _____

HNO3 ID: _____

CrVI preserved date/time: _____ Analyst Initials: _____

H2SO4 ID: _____

Na2S2O3 ID: _____

*pH must be adjusted between 9.3 - 9.7

Buffer Sol'n ID: _____

HCl ID: _____

Na2SO3 ID: _____

1N NaOH ID: _____

5N NaOH: _____

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Sample Preservation Log

Sample Preservation Log
 Form #: F1301
 Rev # 7.0
 Effective: Feb 21, 2017
 Page 1 of 1

Order ID_ 17J0155

Date Performed: 10/5/17

Analyst Performing Check: SP

Sample ID	Container ID	Metals		Cyanide		Sulfide		Ammonia		TKN		Phos, Tot		NO3+NO2		DRO		Pesticide (8081/608/508)		SVOC (525.2/8270/625)		CrVI*		HETL		SW8151	
		pH as Received		Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	Res.Cl as Received	Res.Cl as Received	Res.Cl as Received	Res.Cl as Received	pH as Received	Adjusted final pH	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	
		< 2	Other	> 12	Other	> 9	Other	< 2	Other	Present/Absent	Present/Absent	Present/Absent	Present/Absent	< 1	Ans/2	Other	> 12	Other	> 9	Other							
-03	A																										
-03	B	/																									
-03	C	/																									
-03	F																										
-03	G																										
-03	H																										
-03	I																										
-04	A																										
-04	B	/																									
-04	C	/																									
-04	F																										
-04	G																										
-04	H																										
-04	I																										
-05	A																										

NaOH ID: _____

HNO₃ ID: _____

CrVI preserved date/time: _____

Analyst Initials: _____

H₂SO₄ ID: _____

Na₂S₂O₃ ID: _____

Buffer Sol'n ID: _____

HCl ID: _____

Na₂SO₃ ID: _____

1N NaOH ID: _____

5N NaOH: _____

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Sample Preservation Log

Sample Preservation Log
 Form #: F1301
 Rev # 7.0
 Effective: Feb 21, 2017
 Page 1 of 1

Order ID_ 17J0155

Date Performed: 10/5/17

Analyst Performing Check: SP

Sample ID	Container ID	Metals		Cyanide		Sulfide		Ammonia		TKN		Phos, Tot		NO3+NO2		DRO		Pesticide (8081/608/508)		SVOC (525.2/8270/625)		CrVI*		SW8151 HERB				
		pH as Received		pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	pH as Received	Final pH (if adjust.)	Res.Cls Received	Res.Cls Received	Res.Cls Received	Res.Cls Received	pH as Received	Adjusted final pH	pH as Received	Other	pH as Received	Final pH (if adjust.)	
		< 2	Other	> 12	Other	> 9	Other	< 2	Other	Present	Absent	Present	Absent	Other	Other	Other	Other	Other	Final pH (if adjust.)									
-05	B	/																										
-05	C	/																										
-05	F																											
-05	G																											
-05	H																											
-05	I			/																								
-05	N																											
-06	A																											
-06	B	/																										
-06	C	/																										
-06	F																											
-06	G																											
-06	H																											
-06	I					/																						
-06	J																											

NaOH ID: 10/5/17

HNO3 ID:

CrVI preserved date/time: Analyst Initials:

* pH must be adjusted between 9.3 - 9.7

Buffer Sol'n ID:

H2SO4 ID:

Na2S2O3 ID:

1N NaOH ID:

5N NaOH:

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 F1301 Sample Preservation Log 7_0.xls



1941 Reymet Road • Richmond, Virginia 23230 • Tel: (804)-358-8295 Fax: (804)-358-8297

Certificate of Analysis

Final Report

Client Name:	EEE Consulting (Blacksburg, VA) 201 Church Street Blacksburg VA, 24060	Date Issued:	10/12/2017 17:19
Submitted To:	Jeff Fisher	Project Number:	17-802
Client Site I.D.:	CVTC	Purchase Order:	CVTC 17-802

Sample Conditions Checklist

Samples Received at:	1.10°C
How were samples received?	Courier
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	No
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	Yes
Are all volatile organic and TOX containers free of headspace?	Yes
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	No
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

Sample date for "30-2" and "30-1" is 10/2/17 as per container labels. Jeff Fisher notified via email. BAR 10/03/17 0918

Jeff Fisher notified of missing trip blank via email. BAR 10/03/17 0918



1941 Reymet Road • Richmond, Virginia 23230 • Tel: (804)-358-8295 Fax: (804)-358-8297

Certificate of Analysis

Final Report

Client Name:	EEE Consulting (Blacksburg, VA) 201 Church Street Blacksburg VA, 24060	Date Issued:	10/12/2017 17:19
Submitted To:	Jeff Fisher	Project Number:	17-802
Client Site I.D.:	CVTC	Purchase Order:	CVTC 17-802

Sample Conditions Checklist

Samples Received at:	0.80°C
How were samples received?	Courier
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	No
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	Yes
Are all volatile organic and TOX containers free of headspace?	Yes
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	Yes
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

Received Trip Blank (09/08/2017 1400; 09/08/2017 1450) added to work order.

Sample dates taken from sample labels. SNL 04 Oct 2017 1400.

As per Jeff Fisher, analyze Cr VI outside of holding time. MMB 10/9/17 14:07



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/12/2017 17:19

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: CVTC 17-802

Sample Conditions Checklist

Samples Received at:	1.80°C
How were samples received?	Courier
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	Yes
Are all volatile organic and TOX containers free of headspace?	Yes
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	No
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

As per Jeff Fisher, Sample time for 16-2 is 17:31 and TAT for all samples is 5 days.

No sample containers were received for 16-1; no Trip Blank was received.

Jeff Fisher was notified via phone call.

Per Jeff Fisher, duplicate analysis is not needed. MMB 10/5/17 15:15



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Final Report

Sample Delivery Group ID CVTC Soil

Client Name: EEE Consulting (Blacksburg, VA)	Date Issued:	10/5/2017 13:11
201 Church Street	Project Number:	17-802
Blacksburg, VA 24060	Purchase Order:	17-802 Task 2.13

Submitted To: Jeff Fisher

Client Site I.D.: CVTC

Enclosed are the results of analyses for samples received by the laboratory in sample delivery group CVTC Soil . Work orders included in the sample delivery group:

17I0299	9/11/2017 16:05
17I0300	9/11/2017 16:00
17I0301	9/11/2017 15:58
17I0317	9/11/2017 15:50
17I0319	9/11/2017 15:50
17I0320	9/11/2017 15:55
17I0322	9/11/2017 15:55

Ted Soyars

Laboratory Manager

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.





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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.13

ANALYTICAL REPORT FOR SAMPLES

Laboratory Order ID 17I0299

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
39-1	17I0299-01	Solids	09/11/2017 10:45	09/11/2017 16:05
39-2	17I0299-02	Solids	09/11/2017 11:00	09/11/2017 16:05
39-3	17I0299-03	Solids	09/11/2017 11:08	09/11/2017 16:05
39-4	17I0299-04	Solids	09/11/2017 11:20	09/11/2017 16:05
39-5	17I0299-05	Solids	09/11/2017 11:35	09/11/2017 16:05
39-6	17I0299-06	Solids	09/11/2017 11:45	09/11/2017 16:05

Laboratory Order ID 17I0300

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
31-1 0-5'	17I0300-01	Solids	09/07/2017 12:05	09/11/2017 16:00
31-1 10-12'	17I0300-02	Solids	09/07/2017 12:10	09/11/2017 16:00
31-2 0-5'	17I0300-03	Solids	09/07/2017 12:15	09/11/2017 16:00
31-2 10-13'	17I0300-04	Solids	09/07/2017 12:20	09/11/2017 16:00
49-1 5-8'	17I0300-05	Solids	09/07/2017 14:45	09/11/2017 16:00
65-1 0-5	17I0300-06	Solids	09/07/2017 15:05	09/11/2017 16:00
65-1 10-15	17I0300-07	Solids	09/07/2017 15:15	09/11/2017 16:00
65-1 20-23	17I0300-08	Solids	09/07/2017 15:20	09/11/2017 16:00
65-2 0-5	17I0300-09	Solids	09/07/2017 15:25	09/11/2017 16:00
65-2 10-15	17I0300-10	Solids	09/07/2017 15:35	09/11/2017 16:00
65-2 20-22'	17I0300-11	Solids	09/07/2017 15:40	09/11/2017 16:00
47-OP1 10-14'	17I0300-12	Solids	09/07/2017 16:00	09/11/2017 16:00
47-OP2 10-15'	17I0300-13	Solids	09/07/2017 16:10	09/11/2017 16:00
47-OP2 20-22	17I0300-14	Solids	09/07/2017 16:15	09/11/2017 16:00



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.11

ANALYTICAL REPORT FOR SAMPLES

Laboratory Order ID 17I0301

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
36-1 0-5'	17I0301-01	Solids	09/07/2017 09:50	09/11/2017 15:58
36-1 20-22	17I0301-02	Solids	09/07/2017 10:05	09/11/2017 15:58
36-2 0-5	17I0301-03	Solids	09/07/2017 10:25	09/11/2017 15:58
36-2 20-21	17I0301-04	Solids	09/07/2017 10:35	09/11/2017 15:58
36-3 10-15	17I0301-05	Solids	09/07/2017 10:45	09/11/2017 15:58
36-3 30-33	17I0301-06	Solids	09/07/2017 10:55	09/11/2017 15:58
36-4 10-15	17I0301-07	Solids	09/07/2017 11:05	09/11/2017 15:58
36-4 25-30	17I0301-08	Solids	09/07/2017 11:15	09/11/2017 15:58
36-5 10-15	17I0301-09	Solids	09/07/2017 11:30	09/11/2017 15:58
36-5 15-18	17I0301-10	Solids	09/07/2017 11:40	09/11/2017 15:58

Laboratory Order ID 17I0317

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Finding 21-1	17I0317-01	Solids	09/08/2017 12:25	09/11/2017 15:50
Finding 21-2	17I0317-02	Solids	09/08/2017 12:40	09/11/2017 15:50
Finding 21-3	17I0317-03	Solids	09/08/2017 12:50	09/11/2017 15:50
Finding 21-4	17I0317-04	Solids	09/08/2017 12:55	09/11/2017 15:50
Finding 21-5	17I0317-05	Solids	09/08/2017 13:05	09/11/2017 15:50
Finding 21-6	17I0317-06	Solids	09/08/2017 13:10	09/11/2017 15:50

Laboratory Order ID 17I0319

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Finding 12-1	17I0319-01	Solids	09/08/2017 14:35	09/11/2017 15:50



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.10

ANALYTICAL REPORT FOR SAMPLES

Laboratory Order ID 17I0319

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Finding 12-2	17I0319-02	Solids	09/08/2017 14:40	09/11/2017 15:50
Finding 12-3	17I0319-03	Solids	09/08/2017 14:45	09/11/2017 15:50
Finding 12-4	17I0319-04	Solids	09/08/2017 14:50	09/11/2017 15:50
Finding 12-5	17I0319-05	Solids	09/08/2017 14:55	09/11/2017 15:50
Finding 12-6	17I0319-06	Solids	09/08/2017 15:00	09/11/2017 15:50

Laboratory Order ID 17I0320

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
47-1 0-5	17I0320-01	Soil	09/08/2017 08:40	09/11/2017 15:55
47-1 10-15	17I0320-02	Soil	09/08/2017 08:55	09/11/2017 15:55
47-2 0-5	17I0320-03	Soil	09/08/2017 09:10	09/11/2017 15:55
47-2 16-17	17I0320-04	Soil	09/08/2017 09:20	09/11/2017 15:55
47-3 0-5	17I0320-05	Soil	09/08/2017 09:50	09/11/2017 15:55
47-3 23-24	17I0320-06	Soil	09/08/2017 10:05	09/11/2017 15:55
47-4 0-5	17I0320-07	Soil	09/08/2017 10:25	09/11/2017 15:55
47-4 22-23	17I0320-08	Soil	09/08/2017 10:35	09/11/2017 15:55
47-5 0-5	17I0320-09	Soil	09/08/2017 10:40	09/11/2017 15:55
47-5 20-23	17I0320-10	Soil	09/08/2017 10:50	09/11/2017 15:55
53-1 0-5	17I0320-11	Soil	09/08/2017 10:55	09/11/2017 15:55
53-1 13-14	17I0320-12	Soil	09/08/2017 11:00	09/11/2017 15:55
45-5A Spilled Material	17I0320-13	Soil	09/08/2017 11:10	09/11/2017 15:55

Laboratory Order ID 17I0322

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

ANALYTICAL REPORT FOR SAMPLES

13-1	17I0322-01	Soil	09/11/2017 09:45	09/11/2017 15:55
13-2	17I0322-02	Soil	09/11/2017 09:50	09/11/2017 15:55
13-3	17I0322-03	Soil	09/11/2017 09:55	09/11/2017 15:55
13-4	17I0322-04	Soil	09/11/2017 10:00	09/11/2017 15:55
13-5	17I0322-05	Soil	09/11/2017 10:10	09/11/2017 15:55
13-6	17I0322-06	Soil	09/11/2017 10:15	09/11/2017 15:55
13-7	17I0322-07	Soil	09/11/2017 10:18	09/11/2017 15:55
13-8	17I0322-08	Soil	09/11/2017 10:22	09/11/2017 15:55
13-9	17I0322-09	Soil	09/11/2017 10:30	09/11/2017 15:55
13-10	17I0322-10	Soil	09/11/2017 10:35	09/11/2017 15:55

GRO results for sample ID# 49-1 5-8' have been calculated based on dry weight due to terracore kit collection.

PCB results have been calculated based on dry weight.

PCB results have been calculated based on dry weight.

DRO, GRO, and VOC SW-8260 results for samples 47-1 10-15, 47-2 16-17, 47-3 23-24 have been calculated based on dry weight due to terracore kit collection.

PCB results have been calculated based on dry weight.

Analysis for Asbestos was subcontracted to Environmental Hazards Services . The subcontracted results are attached at the end of this Certificate of Analysis.



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-01								
Composite Start-End Date/Time:			09/11/2017 10:45 - 09/11/2017 10:45						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	01	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:43	CWO
Aluminum	01RE1	SW6010C	26300 mg/kg	E	58.6	25	09/14/17 07:50	09/15/17 19:56	CWO
Arsenic	01	SW6010C	5.65 mg/kg		1.00	1	09/14/17 07:50	09/18/17 16:43	CWO
Barium	01	SW6010C	140 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:43	CWO
Beryllium	01RE1	SW6010C	<0.938 mg/kg		0.938	5	09/14/17 07:50	09/19/17 17:07	CWO
Calcium	01RE1	SW6010C	39500 mg/kg		469	100	09/14/17 07:50	09/18/17 12:50	CWO
Cadmium	01	SW6010C	1.85 mg/kg		0.200	1	09/14/17 07:45	09/18/17 16:43	CWO
Cobalt	01	SW6010C	5.80 mg/kg		0.200	1	09/14/17 07:50	09/18/17 16:43	CWO
Chromium	01	SW6010C	21.7 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:43	CWO
Copper	01	SW6010C	8.81 mg/kg		2.50	1	09/14/17 07:50	09/18/17 16:43	CWO
Iron	01RE1	SW6010C	29500 mg/kg		235	100	09/14/17 07:50	09/18/17 12:50	CWO
Mercury	01	SW7471B	0.052 mg/kg		0.008	1	09/12/17 13:00	09/13/17 11:19	RCV
Potassium	01	SW6010C	2600 mg/kg		25.0	1	09/14/17 07:50	09/15/17 15:21	CWO
Magnesium	01RE1	SW6010C	13000 mg/kg		58.6	25	09/14/17 07:50	09/15/17 19:56	CWO
Manganese	01	SW6010C	376 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:43	CWO
Sodium	01	SW6010C	1250 mg/kg		25.0	1	09/14/17 07:50	09/15/17 15:21	CWO
Nickel	01	SW6010C	9.24 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:43	CWO
Lead	01	SW6010C	23.5 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:43	CWO
Antimony	01	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 16:43	CWO
Selenium	01	SW6010C	3.63 mg/kg		2.50	1	09/14/17 07:50	09/18/17 16:43	CWO
Thallium	01RE1	SW6010C	<11.7 mg/kg		11.7	5	09/14/17 07:50	09/19/17 17:08	CWO
Vanadium	01	SW6010C	36.7 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:43	CWO
Zinc	01	SW6010C	55.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:43	CWO
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	01	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 10:52	09/13/17 10:52	LAO



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-01								
Composite Start-End Date/Time:			09/11/2017 10:45 - 09/11/2017 10:45						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
Surr: 2,5-Dibromotoluene (FID)	01	SW8015C	75.9 %	S	80-120		09/13/17 10:52	09/13/17 10:52	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	01	SW8015C	<10.0 mg/kg		10.0	1	09/12/17 15:02	09/14/17 12:33	CVH
Surr: Pentacosane (Surr)	01	SW8015C	71.0 %		40-160		09/12/17 15:02	09/14/17 12:33	CVH
Organochlorine Pesticides and PCBs by GC/ECD									
4,4'-DDD	01	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 18:17	09/21/17 18:17	LBH
4,4'-DDE	01	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:17	09/21/17 18:17	LBH
4,4'-DDT	01	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Aldrin	01	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:17	09/21/17 18:17	LBH
alpha-BHC	01	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:17	09/21/17 18:17	LBH
beta-BHC	01	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Chlordane	01	SW8081B	<42.0 ug/kg		42.0	1	09/21/17 18:17	09/21/17 18:17	LBH
delta-BHC	01	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Dieldrin	01	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Endosulfan I	01	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Endosulfan II	01	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Endosulfan sulfate	01	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Endrin	01	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Endrin aldehyde	01	SW8081B	<8.00 ug/kg		8.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Endrin ketone	01	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:17	09/21/17 18:17	LBH
gamma-BHC (Lindane)	01	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Heptachlor	01	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:17	09/21/17 18:17	LBH
Heptachlor epoxide	01	SW8081B	<40.0 ug/kg		40.0	1	09/21/17 18:17	09/21/17 18:17	LBH
Methoxychlor	01	SW8081B	<40.0 ug/kg		40.0	1	09/21/17 18:17	09/21/17 18:17	LBH
Mirex	01	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 18:17	09/21/17 18:17	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-01								
Composite Start-End Date/Time: 09/11/2017 10:45 - 09/11/2017 10:45									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Toxaphene	01	SW8081B	<42.0 ug/kg		42.0	1	09/21/17 18:17	09/21/17 18:17	LBH
Surr: TCMX	01	SW8081B	80.0 %		30-105		09/21/17 18:17	09/21/17 18:17	LBH
Surr: DCB	01	SW8081B	65.0 %		30-105		09/21/17 18:17	09/21/17 18:17	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	01	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 16:56	CVH
2,4,5-TP (Silvex)	01	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 16:56	CVH
2,4-D	01	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 16:56	CVH
Dinoseb	01	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 16:56	CVH
Pentachlorophenol	01	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 16:56	CVH
Surr: DCAA (Surr)	01	SW8151A	80.0 %		31-87		09/15/17 13:50	09/18/17 16:56	CVH
Wet Chemistry Analysis									
Chromium, Hexavalent	01	SW7196A	0.32 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-02								
Composite Start-End Date/Time:			09/11/2017 11:00 - 09/11/2017 11:00						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	02	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:43	CWO
Aluminum	02RE1	SW6010C	27300 mg/kg	E	58.6	25	09/14/17 07:50	09/15/17 20:00	CWO
Arsenic	02	SW6010C	7.76 mg/kg		1.00	1	09/14/17 07:50	09/18/17 13:43	CWO
Barium	02	SW6010C	54.9 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:43	CWO
Beryllium	02RE1	SW6010C	<1.88 mg/kg		1.88	10	09/14/17 07:50	09/19/17 17:10	CWO
Calcium	02RE2	SW6010C	1450 mg/kg		117	25	09/14/17 07:50	09/18/17 13:41	CWO
Cadmium	02	SW6010C	2.57 mg/kg		0.200	1	09/14/17 07:50	09/18/17 13:43	CWO
Cobalt	02	SW6010C	3.79 mg/kg		0.200	1	09/14/17 07:50	09/18/17 13:43	CWO
Chromium	02	SW6010C	27.0 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:43	CWO
Copper	02	SW6010C	10.2 mg/kg		2.50	1	09/14/17 07:50	09/18/17 13:43	CWO
Iron	02RE1	SW6010C	41200 mg/kg		235	100	09/14/17 07:50	09/18/17 12:52	CWO
Mercury	02	SW7471B	0.086 mg/kg		0.008	1	09/12/17 13:00	09/13/17 11:21	RCV
Potassium	02	SW6010C	1950 mg/kg		25.0	1	09/14/17 07:50	09/15/17 15:47	CWO
Magnesium	02RE1	SW6010C	1480 mg/kg		58.6	25	09/14/17 07:50	09/15/17 20:00	CWO
Manganese	02	SW6010C	69.6 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:43	CWO
Sodium	02	SW6010C	123 mg/kg		25.0	1	09/14/17 07:50	09/15/17 15:47	CWO
Nickel	02	SW6010C	6.48 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:43	CWO
Lead	02	SW6010C	12.5 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:43	CWO
Antimony	02	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 13:43	CWO
Selenium	02	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 13:43	CWO
Thallium	02	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 13:43	CWO
Vanadium	02	SW6010C	48.4 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:43	CWO
Zinc	02	SW6010C	65.4 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:43	CWO
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	02	SW8015C	<0.50 mg/kg		0.50	1	09/13/17 11:15	09/13/17 11:15	LAO



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-02								
Composite Start-End Date/Time: 09/11/2017 11:00 - 09/11/2017 11:00									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
Surr: 2,5-Dibromotoluene (FID)	02	SW8015C	140 %	S	80-120		09/13/17 11:15	09/13/17 11:15	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	02RE2	SW8015C	1360 mg/kg		98.0	10	09/13/17 14:54	09/18/17 12:38	CVH
Surr: Pentacosane (Surr)	02RE2	SW8015C	172 %	DS	40-160		09/13/17 14:54	09/18/17 12:38	CVH
Organochlorine Pesticides and PCBs by GC/ECD									
4,4'-DDD	02	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 18:36	09/21/17 18:36	LBH
4,4'-DDE	02	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:36	09/21/17 18:36	LBH
4,4'-DDT	02	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Aldrin	02	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:36	09/21/17 18:36	LBH
alpha-BHC	02	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:36	09/21/17 18:36	LBH
beta-BHC	02	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Chlordane	02	SW8081B	<42.0 ug/kg		42.0	1	09/21/17 18:36	09/21/17 18:36	LBH
delta-BHC	02	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Dieldrin	02	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Endosulfan I	02	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Endosulfan II	02	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Endosulfan sulfate	02	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Endrin	02	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Endrin aldehyde	02	SW8081B	<8.00 ug/kg		8.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Endrin ketone	02	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:36	09/21/17 18:36	LBH
gamma-BHC (Lindane)	02	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Heptachlor	02	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 18:36	09/21/17 18:36	LBH
Heptachlor epoxide	02	SW8081B	<40.0 ug/kg		40.0	1	09/21/17 18:36	09/21/17 18:36	LBH
Methoxychlor	02	SW8081B	<40.0 ug/kg		40.0	1	09/21/17 18:36	09/21/17 18:36	LBH
Mirex	02	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 18:36	09/21/17 18:36	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-02								
Composite Start-End Date/Time: 09/11/2017 11:00 - 09/11/2017 11:00									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Toxaphene	02	SW8081B	<42.0 ug/kg		42.0	1	09/21/17 18:36	09/21/17 18:36	LBH
Surr: TCMX	02	SW8081B	90.0 %		30-105		09/21/17 18:36	09/21/17 18:36	LBH
Surr: DCB	02	SW8081B	105 %		30-105		09/21/17 18:36	09/21/17 18:36	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	02	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 17:18	CVH
2,4,5-TP (Silvex)	02	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 17:18	CVH
2,4-D	02	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 17:18	CVH
Dinoseb	02	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 17:18	CVH
Pentachlorophenol	02	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 17:18	CVH
Surr: DCAA (Surr)	02	SW8151A	110 %	S	31-87		09/15/17 13:50	09/18/17 17:18	CVH
Wet Chemistry Analysis									
Chromium, Hexavalent	02	SW7196A	0.27 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-03								
Composite Start-End Date/Time:			09/11/2017 11:08 - 09/11/2017 11:08						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	03	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:45	CWO
Aluminum	03RE1	SW6010C	30700 mg/kg	E	58.6	25	09/14/17 07:50	09/15/17 20:19	CWO
Arsenic	03	SW6010C	6.00 mg/kg		1.00	1	09/14/17 07:50	09/18/17 16:45	CWO
Barium	03	SW6010C	76.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:45	CWO
Beryllium	03RE1	SW6010C	<0.937 mg/kg		0.937	5	09/14/17 07:50	09/19/17 17:14	CWO
Calcium	03RE1	SW6010C	22400 mg/kg		469	100	09/14/17 07:50	09/18/17 12:54	CWO
Cadmium	03	SW6010C	2.11 mg/kg		0.200	1	09/14/17 07:50	09/18/17 16:45	CWO
Cobalt	03	SW6010C	4.44 mg/kg		0.200	1	09/14/17 07:50	09/18/17 16:45	CWO
Chromium	03	SW6010C	29.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:45	CWO
Copper	03	SW6010C	13.9 mg/kg		2.50	1	09/14/17 07:50	09/18/17 16:45	CWO
Iron	03RE1	SW6010C	34200 mg/kg		234	100	09/14/17 07:50	09/18/17 12:54	CWO
Mercury	03	SW7471B	0.152 mg/kg		0.008	1	09/12/17 13:00	09/13/17 11:38	RCV
Potassium	03	SW6010C	2720 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:05	CWO
Magnesium	03RE1	SW6010C	2960 mg/kg		58.6	25	09/14/17 07:50	09/15/17 20:19	CWO
Manganese	03	SW6010C	128 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:45	CWO
Sodium	03	SW6010C	269 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:05	CWO
Nickel	03	SW6010C	8.28 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:45	CWO
Lead	03	SW6010C	40.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:45	CWO
Antimony	03	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 16:45	CWO
Selenium	03RE1	SW6010C	12.9 mg/kg		11.7	5	09/14/17 07:50	09/19/17 17:14	CWO
Thallium	03	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 16:45	CWO
Vanadium	03	SW6010C	45.6 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:45	CWO
Zinc	03	SW6010C	63.6 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:45	CWO
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	03	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 11:37	09/13/17 11:37	LAO



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-03								
Composite Start-End Date/Time:			09/11/2017 11:08 - 09/11/2017 11:08						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
Surr: 2,5-Dibromotoluene (FID)	03	SW8015C	87.0 %		80-120		09/13/17 11:37	09/13/17 11:37	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	03RE2	SW8015C	330 mg/kg		49.2	5	09/13/17 14:54	09/18/17 13:03	CVH
Surr: Pentacosane (Surr)	03RE2	SW8015C	136 %		40-160		09/13/17 14:54	09/18/17 13:03	CVH
Organochlorine Pesticides and PCBs by GC/ECD									
4,4'-DDD	03	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 20:10	09/21/17 20:10	LBH
4,4'-DDE	03	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 20:10	09/21/17 20:10	LBH
4,4'-DDT	03	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Aldrin	03	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 20:10	09/21/17 20:10	LBH
alpha-BHC	03	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 20:10	09/21/17 20:10	LBH
beta-BHC	03	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Chlordane	03	SW8081B	<42.0 ug/kg		42.0	1	09/21/17 20:10	09/21/17 20:10	LBH
delta-BHC	03	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Dieldrin	03	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Endosulfan I	03	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Endosulfan II	03	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Endosulfan sulfate	03	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Endrin	03	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Endrin aldehyde	03	SW8081B	<8.00 ug/kg		8.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Endrin ketone	03	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 20:10	09/21/17 20:10	LBH
gamma-BHC (Lindane)	03	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Heptachlor	03	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 20:10	09/21/17 20:10	LBH
Heptachlor epoxide	03	SW8081B	<40.0 ug/kg		40.0	1	09/21/17 20:10	09/21/17 20:10	LBH
Methoxychlor	03	SW8081B	<40.0 ug/kg		40.0	1	09/21/17 20:10	09/21/17 20:10	LBH
Mirex	03	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 20:10	09/21/17 20:10	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-03								
Composite Start-End Date/Time: 09/11/2017 11:08 - 09/11/2017 11:08									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Toxaphene	03	SW8081B	<42.0 ug/kg		42.0	1	09/21/17 20:10	09/21/17 20:10	LBH
Surr: TCMX	03	SW8081B	75.0 %		30-105		09/21/17 20:10	09/21/17 20:10	LBH
Surr: DCB	03	SW8081B	100 %		30-105		09/21/17 20:10	09/21/17 20:10	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	03RE1	SW8151A	11.6 ug/kg		5.00	1	09/15/17 13:50	09/19/17 16:52	CVH
2,4,5-TP (Silvex)	03RE1	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/19/17 16:52	CVH
2,4-D	03RE1	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/19/17 16:52	CVH
Dinoseb	03RE1	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/19/17 16:52	CVH
Pentachlorophenol	03RE1	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/19/17 16:52	CVH
Surr: DCAA (Surr)	03RE1	SW8151A	120 %	S	31-87		09/15/17 13:50	09/19/17 16:52	CVH
Wet Chemistry Analysis									
Chromium, Hexavalent	03	SW7196A	0.39 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-04								
Composite Start-End Date/Time:			09/11/2017 11:20 - 09/11/2017 11:20						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	04	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:48	CWO
Aluminum	04RE1	SW6010C	27000 mg/kg	E	59.9	25	09/14/17 07:50	09/15/17 20:23	CWO
Arsenic	04	SW6010C	6.39 mg/kg		1.00	1	09/14/17 07:50	09/18/17 16:48	CWO
Barium	04	SW6010C	67.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:48	CWO
Beryllium	04RE1	SW6010C	<1.92 mg/kg		1.92	10	09/14/17 07:50	09/19/17 17:16	CWO
Calcium	04RE1	SW6010C	19700 mg/kg		479	100	09/14/17 07:50	09/18/17 12:56	CWO
Cadmium	04	SW6010C	2.92 mg/kg		0.200	1	09/14/17 07:50	09/18/17 16:48	CWO
Cobalt	04	SW6010C	3.42 mg/kg		0.200	1	09/14/17 07:50	09/18/17 16:48	CWO
Chromium	04	SW6010C	32.4 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:48	CWO
Copper	04	SW6010C	10.0 mg/kg		2.50	1	09/14/17 07:50	09/18/17 16:48	CWO
Iron	04RE1	SW6010C	48700 mg/kg		240	100	09/14/17 07:50	09/18/17 12:56	CWO
Mercury	04RE1	SW7471B	0.510 mg/kg		0.076	10	09/12/17 13:00	09/13/17 12:47	RCV
Potassium	04	SW6010C	1860 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:11	CWO
Magnesium	04RE1	SW6010C	2770 mg/kg		59.9	25	09/14/17 07:50	09/15/17 20:23	CWO
Manganese	04	SW6010C	66.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:48	CWO
Sodium	04	SW6010C	74.3 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:11	CWO
Nickel	04	SW6010C	6.55 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:48	CWO
Lead	04	SW6010C	231 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:48	CWO
Antimony	04	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 16:48	CWO
Selenium	04	SW6010C	3.75 mg/kg		2.50	1	09/14/17 07:50	09/18/17 16:48	CWO
Thallium	04	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 16:48	CWO
Vanadium	04	SW6010C	58.4 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:48	CWO
Zinc	04	SW6010C	89.6 mg/kg		0.500	1	09/14/17 07:50	09/18/17 16:48	CWO
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	04	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 12:00	09/13/17 12:00	LAO



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-04								
Composite Start-End Date/Time: 09/11/2017 11:20 - 09/11/2017 11:20									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
Surr: 2,5-Dibromotoluene (FID)	04	SW8015C	96.3 %		80-120		09/13/17 12:00	09/13/17 12:00	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	04RE1	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/15/17 19:17	CVH
Surr: Pentacosane (Surr)	04RE1	SW8015C	59.8 %		40-160		09/13/17 14:54	09/15/17 19:17	CVH
Organochlorine Pesticides and PCBs by GC/ECD									
4,4'-DDD	04	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 19:32	09/21/17 19:32	LBH
4,4'-DDE	04	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 19:32	09/21/17 19:32	LBH
4,4'-DDT	04	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Aldrin	04	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:32	09/21/17 19:32	LBH
alpha-BHC	04	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:32	09/21/17 19:32	LBH
beta-BHC	04	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Chlordane	04	SW8081B	<42.0 ug/kg		42.0	1	09/21/17 19:32	09/21/17 19:32	LBH
delta-BHC	04	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Dieldrin	04	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Endosulfan I	04	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Endosulfan II	04	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Endosulfan sulfate	04	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Endrin	04	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Endrin aldehyde	04	SW8081B	<8.00 ug/kg		8.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Endrin ketone	04	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:32	09/21/17 19:32	LBH
gamma-BHC (Lindane)	04	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Heptachlor	04	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:32	09/21/17 19:32	LBH
Heptachlor epoxide	04	SW8081B	<40.0 ug/kg		40.0	1	09/21/17 19:32	09/21/17 19:32	LBH
Methoxychlor	04	SW8081B	<40.0 ug/kg		40.0	1	09/21/17 19:32	09/21/17 19:32	LBH
Mirex	04	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 19:32	09/21/17 19:32	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-04								
Composite Start-End Date/Time: 09/11/2017 11:20 - 09/11/2017 11:20									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Toxaphene	04	SW8081B	<42.0 ug/kg		42.0	1	09/21/17 19:32	09/21/17 19:32	LBH
Surr: TCMX	04	SW8081B	65.0 %		30-105		09/21/17 19:32	09/21/17 19:32	LBH
Surr: DCB	04	SW8081B	75.0 %		30-105		09/21/17 19:32	09/21/17 19:32	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	04	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 18:02	CVH
2,4,5-TP (Silvex)	04	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 18:02	CVH
2,4-D	04	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 18:02	CVH
Dinoseb	04	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 18:02	CVH
Pentachlorophenol	04	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 18:02	CVH
Surr: DCAA (Surr)	04	SW8151A	90.0 %	S	31-87		09/15/17 13:50	09/18/17 18:02	CVH
Wet Chemistry Analysis									
Chromium, Hexavalent	04	SW7196A	0.36 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-05								
Composite Start-End Date/Time: 09/11/2017 11:35 - 09/11/2017 11:35									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	05	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:02	CWO
Aluminum	05RE1	SW6010C	25100 mg/kg	E	58.6	25	09/14/17 07:50	09/15/17 20:27	CWO
Arsenic	05	SW6010C	5.36 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:02	CWO
Barium	05	SW6010C	138 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:02	CWO
Beryllium	05RE1	SW6010C	<0.375 mg/kg		0.375	2	09/14/17 07:50	09/19/17 17:18	CWO
Calcium	05RE1	SW6010C	10300 mg/kg		469	100	09/14/17 07:50	09/18/17 12:57	CWO
Cadmium	05	SW6010C	1.85 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:02	CWO
Cobalt	05	SW6010C	7.86 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:02	CWO
Chromium	05	SW6010C	21.2 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:02	CWO
Copper	05	SW6010C	15.4 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:02	CWO
Iron	05RE1	SW6010C	25900 mg/kg		235	100	09/14/17 07:50	09/18/17 12:57	CWO
Mercury	05	SW7471B	0.072 mg/kg		0.008	1	09/12/17 13:00	09/13/17 11:44	RCV
Potassium	05	SW6010C	5790 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:16	CWO
Magnesium	05RE1	SW6010C	4880 mg/kg		58.6	25	09/14/17 07:50	09/15/17 20:27	CWO
Manganese	05	SW6010C	257 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:02	CWO
Sodium	05	SW6010C	839 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:16	CWO
Nickel	05	SW6010C	10.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:02	CWO
Lead	05	SW6010C	74.2 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:02	CWO
Antimony	05	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:02	CWO
Selenium	05	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:02	CWO
Thallium	05	SW6010C	2.67 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:02	CWO
Vanadium	05	SW6010C	31.6 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:02	CWO
Zinc	05	SW6010C	114 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:02	CWO
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	05	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 12:40	09/13/17 12:40	LAO



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results

Sample I.D. 39-5 Laboratory Sample ID: 17I0299-05

Composite Start-End Date/Time: 09/11/2017 11:35 - 09/11/2017 11:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Hydrocarbons by GC

Surr: 2,5-Dibromotoluene (FID)	05	SW8015C	80.5 %		80-120		09/13/17 12:40	09/13/17 12:40	LAO
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	05RE2	SW8015C	952 mg/kg		98.0	10	09/13/17 14:54	09/18/17 12:13	CVH
Surr: Pentacosane (Surr)	05RE2	SW8015C	105 %		40-160		09/13/17 14:54	09/18/17 12:13	CVH

Organochlorine Pesticides and PCBs by GC/ECD

4,4'-DDD	05	SW8081B	<280 ug/kg		280	50	09/20/17 13:41	09/25/17 15:43	LBH
4,4'-DDE	05	SW8081B	<186 ug/kg		186	50	09/20/17 13:41	09/25/17 15:43	LBH
4,4'-DDT	05	SW8081B	<186 ug/kg		186	50	09/20/17 13:41	09/25/17 15:43	LBH
Aldrin	05	SW8081B	<93.2 ug/kg		93.2	50	09/20/17 13:41	09/25/17 15:43	LBH
alpha-BHC	05	SW8081B	<93.2 ug/kg		93.2	50	09/20/17 13:41	09/25/17 15:43	LBH
beta-BHC	05	SW8081B	<93.2 ug/kg		93.2	50	09/20/17 13:41	09/25/17 15:43	LBH
Chlordane	05	SW8081B	8070 ug/kg		1960	50	09/20/17 13:41	09/25/17 15:43	LBH
delta-BHC	05	SW8081B	<186 ug/kg		186	50	09/20/17 13:41	09/25/17 15:43	LBH
Dieldrin	05	SW8081B	<186 ug/kg		186	50	09/20/17 13:41	09/25/17 15:43	LBH
Endosulfan I	05	SW8081B	<186 ug/kg		186	50	09/20/17 13:41	09/25/17 15:43	LBH
Endosulfan II	05	SW8081B	<280 ug/kg		280	50	09/20/17 13:41	09/25/17 15:43	LBH
Endosulfan sulfate	05	SW8081B	<93.2 ug/kg		93.2	50	09/20/17 13:41	09/25/17 15:43	LBH
Endrin	05	SW8081B	<186 ug/kg		186	50	09/20/17 13:41	09/25/17 15:43	LBH
Endrin aldehyde	05	SW8081B	<373 ug/kg		373	50	09/20/17 13:41	09/25/17 15:43	LBH
Endrin ketone	05	SW8081B	<93.2 ug/kg		93.2	50	09/20/17 13:41	09/25/17 15:43	LBH
gamma-BHC (Lindane)	05	SW8081B	<93.2 ug/kg		93.2	50	09/20/17 13:41	09/25/17 15:43	LBH
Heptachlor	05	SW8081B	311 ug/kg		93.2	50	09/20/17 13:41	09/25/17 15:43	LBH
Heptachlor epoxide	05	SW8081B	<1860 ug/kg		1860	50	09/20/17 13:41	09/25/17 15:43	LBH
Methoxychlor	05	SW8081B	<1860 ug/kg		1860	50	09/20/17 13:41	09/25/17 15:43	LBH
Mirex	05	SW8081B	<280 ug/kg		280	50	09/20/17 13:41	09/25/17 15:43	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-05								
Composite Start-End Date/Time: 09/11/2017 11:35 - 09/11/2017 11:35									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Toxaphene	05	SW8081B	<1960 ug/kg		1960	50	09/20/17 13:41	09/25/17 15:43	LBH
Surr: TCMX	05	SW8081B	%	DS	30-105		09/20/17 13:41	09/25/17 15:43	LBH
Surr: DCB	05	SW8081B	250 %	DS	30-105		09/20/17 13:41	09/25/17 15:43	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	05RE1	SW8151A	10800 ug/kg		2480	500	09/15/17 13:50	09/19/17 15:23	CVH
2,4,5-TP (Silvex)	05	SW8151A	<19.9 ug/kg		19.9	4	09/15/17 13:50	09/18/17 18:25	CVH
2,4-D	05	SW8151A	<19.9 ug/kg		19.9	4	09/15/17 13:50	09/18/17 18:25	CVH
Dinoseb	05	SW8151A	<19.9 ug/kg		19.9	4	09/15/17 13:50	09/18/17 18:25	CVH
Pentachlorophenol	05	SW8151A	<19.9 ug/kg		19.9	4	09/15/17 13:50	09/18/17 18:25	CVH
Surr: DCAA (Surr)	05	SW8151A	120 %	DS	31-87		09/15/17 13:50	09/18/17 18:25	CVH
Wet Chemistry Analysis									
Chromium, Hexavalent	05	SW7196A	<0.20 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-06								
Composite Start-End Date/Time: 09/11/2017 11:45 - 09/11/2017 11:45									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	06	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:04	CWO
Aluminum	06RE1	SW6010C	31400 mg/kg	E	61.0	25	09/14/17 07:50	09/15/17 20:31	CWO
Arsenic	06	SW6010C	5.27 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:04	CWO
Barium	06	SW6010C	76.8 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:04	CWO
Beryllium	06RE1	SW6010C	<0.780 mg/kg		0.780	4	09/14/17 07:50	09/19/17 17:20	CWO
Calcium	06RE1	SW6010C	21100 mg/kg		488	100	09/14/17 07:50	09/18/17 12:59	CWO
Cadmium	06	SW6010C	2.52 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:04	CWO
Cobalt	06	SW6010C	3.68 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:04	CWO
Chromium	06	SW6010C	28.9 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:04	CWO
Copper	06	SW6010C	10.8 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:04	CWO
Iron	06RE1	SW6010C	35300 mg/kg		244	100	09/14/17 07:50	09/18/17 12:59	CWO
Mercury	06RE1	SW7471B	0.334 mg/kg		0.014	2	09/12/17 13:00	09/13/17 12:50	RCV
Potassium	06	SW6010C	1520 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:23	CWO
Magnesium	06RE1	SW6010C	1980 mg/kg		61.0	25	09/14/17 07:50	09/15/17 20:31	CWO
Manganese	06	SW6010C	71.7 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:04	CWO
Sodium	06	SW6010C	2880 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:23	CWO
Nickel	06	SW6010C	7.89 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:04	CWO
Lead	06RE1	SW6010C	1140 mg/kg		1.95	4	09/14/17 07:50	09/19/17 17:20	CWO
Antimony	06	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:04	CWO
Selenium	06RE1	SW6010C	<9.76 mg/kg		9.76	4	09/14/17 07:50	09/19/17 17:20	CWO
Thallium	06	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:04	CWO
Vanadium	06	SW6010C	47.8 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:04	CWO
Zinc	06	SW6010C	211 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:04	CWO
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	06	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 13:02	09/13/17 13:02	LAO



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-06								
Composite Start-End Date/Time: 09/11/2017 11:45 - 09/11/2017 11:45									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
Surr: 2,5-Dibromotoluene (FID)	06	SW8015C	85.1 %		80-120		09/13/17 13:02	09/13/17 13:02	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	06RE2	SW8015C	34.9 mg/kg		10.0	1	09/13/17 14:54	09/18/17 11:22	CVH
Surr: Pentacosane (Surr)	06RE2	SW8015C	83.3 %		40-160		09/13/17 14:54	09/18/17 11:22	CVH
Organochlorine Pesticides and PCBs by GC/ECD									
4,4'-DDD	06	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 19:51	09/21/17 19:51	LBH
4,4'-DDE	06	SW8081B	8.31 ug/kg		4.00	1	09/21/17 19:51	09/21/17 19:51	LBH
4,4'-DDT	06RE1	SW8081B	33.2 ug/kg		19.9	5	09/21/17 19:51	09/25/17 15:24	LBH
Aldrin	06	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:51	09/21/17 19:51	LBH
alpha-BHC	06	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:51	09/21/17 19:51	LBH
beta-BHC	06	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:51	09/21/17 19:51	LBH
Chlordane	06	SW8081B	<42.0 ug/kg		42.0	1	09/21/17 19:51	09/21/17 19:51	LBH
delta-BHC	06	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 19:51	09/21/17 19:51	LBH
Dieldrin	06	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 19:51	09/21/17 19:51	LBH
Endosulfan I	06	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 19:51	09/21/17 19:51	LBH
Endosulfan II	06	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 19:51	09/21/17 19:51	LBH
Endosulfan sulfate	06	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:51	09/21/17 19:51	LBH
Endrin	06	SW8081B	<4.00 ug/kg		4.00	1	09/21/17 19:51	09/21/17 19:51	LBH
Endrin aldehyde	06	SW8081B	<8.00 ug/kg		8.00	1	09/21/17 19:51	09/21/17 19:51	LBH
Endrin ketone	06	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:51	09/21/17 19:51	LBH
gamma-BHC (Lindane)	06	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:51	09/21/17 19:51	LBH
Heptachlor	06	SW8081B	<2.00 ug/kg		2.00	1	09/21/17 19:51	09/21/17 19:51	LBH
Heptachlor epoxide	06	SW8081B	<40.0 ug/kg		40.0	1	09/21/17 19:51	09/21/17 19:51	LBH
Methoxychlor	06	SW8081B	<40.0 ug/kg		40.0	1	09/21/17 19:51	09/21/17 19:51	LBH
Mirex	06	SW8081B	<6.00 ug/kg		6.00	1	09/21/17 19:51	09/21/17 19:51	LBH



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Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0299

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0299-06								
Composite Start-End Date/Time: 09/11/2017 11:45 - 09/11/2017 11:45									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
Toxaphene	06	SW8081B	<42.0 ug/kg		42.0	1	09/21/17 19:51	09/21/17 19:51	LBH
Surr: TCMX	06	SW8081B	70.0 %		30-105		09/21/17 19:51	09/21/17 19:51	LBH
Surr: DCB	06	SW8081B	75.0 %		30-105		09/21/17 19:51	09/21/17 19:51	LBH
Surr: TCMX	06RE1	SW8081B	75.0 %		30-105		09/21/17 19:51	09/25/17 15:24	LBH
Surr: DCB	06RE1	SW8081B	225 %	DS	30-105		09/21/17 19:51	09/25/17 15:24	LBH
Organochlorine Herbicides by GC/ECD									
2,4,5-T	06	SW8151A	26.1 ug/kg		5.00	1	09/15/17 13:50	09/18/17 18:47	CVH
2,4,5-TP (Silvex)	06	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 18:47	CVH
2,4-D	06	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 18:47	CVH
Dinoseb	06	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 18:47	CVH
Pentachlorophenol	06	SW8151A	<5.00 ug/kg		5.00	1	09/15/17 13:50	09/18/17 18:47	CVH
Surr: DCAA (Surr)	06	SW8151A	90.0 %	S	31-87		09/15/17 13:50	09/18/17 18:47	CVH
Wet Chemistry Analysis									
Chromium, Hexavalent	06	SW7196A	0.67 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT



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Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/5/2017 13:11
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results									
Sample I.D.	31-1 0-5'	Laboratory Sample ID:						17I0300-01	
Grab Date/Time:		09/07/2017 12:05							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	01RE1	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/15/17 12:50	CVH
<i>Surr: Pentacosane (Surr)</i>	01RE1	SW8015C	77.0 %		40-160		09/13/17 14:54	09/15/17 12:50	CVH



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results

Sample I.D. 31-1 10-12' Laboratory Sample ID: 17I0300-02

Grab Date/Time: 09/07/2017 12:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	02	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/14/17 20:16	CVH
<i>Surr: Pentacosane (Surr)</i>	02	SW8015C	65.1 %		40-160		09/13/17 14:54	09/14/17 20:16	CVH



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results									
Sample I.D.	31-2 0-5'	Laboratory Sample ID:							
Grab Date/Time:	17I0300-03								
Semivolatile Hydrocarbons by GC									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
TPH-Semi-Volatiles (DRO)	03	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/14/17 20:41	CVH
<i>Surr: Pentacosane (Surr)</i>	03	SW8015C	59.6 %		40-160		09/13/17 14:54	09/14/17 20:41	CVH



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results

Sample I.D. 31-2 10-13' Laboratory Sample ID: 17I0300-04

Grab Date/Time: 09/07/2017 12:20

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	04	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/14/17 21:06	CVH
Surr: Pentacosane (Surr)	04	SW8015C	56.9 %		40-160		09/13/17 14:54	09/14/17 21:06	CVH



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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results									
Sample I.D.		Laboratory Sample ID: 17I0300-05							
Grab Date/Time:		09/07/2017 14:45							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	05	SW8015C	<0.10 mg/kg dry		0.10	1	09/13/17 13:25	09/13/17 13:25	LAO
Surr: 2,5-Dibromotoluene (FID)	05	SW8015C	103 %		80-120		09/13/17 13:25	09/13/17 13:25	LAO
Wet Chemistry Analysis									
Percent Solids	05	SM18 2540G	86.5 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results									
Sample I.D.	65-1 0-5	Laboratory Sample ID:						17I0300-06	
Grab Date/Time:		09/07/2017 15:05							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	06	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/14/17 21:31	CVH
<i>Surr: Pentacosane (Surr)</i>	06	SW8015C	50.8 %		40-160		09/13/17 14:54	09/14/17 21:31	CVH



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results

Sample I.D. 65-1 10-15 Laboratory Sample ID: 17I0300-07

Grab Date/Time: 09/07/2017 15:15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	07	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/14/17 21:56	CVH
<i>Surr: Pentacosane (Surr)</i>	07	SW8015C	46.6 %		40-160		09/13/17 14:54	09/14/17 21:56	CVH



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results

Sample I.D. 65-1 20-23 Laboratory Sample ID: 17I0300-08

Grab Date/Time: 09/07/2017 15:20

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	08	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/14/17 22:21	CVH
Surr: Pentacosane (Surr)	08	SW8015C	59.5 %		40-160		09/13/17 14:54	09/14/17 22:21	CVH



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results									
Sample I.D.	65-2 0-5	Laboratory Sample ID:							
Grab Date/Time:		17I0300-09							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	09	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/14/17 22:46	CVH
<i>Surr: Pentacosane (Surr)</i>	09	SW8015C	56.3 %		40-160		09/13/17 14:54	09/14/17 22:46	CVH



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results

Sample I.D. 65-2 10-15 Laboratory Sample ID: 17I0300-10

Grab Date/Time: 09/07/2017 15:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	10	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/14/17 23:12	CVH
<i>Surr: Pentacosane (Surr)</i>	10	SW8015C	57.0 %		40-160		09/13/17 14:54	09/14/17 23:12	CVH



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results

Sample I.D. 65-2 20-22' Laboratory Sample ID: 17I0300-11

Grab Date/Time: 09/07/2017 15:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	11	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/14/17 23:37	CVH
<i>Surr: Pentacosane (Surr)</i>	11	SW8015C	68.1 %		40-160		09/13/17 14:54	09/14/17 23:37	CVH



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results

Sample I.D. 47-OP1 10-14' Laboratory Sample ID: 17I0300-12

Grab Date/Time: 09/07/2017 16:00

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	12	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 15:51	09/13/17 15:51	LAO
Surr: 2,5-Dibromotoluene (FID)	12	SW8015C	101 %		80-120		09/13/17 15:51	09/13/17 15:51	LAO

Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	12	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/15/17 00:02	CVH
Surr: Pentacosane (Surr)	12	SW8015C	66.1 %		40-160		09/13/17 14:54	09/15/17 00:02	CVH



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results

Sample I.D. 47-OP2 10-15' Laboratory Sample ID: 17I0300-13

Grab Date/Time: 09/07/2017 16:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	13	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 16:14	09/13/17 16:14	LAO
Surr: 2,5-Dibromotoluene (FID)	13	SW8015C	102 %		80-120		09/13/17 16:14	09/13/17 16:14	LAO

Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	13	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/15/17 00:27	CVH
Surr: Pentacosane (Surr)	13	SW8015C	57.9 %		40-160		09/13/17 14:54	09/15/17 00:27	CVH



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0300

Analytical Results

Sample I.D. 47-OP2 20-22 Laboratory Sample ID: 17I0300-14

Grab Date/Time: 09/07/2017 16:15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	14	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 16:36	09/13/17 16:36	LAO
Surr: 2,5-Dibromotoluene (FID)	14	SW8015C	101 %		80-120		09/13/17 16:36	09/13/17 16:36	LAO

Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	14	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/15/17 00:52	CVH
Surr: Pentacosane (Surr)	14	SW8015C	70.3 %		40-160		09/13/17 14:54	09/15/17 00:52	CVH



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0301

Analytical Results									
Sample I.D.	36-1 0-5'	Laboratory Sample ID:							
Grab Date/Time:	09/07/2017 09:50								17I0301-01
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	01	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 16:59	09/13/17 16:59	LAO
Surr: 2,5-Dibromotoluene (FID)	01	SW8015C	95.4 %		80-120		09/13/17 16:59	09/13/17 16:59	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	01	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/15/17 01:17	CVH
Surr: Pentacosane (Surr)	01	SW8015C	54.4 %		40-160		09/13/17 14:54	09/15/17 01:17	CVH



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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0301

Analytical Results									
Sample I.D.		Laboratory Sample ID: 17I0301-02							
Grab Date/Time:		09/07/2017 10:05							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	02	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 17:21	09/13/17 17:21	LAO
Surr: 2,5-Dibromotoluene (FID)	02	SW8015C	99.7 %		80-120		09/13/17 17:21	09/13/17 17:21	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	02	SW8015C	<10.0 mg/kg		10.0	1	09/13/17 14:54	09/15/17 01:42	CVH
Surr: Pentacosane (Surr)	02	SW8015C	59.2 %		40-160		09/13/17 14:54	09/15/17 01:42	CVH



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0301

Analytical Results									
Sample I.D.		Laboratory Sample ID: 17I0301-03							
Grab Date/Time:		09/07/2017 10:25							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	03	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 17:44	09/13/17 17:44	LAO
Surr: 2,5-Dibromotoluene (FID)	03	SW8015C	99.5 %		80-120		09/13/17 17:44	09/13/17 17:44	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	03	SW8015C	<10.0 mg/kg		10.0	1	09/19/17 15:30	09/20/17 15:46	CVH
Surr: Pentacosane (Surr)	03	SW8015C	58.6 %		40-160		09/19/17 15:30	09/20/17 15:46	CVH



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0301

Analytical Results

Sample I.D. 36-2 20-21 Laboratory Sample ID: 17I0301-04

Grab Date/Time: 09/07/2017 10:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	04	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 18:06	09/13/17 18:06	LAO
Surr: 2,5-Dibromotoluene (FID)	04	SW8015C	101 %		80-120		09/13/17 18:06	09/13/17 18:06	LAO

Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	04	SW8015C	<10.0 mg/kg		10.0	1	09/19/17 15:30	09/20/17 16:12	CVH
Surr: Pentacosane (Surr)	04	SW8015C	87.2 %		40-160		09/19/17 15:30	09/20/17 16:12	CVH



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0301

Analytical Results

Sample I.D. 36-3 10-15 Laboratory Sample ID: 17I0301-05

Grab Date/Time: 09/07/2017 10:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	05	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 18:29	09/13/17 18:29	LAO
Surr: 2,5-Dibromotoluene (FID)	05	SW8015C	98.4 %		80-120		09/13/17 18:29	09/13/17 18:29	LAO

Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	05	SW8015C	<10.0 mg/kg		10.0	1	09/19/17 15:30	09/20/17 16:39	CVH
Surr: Pentacosane (Surr)	05	SW8015C	70.3 %		40-160		09/19/17 15:30	09/20/17 16:39	CVH



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0301

Analytical Results

Sample I.D. 36-3 30-33 Laboratory Sample ID: 17I0301-06

Grab Date/Time: 09/07/2017 10:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	06	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 18:51	09/13/17 18:51	LAO
Surr: 2,5-Dibromotoluene (FID)	06	SW8015C	103 %		80-120		09/13/17 18:51	09/13/17 18:51	LAO

Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	06	SW8015C	<10.0 mg/kg		10.0	1	09/19/17 15:30	09/20/17 17:06	CVH
Surr: Pentacosane (Surr)	06	SW8015C	74.1 %		40-160		09/19/17 15:30	09/20/17 17:06	CVH



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Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0301

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0301-07								
Grab Date/Time: 09/07/2017 11:05									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	07	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 19:14	09/13/17 19:14	LAO
Surr: 2,5-Dibromotoluene (FID)	07	SW8015C	102 %		80-120		09/13/17 19:14	09/13/17 19:14	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	07	SW8015C	<10.0 mg/kg		10.0	1	09/19/17 15:30	09/20/17 17:32	CVH
Surr: Pentacosane (Surr)	07	SW8015C	77.8 %		40-160		09/19/17 15:30	09/20/17 17:32	CVH



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0301

Analytical Results

Sample I.D. 36-4 25-30 Laboratory Sample ID: 17I0301-08

Grab Date/Time: 09/07/2017 11:15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	08	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 19:36	09/13/17 19:36	LAO
Surr: 2,5-Dibromotoluene (FID)	08	SW8015C	104 %		80-120		09/13/17 19:36	09/13/17 19:36	LAO

Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	08	SW8015C	<10.0 mg/kg		10.0	1	09/19/17 15:30	09/20/17 17:59	CVH
Surr: Pentacosane (Surr)	08	SW8015C	66.6 %		40-160		09/19/17 15:30	09/20/17 17:59	CVH



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Client Name: EEE Consulting (Blacksburg, VA)
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Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0301

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0301-09								
Grab Date/Time: 09/07/2017 11:30									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	09	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 19:59	09/13/17 19:59	LAO
Surr: 2,5-Dibromotoluene (FID)	09	SW8015C	102 %		80-120		09/13/17 19:59	09/13/17 19:59	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	09	SW8015C	<10.0 mg/kg		10.0	1	09/19/17 15:30	09/20/17 18:25	CVH
Surr: Pentacosane (Surr)	09	SW8015C	78.3 %		40-160		09/19/17 15:30	09/20/17 18:25	CVH



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Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0301

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0301-10								
Grab Date/Time: 09/07/2017 11:40									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	10	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 20:21	09/13/17 20:21	LAO
Surr: 2,5-Dibromotoluene (FID)	10	SW8015C	96.0 %		80-120		09/13/17 20:21	09/13/17 20:21	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	10	SW8015C	<10.0 mg/kg		10.0	1	09/19/17 15:30	09/20/17 18:51	CVH
Surr: Pentacosane (Surr)	10	SW8015C	81.7 %		40-160		09/19/17 15:30	09/20/17 18:51	CVH



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-1 Laboratory Sample ID: 17I0317-01

Composite Start-End Date/Time: 09/08/2017 12:25 - 09/08/2017 12:25

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	01	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:06	CWO
Aluminum	01RE1	SW6010C	20400 mg/kg		58.0	25	09/14/17 07:50	09/15/17 20:35	CWO
Arsenic	01	SW6010C	3.90 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:06	CWO
Barium	01	SW6010C	67.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:06	CWO
Beryllium	01RE2	SW6010C	<1.86 mg/kg		1.86	10	09/14/17 07:50	09/18/17 16:22	CWO
Calcium	01RE2	SW6010C	857 mg/kg		46.4	10	09/14/17 07:50	09/18/17 16:22	CWO
Cadmium	01	SW6010C	1.65 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:06	CWO
Cobalt	01	SW6010C	7.55 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:06	CWO
Chromium	01	SW6010C	17.0 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:06	CWO
Copper	01	SW6010C	9.72 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:06	CWO
Iron	01RE1	SW6010C	24000 mg/kg		232	100	09/14/17 07:50	09/18/17 13:10	CWO
Mercury	01	SW7471B	0.025 mg/kg		0.008	1	09/12/17 13:00	09/13/17 11:55	RCV
Potassium	01	SW6010C	4650 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:29	CWO
Magnesium	01RE1	SW6010C	4150 mg/kg		58.0	25	09/14/17 07:50	09/15/17 20:35	CWO
Manganese	01	SW6010C	178 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:06	CWO
Sodium	01	SW6010C	31.8 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:29	CWO
Nickel	01	SW6010C	11.5 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:06	CWO
Lead	01	SW6010C	19.6 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:06	CWO
Antimony	01	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:06	CWO
Selenium	01	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:06	CWO
Thallium	01	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:06	CWO
Vanadium	01	SW6010C	26.9 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:06	CWO
Zinc	01	SW6010C	95.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:06	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	01	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	01	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/15/17 16:37	SKS



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-1 Laboratory Sample ID: 17I0317-01

Composite Start-End Date/Time: 09/08/2017 12:25 - 09/08/2017 12:25

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
1,2-Dichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
1,2-Diphenylhydrazine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
1,3-Dichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
1,4-Dichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
1-Chloronaphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
1-Naphthylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2,3,4,6-Tetrachlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2,4,5-Trichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2,4,6-Trichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2,4-Dichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2,4-Dimethylphenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2,4-Dinitrophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2,4-Dinitrotoluene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2,6-Dichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2,6-Dinitrotoluene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2-Chloronaphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2-Chlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2-Methylnaphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2-Naphthylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2-Nitroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2-Nitrophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
3,3'-Dichlorobenzidine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
3-Methylcholanthrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
3-Nitroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
4,6-Dinitro-2-methylphenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results									
Sample I.D.	Finding 21-1	Laboratory Sample ID: 17I0317-01							
Composite Start-End Date/Time:			09/08/2017 12:25 - 09/08/2017 12:25						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
4-Bromophenyl phenyl ether	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
4-Chloroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
4-Chlorophenyl phenyl ether	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
4-Nitroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
4-Nitrophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
7,12-Dimethylbenz (a)anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Acenaphthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Acenaphthylene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Acetophenone	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Aniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Benzidine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Benzo (a) anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Benzo (a) pyrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Benzo (b) fluoranthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Benzo (g,h,i) perylene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Benzo (k) fluoranthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Benzoic acid	01	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Benzyl alcohol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
bis (2-Chloroethoxy) methane	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
bis (2-Chloroethyl) ether	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
2,2'-Oxybis(1-chloropropane)	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Butyl benzyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results									
Sample I.D.	Finding 21-1	Laboratory Sample ID: 17I0317-01							
Composite Start-End Date/Time:			09/08/2017 12:25 - 09/08/2017 12:25						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Dibenz (a,h) anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Dibenz (a,j) acridine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Dibenzofuran	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Diethyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Dimethyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Di-n-butyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Di-n-octyl phthalate	01	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Diphenylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Ethyl methanesulfonate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Fluoranthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Fluorene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Hexachlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Hexachlorobutadiene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Hexachlorocyclopentadiene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Hexachloroethane	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Indeno (1,2,3-cd) pyrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Isophorone	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
m+p-Cresols	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Methyl methanesulfonate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Naphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Nitrobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
n-Nitrosodimethylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
n-Nitrosodi-n-butylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
n-Nitrosodi-n-propylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
n-Nitrosodiphenylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-1 Laboratory Sample ID: 17I0317-01

Composite Start-End Date/Time: 09/08/2017 12:25 - 09/08/2017 12:25

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Organic Compounds by GCMS

n-Nitrosopiperidine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
o+m+p-Cresols	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
o-Cresol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
p-(Dimethylamino)azobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
p-Chloro-m-cresol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Pentachloronitrobenzene (quintozone)	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Pentachlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Phenacetin	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Phenanthrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Phenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Pronamide	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Pyrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
Pyridine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 16:37	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	01	SW8270D	37.8 %		35-125		09/14/17 09:50	09/15/17 16:37	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	01	SW8270D	35.3 %	S	45-105		09/14/17 09:50	09/15/17 16:37	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	01	SW8270D	37.1 %		35-105		09/14/17 09:50	09/15/17 16:37	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	01	SW8270D	36.5 %		35-100		09/14/17 09:50	09/15/17 16:37	SKS
<i>Surr: Phenol-d5 (Surr)</i>	01	SW8270D	36.5 %	S	40-100		09/14/17 09:50	09/15/17 16:37	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	01	SW8270D	49.8 %		30-125		09/14/17 09:50	09/15/17 16:37	SKS

Organochlorine Pesticides and PCBs by GC/ECD

PCB as Aroclor 1016	01	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 18:56	09/21/17 18:56	LBH
PCB as Aroclor 1221	01	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 18:56	09/21/17 18:56	LBH
PCB as Aroclor 1232	01	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 18:56	09/21/17 18:56	LBH
PCB as Aroclor 1242	01	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 18:56	09/21/17 18:56	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results									
Sample I.D.	Finding 21-1								
Composite Start-End Date/Time:			09/08/2017 12:25 - 09/08/2017 12:25						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	01	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 18:56	09/21/17 18:56	LBH
PCB as Aroclor 1254	01	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 18:56	09/21/17 18:56	LBH
PCB as Aroclor 1260	01	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 18:56	09/21/17 18:56	LBH
Surr: DCB	01	SW8082A	60.0 %		30-105		09/21/17 18:56	09/21/17 18:56	LBH
Surr: TCMX	01	SW8082A	50.0 %		30-105		09/21/17 18:56	09/21/17 18:56	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	01	SW7196A	0.39 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT
Percent Solids	01	SM18 2540G	75.8 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-2 Laboratory Sample ID: 17I0317-02

Composite Start-End Date/Time: 09/08/2017 12:40 - 09/08/2017 12:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	02	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:07	CWO
Aluminum	02RE1	SW6010C	21100 mg/kg	E	58.6	25	09/14/17 07:50	09/15/17 20:39	CWO
Arsenic	02	SW6010C	6.82 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:07	CWO
Barium	02	SW6010C	63.5 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:07	CWO
Beryllium	02RE2	SW6010C	<1.87 mg/kg		1.87	10	09/14/17 07:50	09/18/17 16:32	CWO
Calcium	02RE2	SW6010C	1330 mg/kg		46.9	10	09/14/17 07:50	09/18/17 16:32	CWO
Cadmium	02	SW6010C	1.98 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:07	CWO
Cobalt	02	SW6010C	7.53 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:07	CWO
Chromium	02	SW6010C	22.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:07	CWO
Copper	02	SW6010C	11.9 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:07	CWO
Iron	02RE1	SW6010C	23500 mg/kg		234	100	09/14/17 07:50	09/18/17 13:12	CWO
Mercury	02	SW7471B	0.015 mg/kg		0.008	1	09/12/17 13:00	09/13/17 11:57	RCV
Potassium	02	SW6010C	4820 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:54	CWO
Magnesium	02RE1	SW6010C	4670 mg/kg		58.6	25	09/14/17 07:50	09/15/17 20:39	CWO
Manganese	02	SW6010C	168 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:07	CWO
Sodium	02	SW6010C	31.5 mg/kg		25.0	1	09/14/17 07:50	09/15/17 16:54	CWO
Nickel	02	SW6010C	10.2 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:07	CWO
Lead	02	SW6010C	17.7 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:07	CWO
Antimony	02	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:07	CWO
Selenium	02	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:07	CWO
Thallium	02	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:07	CWO
Vanadium	02	SW6010C	29.0 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:07	CWO
Zinc	02	SW6010C	122 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:07	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	02	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	02	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/18/17 20:32	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-2 Laboratory Sample ID: 17I0317-02

Composite Start-End Date/Time: 09/08/2017 12:40 - 09/08/2017 12:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
1,2-Dichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
1,2-Diphenylhydrazine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
1,3-Dichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
1,4-Dichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
1-Chloronaphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
1-Naphthylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2,3,4,6-Tetrachlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2,4,5-Trichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2,4,6-Trichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2,4-Dichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2,4-Dimethylphenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2,4-Dinitrophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2,4-Dinitrotoluene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2,6-Dichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2,6-Dinitrotoluene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2-Chloronaphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2-Chlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2-Methylnaphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2-Naphthylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2-Nitroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2-Nitrophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
3,3'-Dichlorobenzidine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
3-Methylcholanthrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
3-Nitroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
4,6-Dinitro-2-methylphenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS



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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results									
Sample I.D.	Finding 21-2	Laboratory Sample ID: 17I0317-02							
Composite Start-End Date/Time:			09/08/2017 12:40 - 09/08/2017 12:40						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
4-Bromophenyl phenyl ether	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
4-Chloroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
4-Chlorophenyl phenyl ether	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
4-Nitroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
4-Nitrophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
7,12-Dimethylbenz (a) anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Acenaphthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Acenaphthylene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Acetophenone	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Aniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Benzidine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Benzo (a) anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Benzo (a) pyrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Benzo (b) fluoranthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Benzo (g,h,i) perylene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Benzo (k) fluoranthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Benzoic acid	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Benzyl alcohol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
bis (2-Chloroethoxy) methane	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
bis (2-Chloroethyl) ether	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
2,2'-Oxybis (1-chloropropane)	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
bis (2-Ethylhexyl) phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Butyl benzyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-2 Laboratory Sample ID: 17I0317-02

Composite Start-End Date/Time: 09/08/2017 12:40 - 09/08/2017 12:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Dibenz (a,h) anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Dibenz (a,j) acridine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Dibenzofuran	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Diethyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Dimethyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Di-n-butyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Di-n-octyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Diphenylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Ethyl methanesulfonate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Fluoranthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Fluorene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Hexachlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Hexachlorobutadiene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Hexachlorocyclopentadiene	02	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Hexachloroethane	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Indeno (1,2,3-cd) pyrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Isophorone	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
m+p-Cresols	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Methyl methanesulfonate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Naphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Nitrobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
n-Nitrosodimethylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
n-Nitrosodi-n-butylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
n-Nitrosodi-n-propylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
n-Nitrosodiphenylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-2 Laboratory Sample ID: 17I0317-02

Composite Start-End Date/Time: 09/08/2017 12:40 - 09/08/2017 12:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
o+m+p-Cresols	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
o-Cresol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
p-(Dimethylamino)azobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
p-Chloro-m-cresol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Pentachloronitrobenzene (quintozone)	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Pentachlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Phenacetin	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Phenanthrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Phenol	02	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Pronamide	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Pyrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
Pyridine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 20:32	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	02	SW8270D	33.6 %	S	35-125		09/14/17 09:50	09/18/17 20:32	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	02	SW8270D	29.1 %	S	45-105		09/14/17 09:50	09/18/17 20:32	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	02	SW8270D	30.8 %	S	35-105		09/14/17 09:50	09/18/17 20:32	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	02	SW8270D	29.6 %	S	35-100		09/14/17 09:50	09/18/17 20:32	SKS
<i>Surr: Phenol-d5 (Surr)</i>	02	SW8270D	28.9 %	S	40-100		09/14/17 09:50	09/18/17 20:32	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	02	SW8270D	51.8 %		30-125		09/14/17 09:50	09/18/17 20:32	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	02	SW8082A	<0.126 mg/kg dry		0.126	1	09/21/17 19:16	09/21/17 19:16	LBH
PCB as Aroclor 1221	02	SW8082A	<0.126 mg/kg dry		0.126	1	09/21/17 19:16	09/21/17 19:16	LBH
PCB as Aroclor 1232	02	SW8082A	<0.126 mg/kg dry		0.126	1	09/21/17 19:16	09/21/17 19:16	LBH
PCB as Aroclor 1242	02	SW8082A	<0.126 mg/kg dry		0.126	1	09/21/17 19:16	09/21/17 19:16	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-2 Laboratory Sample ID: 17I0317-02

Composite Start-End Date/Time: 09/08/2017 12:40 - 09/08/2017 12:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Organochlorine Pesticides and PCBs by GC/ECD

PCB as Aroclor 1248	02	SW8082A	<0.126 mg/kg dry		0.126	1	09/21/17 19:16	09/21/17 19:16	LBH
PCB as Aroclor 1254	02	SW8082A	<0.126 mg/kg dry		0.126	1	09/21/17 19:16	09/21/17 19:16	LBH
PCB as Aroclor 1260	02	SW8082A	<0.126 mg/kg dry		0.126	1	09/21/17 19:16	09/21/17 19:16	LBH
Surr: DCB	02	SW8082A	70.0 %		30-105		09/21/17 19:16	09/21/17 19:16	LBH
Surr: TCMX	02	SW8082A	65.0 %		30-105		09/21/17 19:16	09/21/17 19:16	LBH

Wet Chemistry Analysis

Chromium, Hexavalent	02	SW7196A	<0.19 mg/kg		0.19	1	09/15/17 17:03	09/21/17 14:35	CGT
Percent Solids	02	SM18 2540G	75.5 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-3 Laboratory Sample ID: 17I0317-03

Composite Start-End Date/Time: 09/08/2017 12:50 - 09/08/2017 12:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	03	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:48	CWO
Aluminum	03RE1	SW6010C	20200 mg/kg		60.3	25	09/14/17 07:50	09/15/17 20:43	CWO
Arsenic	03	SW6010C	6.70 mg/kg		1.00	1	09/14/17 07:50	09/18/17 13:48	CWO
Barium	03	SW6010C	63.6 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:48	CWO
Beryllium	03RE2	SW6010C	<1.93 mg/kg		1.93	10	09/14/17 07:50	09/18/17 16:34	CWO
Calcium	03RE2	SW6010C	1100 mg/kg		48.2	10	09/14/17 07:50	09/18/17 16:34	CWO
Cadmium	03	SW6010C	2.03 mg/kg		0.200	1	09/14/17 07:50	09/18/17 13:48	CWO
Cobalt	03	SW6010C	7.42 mg/kg		0.200	1	09/14/17 07:50	09/18/17 13:48	CWO
Chromium	03	SW6010C	21.8 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:48	CWO
Copper	03	SW6010C	11.9 mg/kg		2.50	1	09/14/17 07:50	09/18/17 13:48	CWO
Iron	03RE1	SW6010C	25700 mg/kg		241	100	09/14/17 07:50	09/18/17 13:13	CWO
Mercury	03	SW7471B	0.025 mg/kg		0.008	1	09/12/17 13:00	09/13/17 12:11	RCV
Potassium	03	SW6010C	4210 mg/kg		25.0	1	09/14/17 07:50	09/15/17 17:00	CWO
Magnesium	03RE1	SW6010C	4040 mg/kg		60.3	25	09/14/17 07:50	09/15/17 20:43	CWO
Manganese	03	SW6010C	167 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:48	CWO
Sodium	03	SW6010C	26.7 mg/kg		25.0	1	09/14/17 07:50	09/15/17 17:00	CWO
Nickel	03	SW6010C	10.2 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:48	CWO
Lead	03	SW6010C	17.7 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:48	CWO
Antimony	03	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 13:48	CWO
Selenium	03	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 13:48	CWO
Thallium	03	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 13:48	CWO
Vanadium	03	SW6010C	28.8 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:48	CWO
Zinc	03	SW6010C	125 mg/kg		0.500	1	09/14/17 07:50	09/18/17 13:48	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	03	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	03	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/18/17 21:03	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-3 Laboratory Sample ID: 17I0317-03

Composite Start-End Date/Time: 09/08/2017 12:50 - 09/08/2017 12:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
1,2-Dichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
1,2-Diphenylhydrazine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
1,3-Dichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
1,4-Dichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
1-Chloronaphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
1-Naphthylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2,3,4,6-Tetrachlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2,4,5-Trichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2,4,6-Trichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2,4-Dichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2,4-Dimethylphenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2,4-Dinitrophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2,4-Dinitrotoluene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2,6-Dichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2,6-Dinitrotoluene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2-Chloronaphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2-Chlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2-Methylnaphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2-Naphthylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2-Nitroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2-Nitrophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
3,3'-Dichlorobenzidine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
3-Methylcholanthrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
3-Nitroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
4,6-Dinitro-2-methylphenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-3 Laboratory Sample ID: 17I0317-03

Composite Start-End Date/Time: 09/08/2017 12:50 - 09/08/2017 12:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
4-Bromophenyl phenyl ether	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
4-Chloroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
4-Chlorophenyl phenyl ether	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
4-Nitroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
4-Nitrophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
7,12-Dimethylbenz (a) anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Acenaphthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Acenaphthylene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Acetophenone	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Aniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Benzidine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Benzo (a) anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Benzo (a) pyrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Benzo (b) fluoranthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Benzo (g,h,i) perylene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Benzo (k) fluoranthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Benzoic acid	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Benzyl alcohol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
bis (2-Chloroethoxy) methane	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
bis (2-Chloroethyl) ether	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
2,2'-Oxybis (1-chloropropane)	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
bis (2-Ethylhexyl) phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Butyl benzyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-3 Laboratory Sample ID: 17I0317-03

Composite Start-End Date/Time: 09/08/2017 12:50 - 09/08/2017 12:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Organic Compounds by GCMS

Chrysene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Dibenz (a,h) anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Dibenz (a,j) acridine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Dibenzofuran	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Diethyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Dimethyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Di-n-butyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Di-n-octyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Diphenylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Ethyl methanesulfonate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Fluoranthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Fluorene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Hexachlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Hexachlorobutadiene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Hexachlorocyclopentadiene	03	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Hexachloroethane	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Indeno (1,2,3-cd) pyrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Isophorone	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
m+p-Cresols	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Methyl methanesulfonate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Naphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Nitrobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
n-Nitrosodimethylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
n-Nitrosodi-n-butylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
n-Nitrosodi-n-propylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
n-Nitrosodiphenylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-3 Laboratory Sample ID: 17I0317-03

Composite Start-End Date/Time: 09/08/2017 12:50 - 09/08/2017 12:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
o+m+p-Cresols	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
o-Cresol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
p-(Dimethylamino)azobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
p-Chloro-m-cresol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Pentachloronitrobenzene (quintozone)	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Pentachlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Phenacetin	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Phenanthrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Phenol	03	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Pronamide	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Pyrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
Pyridine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:03	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	03	SW8270D	37.4 %		35-125		09/14/17 09:50	09/18/17 21:03	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	03	SW8270D	32.1 %	S	45-105		09/14/17 09:50	09/18/17 21:03	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	03	SW8270D	32.6 %	S	35-105		09/14/17 09:50	09/18/17 21:03	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	03	SW8270D	31.8 %	S	35-100		09/14/17 09:50	09/18/17 21:03	SKS
<i>Surr: Phenol-d5 (Surr)</i>	03	SW8270D	31.2 %	S	40-100		09/14/17 09:50	09/18/17 21:03	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	03	SW8270D	48.0 %		30-125		09/14/17 09:50	09/18/17 21:03	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	03	SW8082A	<0.134 mg/kg dry		0.134	1	09/21/17 19:35	09/21/17 19:35	LBH
PCB as Aroclor 1221	03	SW8082A	<0.134 mg/kg dry		0.134	1	09/21/17 19:35	09/21/17 19:35	LBH
PCB as Aroclor 1232	03	SW8082A	<0.134 mg/kg dry		0.134	1	09/21/17 19:35	09/21/17 19:35	LBH
PCB as Aroclor 1242	03	SW8082A	<0.134 mg/kg dry		0.134	1	09/21/17 19:35	09/21/17 19:35	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-3 Laboratory Sample ID: 17I0317-03

Composite Start-End Date/Time: 09/08/2017 12:50 - 09/08/2017 12:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Organochlorine Pesticides and PCBs by GC/ECD

PCB as Aroclor 1248	03	SW8082A	<0.134 mg/kg dry	0.134	1	09/21/17 19:35	09/21/17 19:35	LBH
PCB as Aroclor 1254	03	SW8082A	<0.134 mg/kg dry	0.134	1	09/21/17 19:35	09/21/17 19:35	LBH
PCB as Aroclor 1260	03	SW8082A	<0.134 mg/kg dry	0.134	1	09/21/17 19:35	09/21/17 19:35	LBH
Surr: DCB	03	SW8082A	60.0 %	30-105		09/21/17 19:35	09/21/17 19:35	LBH
Surr: TCMX	03	SW8082A	70.0 %	30-105		09/21/17 19:35	09/21/17 19:35	LBH

Wet Chemistry Analysis

Chromium, Hexavalent	03	SW7196A	<0.20 mg/kg	0.20	1	09/15/17 17:03	09/21/17 14:35	CGT
Percent Solids	03	SM18 2540G	73.6 %	0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-4 Laboratory Sample ID: 17I0317-04

Composite Start-End Date/Time: 09/08/2017 12:55 - 09/08/2017 12:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	04	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:09	CWO
Aluminum	04RE1	SW6010C	29400 mg/kg	E	58.2	25	09/14/17 07:50	09/15/17 20:46	CWO
Arsenic	04	SW6010C	4.07 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:09	CWO
Barium	04	SW6010C	82.7 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:09	CWO
Beryllium	04RE2	SW6010C	<1.86 mg/kg		1.86	10	09/14/17 07:50	09/18/17 16:37	CWO
Calcium	04RE2	SW6010C	893 mg/kg		46.6	10	09/14/17 07:50	09/18/17 16:37	CWO
Cadmium	04	SW6010C	1.75 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:09	CWO
Cobalt	04	SW6010C	10.2 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:09	CWO
Chromium	04	SW6010C	16.5 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:09	CWO
Copper	04	SW6010C	9.07 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:09	CWO
Iron	04RE1	SW6010C	26400 mg/kg		233	100	09/14/17 07:50	09/18/17 13:15	CWO
Mercury	04	SW7471B	0.014 mg/kg		0.008	1	09/12/17 13:00	09/13/17 12:14	RCV
Potassium	04	SW6010C	6090 mg/kg		25.0	1	09/14/17 07:50	09/15/17 17:19	CWO
Magnesium	04RE1	SW6010C	7300 mg/kg		58.2	25	09/14/17 07:50	09/15/17 20:46	CWO
Manganese	04	SW6010C	262 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:09	CWO
Sodium	04	SW6010C	32.5 mg/kg		25.0	1	09/14/17 07:50	09/15/17 17:19	CWO
Nickel	04	SW6010C	12.5 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:09	CWO
Lead	04	SW6010C	14.2 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:09	CWO
Antimony	04	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:09	CWO
Selenium	04	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:09	CWO
Thallium	04	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:09	CWO
Vanadium	04	SW6010C	26.4 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:09	CWO
Zinc	04	SW6010C	167 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:09	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	04	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	04	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/18/17 21:34	SKS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-4 Laboratory Sample ID: 17I0317-04

Composite Start-End Date/Time: 09/08/2017 12:55 - 09/08/2017 12:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
1,2-Dichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
1,2-Diphenylhydrazine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
1,3-Dichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
1,4-Dichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
1-Chloronaphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
1-Naphthylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2,3,4,6-Tetrachlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2,4,5-Trichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2,4,6-Trichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2,4-Dichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2,4-Dimethylphenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2,4-Dinitrophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2,4-Dinitrotoluene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2,6-Dichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2,6-Dinitrotoluene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2-Chloronaphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2-Chlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2-Methylnaphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2-Naphthylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2-Nitroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2-Nitrophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
3,3'-Dichlorobenzidine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
3-Methylcholanthrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
3-Nitroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
4,6-Dinitro-2-methylphenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-4 Laboratory Sample ID: 17I0317-04

Composite Start-End Date/Time: 09/08/2017 12:55 - 09/08/2017 12:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Organic Compounds by GCMS

4-Aminobiphenyl	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
4-Bromophenyl phenyl ether	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
4-Chloroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
4-Chlorophenyl phenyl ether	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
4-Nitroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
4-Nitrophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
7,12-Dimethylbenz (a) anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Acenaphthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Acenaphthylene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Acetophenone	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Aniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Benzidine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Benzo (a) anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Benzo (a) pyrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Benzo (b) fluoranthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Benzo (g,h,i) perylene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Benzo (k) fluoranthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Benzoic acid	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Benzyl alcohol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
bis (2-Chloroethoxy) methane	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
bis (2-Chloroethyl) ether	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
2,2'-Oxybis (1-chloropropane)	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
bis (2-Ethylhexyl) phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Butyl benzyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-4 Laboratory Sample ID: 17I0317-04

Composite Start-End Date/Time: 09/08/2017 12:55 - 09/08/2017 12:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Organic Compounds by GCMS

Chrysene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Dibenz (a,h) anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Dibenz (a,j) acridine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Dibenzofuran	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Diethyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Dimethyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Di-n-butyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Di-n-octyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Diphenylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Ethyl methanesulfonate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Fluoranthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Fluorene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Hexachlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Hexachlorobutadiene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Hexachlorocyclopentadiene	04	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Hexachloroethane	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Indeno (1,2,3-cd) pyrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Isophorone	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
m+p-Cresols	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Methyl methanesulfonate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Naphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Nitrobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
n-Nitrosodimethylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
n-Nitrosodi-n-butylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
n-Nitrosodi-n-propylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
n-Nitrosodiphenylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-4 Laboratory Sample ID: 17I0317-04

Composite Start-End Date/Time: 09/08/2017 12:55 - 09/08/2017 12:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
o+m+p-Cresols	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
o-Cresol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
p-(Dimethylamino)azobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
p-Chloro-m-cresol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Pentachloronitrobenzene (quintozone)	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Pentachlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Phenacetin	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Phenanthrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Phenol	04	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Pronamide	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Pyrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
Pyridine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 21:34	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	04	SW8270D	36.7 %		35-125		09/14/17 09:50	09/18/17 21:34	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	04	SW8270D	32.4 %	S	45-105		09/14/17 09:50	09/18/17 21:34	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	04	SW8270D	32.6 %	S	35-105		09/14/17 09:50	09/18/17 21:34	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	04	SW8270D	31.8 %	S	35-100		09/14/17 09:50	09/18/17 21:34	SKS
<i>Surr: Phenol-d5 (Surr)</i>	04	SW8270D	31.3 %	S	40-100		09/14/17 09:50	09/18/17 21:34	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	04	SW8270D	51.3 %		30-125		09/14/17 09:50	09/18/17 21:34	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	04	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 19:54	09/21/17 19:54	LBH
PCB as Aroclor 1221	04	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 19:54	09/21/17 19:54	LBH
PCB as Aroclor 1232	04	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 19:54	09/21/17 19:54	LBH
PCB as Aroclor 1242	04	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 19:54	09/21/17 19:54	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results									
Sample I.D.	Finding 21-4								
Composite Start-End Date/Time:			09/08/2017 12:55 - 09/08/2017 12:55						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	04	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 19:54	09/21/17 19:54	LBH
PCB as Aroclor 1254	04	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 19:54	09/21/17 19:54	LBH
PCB as Aroclor 1260	04	SW8082A	<0.131 mg/kg dry		0.131	1	09/21/17 19:54	09/21/17 19:54	LBH
Surr: DCB	04	SW8082A	60.0 %		30-105		09/21/17 19:54	09/21/17 19:54	LBH
Surr: TCMX	04	SW8082A	60.0 %		30-105		09/21/17 19:54	09/21/17 19:54	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	04	SW7196A	<0.20 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT
Percent Solids	04	SM18 2540G	75.8 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-5 Laboratory Sample ID: 17I0317-05

Composite Start-End Date/Time: 09/08/2017 13:05 - 09/08/2017 13:05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	05	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:11	CWO
Aluminum	05RE1	SW6010C	24000 mg/kg	E	57.2	25	09/14/17 07:50	09/15/17 21:09	CWO
Arsenic	05	SW6010C	4.15 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:11	CWO
Barium	05	SW6010C	69.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:11	CWO
Beryllium	05RE2	SW6010C	<1.83 mg/kg		1.83	10	09/14/17 07:50	09/18/17 16:39	CWO
Calcium	05RE2	SW6010C	1410 mg/kg		45.8	10	09/14/17 07:50	09/18/17 16:39	CWO
Cadmium	05	SW6010C	2.19 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:11	CWO
Cobalt	05	SW6010C	8.07 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:11	CWO
Chromium	05	SW6010C	15.8 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:11	CWO
Copper	05	SW6010C	9.51 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:11	CWO
Iron	05RE1	SW6010C	26200 mg/kg		229	100	09/14/17 07:50	09/18/17 13:17	CWO
Mercury	05	SW7471B	0.015 mg/kg		0.008	1	09/12/17 13:00	09/13/17 12:17	RCV
Potassium	05	SW6010C	5080 mg/kg		25.0	1	09/14/17 07:50	09/15/17 17:25	CWO
Magnesium	05RE1	SW6010C	5710 mg/kg		57.2	25	09/14/17 07:50	09/15/17 21:09	CWO
Manganese	05	SW6010C	196 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:11	CWO
Sodium	05	SW6010C	35.2 mg/kg		25.0	1	09/14/17 07:50	09/15/17 17:25	CWO
Nickel	05	SW6010C	10.9 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:11	CWO
Lead	05	SW6010C	11.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:11	CWO
Antimony	05	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:11	CWO
Selenium	05	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:11	CWO
Thallium	05	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:11	CWO
Vanadium	05	SW6010C	28.9 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:11	CWO
Zinc	05	SW6010C	98.4 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:11	CWO
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	05	SW8270D SIM	Not Detected		500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-5 Laboratory Sample ID: 17I0317-05

Composite Start-End Date/Time: 09/08/2017 13:05 - 09/08/2017 13:05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
1,2-Dichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
1,2-Diphenylhydrazine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
1,3-Dichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
1,4-Dichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
1-Chloronaphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
1-Naphthylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2,3,4,6-Tetrachlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2,4,5-Trichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2,4,6-Trichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2,4-Dichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2,4-Dimethylphenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2,4-Dinitrophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2,4-Dinitrotoluene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2,6-Dichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2,6-Dinitrotoluene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2-Chloronaphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2-Chlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2-Methylnaphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2-Naphthylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2-Nitroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2-Nitrophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
3,3'-Dichlorobenzidine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
3-Methylcholanthrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
3-Nitroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
4,6-Dinitro-2-methylphenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-5 Laboratory Sample ID: 17I0317-05

Composite Start-End Date/Time: 09/08/2017 13:05 - 09/08/2017 13:05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
4-Bromophenyl phenyl ether	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
4-Chloroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
4-Chlorophenyl phenyl ether	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
4-Nitroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
4-Nitrophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
7,12-Dimethylbenz (a) anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Acenaphthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Acenaphthylene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Acetophenone	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Aniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Benzidine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Benzo (a) anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Benzo (a) pyrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Benzo (b) fluoranthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Benzo (g,h,i) perylene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Benzo (k) fluoranthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Benzoic acid	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Benzyl alcohol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
bis (2-Chloroethoxy) methane	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
bis (2-Chloroethyl) ether	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
2,2'-Oxybis (1-chloropropane)	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
bis (2-Ethylhexyl) phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Butyl benzyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results									
Sample I.D.	Finding 21-5	Laboratory Sample ID: 17I0317-05							
Composite Start-End Date/Time:			09/08/2017 13:05 - 09/08/2017 13:05						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Dibenz (a,h) anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Dibenz (a,j) acridine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Dibenzofuran	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Diethyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Dimethyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Di-n-butyl phthalate	05	SW8270D	94.5 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Di-n-octyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Diphenylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Ethyl methanesulfonate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Fluoranthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Fluorene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Hexachlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Hexachlorobutadiene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Hexachlorocyclopentadiene	05	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Hexachloroethane	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Indeno (1,2,3-cd) pyrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Isophorone	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
m+p-Cresols	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Methyl methanesulfonate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Naphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Nitrobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
n-Nitrosodimethylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
n-Nitrosodi-n-butylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
n-Nitrosodi-n-propylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
n-Nitrosodiphenylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-5 Laboratory Sample ID: 17I0317-05

Composite Start-End Date/Time: 09/08/2017 13:05 - 09/08/2017 13:05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
o+m+p-Cresols	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
o-Cresol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
p-(Dimethylamino)azobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
p-Chloro-m-cresol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Pentachloronitrobenzene (quintozone)	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Pentachlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Phenacetin	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Phenanthrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Phenol	05	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Pronamide	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Pyrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
Pyridine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:05	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	05	SW8270D	38.8 %		35-125		09/14/17 09:50	09/18/17 22:05	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	05	SW8270D	33.5 %	S	45-105		09/14/17 09:50	09/18/17 22:05	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	05	SW8270D	32.9 %	S	35-105		09/14/17 09:50	09/18/17 22:05	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	05	SW8270D	32.6 %	S	35-100		09/14/17 09:50	09/18/17 22:05	SKS
<i>Surr: Phenol-d5 (Surr)</i>	05	SW8270D	34.8 %	S	40-100		09/14/17 09:50	09/18/17 22:05	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	05	SW8270D	49.7 %		30-125		09/14/17 09:50	09/18/17 22:05	SKS

Organochlorine Pesticides and PCBs by GC/ECD

PCB as Aroclor 1016	05	SW8082A	<0.141 mg/kg dry	0.141	1	09/21/17 20:14	09/21/17 20:14	LBH
PCB as Aroclor 1221	05	SW8082A	<0.141 mg/kg dry	0.141	1	09/21/17 20:14	09/21/17 20:14	LBH
PCB as Aroclor 1232	05	SW8082A	<0.141 mg/kg dry	0.141	1	09/21/17 20:14	09/21/17 20:14	LBH
PCB as Aroclor 1242	05	SW8082A	<0.141 mg/kg dry	0.141	1	09/21/17 20:14	09/21/17 20:14	LBH



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-5 Laboratory Sample ID: 17I0317-05

Composite Start-End Date/Time: 09/08/2017 13:05 - 09/08/2017 13:05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	05	SW8082A	<0.141 mg/kg dry		0.141	1	09/21/17 20:14	09/21/17 20:14	LBH
PCB as Aroclor 1254	05	SW8082A	<0.141 mg/kg dry		0.141	1	09/21/17 20:14	09/21/17 20:14	LBH
PCB as Aroclor 1260	05	SW8082A	<0.141 mg/kg dry		0.141	1	09/21/17 20:14	09/21/17 20:14	LBH
Surr: DCB	05	SW8082A	65.0 %		30-105		09/21/17 20:14	09/21/17 20:14	LBH
Surr: TCMX	05	SW8082A	60.0 %		30-105		09/21/17 20:14	09/21/17 20:14	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	05	SW7196A	<0.20 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT
Percent Solids	05	SM18 2540G	70.8 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-6 Laboratory Sample ID: 17I0317-06

Composite Start-End Date/Time: 09/08/2017 13:10 - 09/08/2017 13:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	06	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:13	CWO
Aluminum	06RE1	SW6010C	31700 mg/kg	E	58.9	25	09/14/17 07:50	09/15/17 21:13	CWO
Arsenic	06	SW6010C	4.68 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:13	CWO
Barium	06	SW6010C	72.2 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:13	CWO
Beryllium	06RE2	SW6010C	<1.88 mg/kg		1.88	10	09/14/17 07:50	09/18/17 16:41	CWO
Calcium	06RE2	SW6010C	2410 mg/kg		47.1	10	09/14/17 07:50	09/18/17 16:41	CWO
Cadmium	06	SW6010C	1.81 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:13	CWO
Cobalt	06	SW6010C	7.91 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:13	CWO
Chromium	06	SW6010C	18.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:13	CWO
Copper	06	SW6010C	9.92 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:13	CWO
Iron	06RE1	SW6010C	29600 mg/kg		235	100	09/14/17 07:50	09/18/17 13:19	CWO
Mercury	06	SW7471B	0.029 mg/kg		0.008	1	09/12/17 13:00	09/13/17 12:20	RCV
Potassium	06	SW6010C	4870 mg/kg		25.0	1	09/14/17 07:50	09/15/17 17:31	CWO
Magnesium	06RE1	SW6010C	6030 mg/kg		58.9	25	09/14/17 07:50	09/15/17 21:13	CWO
Manganese	06	SW6010C	187 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:13	CWO
Sodium	06	SW6010C	30.2 mg/kg		25.0	1	09/14/17 07:50	09/15/17 17:31	CWO
Nickel	06	SW6010C	10.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:13	CWO
Lead	06	SW6010C	12.0 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:13	CWO
Antimony	06	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:13	CWO
Selenium	06	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:13	CWO
Thallium	06	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:13	CWO
Vanadium	06	SW6010C	37.9 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:13	CWO
Zinc	06	SW6010C	96.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:13	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	06	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	06	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/18/17 22:36	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-6 Laboratory Sample ID: 17I0317-06

Composite Start-End Date/Time: 09/08/2017 13:10 - 09/08/2017 13:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
1,2-Dichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
1,2-Diphenylhydrazine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
1,3-Dichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
1,4-Dichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
1-Chloronaphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
1-Naphthylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2,3,4,6-Tetrachlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2,4,5-Trichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2,4,6-Trichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2,4-Dichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2,4-Dimethylphenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2,4-Dinitrophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2,4-Dinitrotoluene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2,6-Dichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2,6-Dinitrotoluene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2-Chloronaphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2-Chlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2-Methylnaphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2-Naphthylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2-Nitroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2-Nitrophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
3,3'-Dichlorobenzidine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
3-Methylcholanthrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
3-Nitroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
4,6-Dinitro-2-methylphenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS



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Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results									
Sample I.D.	Finding 21-6	Laboratory Sample ID: 17I0317-06							
Composite Start-End Date/Time:			09/08/2017 13:10 - 09/08/2017 13:10						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
4-Bromophenyl phenyl ether	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
4-Chloroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
4-Chlorophenyl phenyl ether	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
4-Nitroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
4-Nitrophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
7,12-Dimethylbenz (a)anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Acenaphthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Acenaphthylene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Acetophenone	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Aniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Benzidine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Benzo (a) anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Benzo (a) pyrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Benzo (b) fluoranthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Benzo (g,h,i) perylene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Benzo (k) fluoranthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Benzoic acid	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Benzyl alcohol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
bis (2-Chloroethoxy) methane	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
bis (2-Chloroethyl) ether	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
2,2'-Oxybis (1-chloropropane)	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
bis (2-Ethylhexyl) phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Butyl benzyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results									
Sample I.D.	Finding 21-6	Laboratory Sample ID: 17I0317-06							
Composite Start-End Date/Time:			09/08/2017 13:10 - 09/08/2017 13:10						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Dibenz (a,h) anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Dibenz (a,j) acridine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Dibenzofuran	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Diethyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Dimethyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Di-n-butyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Di-n-octyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Diphenylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Ethyl methanesulfonate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Fluoranthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Fluorene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Hexachlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Hexachlorobutadiene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Hexachlorocyclopentadiene	06	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Hexachloroethane	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Indeno (1,2,3-cd) pyrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Isophorone	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
m+p-Cresols	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Methyl methanesulfonate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Naphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Nitrobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
n-Nitrosodimethylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
n-Nitrosodi-n-butylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
n-Nitrosodi-n-propylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
n-Nitrosodiphenylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-6 Laboratory Sample ID: 17I0317-06

Composite Start-End Date/Time: 09/08/2017 13:10 - 09/08/2017 13:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
o+m+p-Cresols	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
o-Cresol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
p-(Dimethylamino)azobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
p-Chloro-m-cresol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Pentachloronitrobenzene (quintozone)	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Pentachlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Phenacetin	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Phenanthrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Phenol	06	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Pronamide	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Pyrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
Pyridine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 22:36	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	06	SW8270D	29.6 %	S	35-125		09/14/17 09:50	09/18/17 22:36	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	06	SW8270D	26.7 %	S	45-105		09/14/17 09:50	09/18/17 22:36	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	06	SW8270D	27.3 %	S	35-105		09/14/17 09:50	09/18/17 22:36	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	06	SW8270D	27.3 %	S	35-100		09/14/17 09:50	09/18/17 22:36	SKS
<i>Surr: Phenol-d5 (Surr)</i>	06	SW8270D	27.1 %	S	40-100		09/14/17 09:50	09/18/17 22:36	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	06	SW8270D	45.5 %		30-125		09/14/17 09:50	09/18/17 22:36	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	06	SW8082A	<0.127 mg/kg dry		0.127	1	09/21/17 20:33	09/21/17 20:33	LBH
PCB as Aroclor 1221	06	SW8082A	<0.127 mg/kg dry		0.127	1	09/21/17 20:33	09/21/17 20:33	LBH
PCB as Aroclor 1232	06	SW8082A	<0.127 mg/kg dry		0.127	1	09/21/17 20:33	09/21/17 20:33	LBH
PCB as Aroclor 1242	06	SW8082A	<0.127 mg/kg dry		0.127	1	09/21/17 20:33	09/21/17 20:33	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0317

Analytical Results

Sample I.D. Finding 21-6 Laboratory Sample ID: 17I0317-06

Composite Start-End Date/Time: 09/08/2017 13:10 - 09/08/2017 13:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Organochlorine Pesticides and PCBs by GC/ECD

PCB as Aroclor 1248	06	SW8082A	<0.127 mg/kg dry		0.127	1	09/21/17 20:33	09/21/17 20:33	LBH
PCB as Aroclor 1254	06	SW8082A	<0.127 mg/kg dry		0.127	1	09/21/17 20:33	09/21/17 20:33	LBH
PCB as Aroclor 1260	06	SW8082A	<0.127 mg/kg dry		0.127	1	09/21/17 20:33	09/21/17 20:33	LBH
Surr: DCB	06	SW8082A	70.0 %		30-105		09/21/17 20:33	09/21/17 20:33	LBH
Surr: TCMX	06	SW8082A	80.0 %		30-105		09/21/17 20:33	09/21/17 20:33	LBH

Wet Chemistry Analysis

Chromium, Hexavalent	06	SW7196A	<0.20 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT
Percent Solids	06	SM18 2540G	78.3 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-1 Laboratory Sample ID: 17I0319-01

Grab Date/Time: 09/08/2017 14:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	01	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:15	CWO
Aluminum	01RE1	SW6010C	22500 mg/kg	E	59.6	25	09/14/17 07:50	09/15/17 21:17	CWO
Arsenic	01	SW6010C	4.09 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:15	CWO
Barium	01	SW6010C	100 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:15	CWO
Beryllium	01	SW6010C	<0.200 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:15	CWO
Calcium	01RE2	SW6010C	1250 mg/kg		47.7	10	09/14/17 07:50	09/19/17 16:44	CWO
Cadmium	01	SW6010C	1.56 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:15	CWO
Cobalt	01	SW6010C	12.3 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:15	CWO
Chromium	01	SW6010C	14.0 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:15	CWO
Copper	01	SW6010C	9.54 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:15	CWO
Iron	01RE1	SW6010C	25700 mg/kg		239	100	09/14/17 07:50	09/18/17 13:21	CWO
Mercury	01	SW7471B	0.010 mg/kg		0.008	1	09/12/17 13:00	09/13/17 12:22	RCV
Potassium	01	SW6010C	6800 mg/kg		25.0	1	09/14/17 07:50	09/15/17 17:37	CWO
Magnesium	01RE1	SW6010C	8000 mg/kg		59.6	25	09/14/17 07:50	09/15/17 21:17	CWO
Manganese	01	SW6010C	275 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:15	CWO
Sodium	01	SW6010C	42.7 mg/kg		25.0	1	09/14/17 07:50	09/15/17 17:37	CWO
Nickel	01	SW6010C	13.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:15	CWO
Lead	01	SW6010C	5.85 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:15	CWO
Antimony	01	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:15	CWO
Selenium	01	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:15	CWO
Thallium	01	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:15	CWO
Vanadium	01	SW6010C	19.5 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:15	CWO
Zinc	01	SW6010C	65.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:15	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	01	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	01	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/18/17 23:07	SKS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-1 Laboratory Sample ID: 17I0319-01

Grab Date/Time: 09/08/2017 14:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
1,2-Dichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
1,2-Diphenylhydrazine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
1,3-Dichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
1,4-Dichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
1-Chloronaphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
1-Naphthylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2,3,4,6-Tetrachlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2,4,5-Trichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2,4,6-Trichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2,4-Dichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2,4-Dimethylphenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2,4-Dinitrophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2,4-Dinitrotoluene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2,6-Dichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2,6-Dinitrotoluene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2-Chloronaphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2-Chlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2-Methylnaphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2-Naphthylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2-Nitroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2-Nitrophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
3,3'-Dichlorobenzidine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
3-Methylcholanthrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
3-Nitroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
4,6-Dinitro-2-methylphenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS



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Final Report

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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results									
Sample I.D.	Finding 12-1	Laboratory Sample ID: 17I0319-01							
Grab Date/Time:		09/08/2017 14:35							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
4-Bromophenyl phenyl ether	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
4-Chloroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
4-Chlorophenyl phenyl ether	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
4-Nitroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
4-Nitrophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
7,12-Dimethylbenz (a) anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Acenaphthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Acenaphthylene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Acetophenone	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Aniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Benzidine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Benzo (a) anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Benzo (a) pyrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Benzo (b) fluoranthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Benzo (g,h,i) perylene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Benzo (k) fluoranthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Benzoic acid	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Benzyl alcohol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
bis (2-Chloroethoxy) methane	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
bis (2-Chloroethyl) ether	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
2,2'-Oxybis (1-chloropropane)	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Butyl benzyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-1 Laboratory Sample ID: 17I0319-01

Grab Date/Time: 09/08/2017 14:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Dibenz (a,h) anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Dibenz (a,j) acridine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Dibenzofuran	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Diethyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Dimethyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Di-n-butyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Di-n-octyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Diphenylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Ethyl methanesulfonate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Fluoranthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Fluorene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Hexachlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Hexachlorobutadiene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Hexachlorocyclopentadiene	01	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Hexachloroethane	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Indeno (1,2,3-cd) pyrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Isophorone	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
m+p-Cresols	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Methyl methanesulfonate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Naphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Nitrobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
n-Nitrosodimethylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
n-Nitrosodi-n-butylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
n-Nitrosodi-n-propylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
n-Nitrosodiphenylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results									
Sample I.D.	Finding 12-1								
Grab Date/Time:			Laboratory Sample ID: 17I0319-01						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
o+m+p-Cresols	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
o-Cresol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
p-(Dimethylamino)azobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
p-Chloro-m-cresol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Pentachloronitrobenzene (quintozone)	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Pentachlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Phenacetin	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Phenanthrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Phenol	01	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Pronamide	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Pyrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
Pyridine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:07	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	01	SW8270D	29.1 %	S	35-125		09/14/17 09:50	09/18/17 23:07	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	01	SW8270D	21.3 %	S	45-105		09/14/17 09:50	09/18/17 23:07	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	01	SW8270D	7.48 %	S	35-105		09/14/17 09:50	09/18/17 23:07	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	01	SW8270D	11.9 %	S	35-100		09/14/17 09:50	09/18/17 23:07	SKS
<i>Surr: Phenol-d5 (Surr)</i>	01	SW8270D	13.0 %	S	40-100		09/14/17 09:50	09/18/17 23:07	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	01	SW8270D	49.7 %		30-125		09/14/17 09:50	09/18/17 23:07	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	01	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 20:52	09/21/17 20:52	LBH
PCB as Aroclor 1221	01	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 20:52	09/21/17 20:52	LBH
PCB as Aroclor 1232	01	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 20:52	09/21/17 20:52	LBH
PCB as Aroclor 1242	01	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 20:52	09/21/17 20:52	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results									
Sample I.D.	Finding 12-1								
Grab Date/Time:			Laboratory Sample ID: 17I0319-01						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	01	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 20:52	09/21/17 20:52	LBH
PCB as Aroclor 1254	01	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 20:52	09/21/17 20:52	LBH
PCB as Aroclor 1260	01	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 20:52	09/21/17 20:52	LBH
Surr: DCB	01	SW8082A	75.0 %		30-105		09/21/17 20:52	09/21/17 20:52	LBH
Surr: TCMX	01	SW8082A	45.0 %		30-105		09/21/17 20:52	09/21/17 20:52	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	01	SW7196A	<0.20 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT
Percent Solids	01	SM18 2540G	84.5 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results								
Sample I.D.	Finding 12-2	Laboratory Sample ID: 17I0319-02						
Grab Date/Time:		09/08/2017 14:40						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time Analyst

Metals (Total) by EPA 6000/7000 Series Methods

Silver	02	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:28	CWO
Aluminum	02RE1	SW6010C	18100 mg/kg		61.7	25	09/14/17 07:50	09/15/17 21:21	CWO
Arsenic	02	SW6010C	4.28 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:28	CWO
Barium	02	SW6010C	97.0 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:28	CWO
Beryllium	02	SW6010C	<0.200 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:28	CWO
Calcium	02RE2	SW6010C	922 mg/kg		49.4	10	09/14/17 07:50	09/19/17 16:46	CWO
Cadmium	02	SW6010C	1.64 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:28	CWO
Cobalt	02	SW6010C	11.5 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:28	CWO
Chromium	02	SW6010C	12.6 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:28	CWO
Copper	02	SW6010C	2.79 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:28	CWO
Iron	02RE1	SW6010C	28700 mg/kg		247	100	09/14/17 07:50	09/18/17 13:23	CWO
Mercury	02	SW7471B	0.009 mg/kg		0.008	1	09/12/17 13:00	09/13/17 12:25	RCV
Potassium	02	SW6010C	7400 mg/kg		25.0	1	09/14/17 07:50	09/15/17 18:16	CWO
Magnesium	02RE1	SW6010C	7240 mg/kg		61.7	25	09/14/17 07:50	09/15/17 21:21	CWO
Manganese	02	SW6010C	231 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:28	CWO
Sodium	02	SW6010C	29.7 mg/kg		25.0	1	09/14/17 07:50	09/15/17 18:16	CWO
Nickel	02	SW6010C	15.0 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:28	CWO
Lead	02	SW6010C	4.25 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:28	CWO
Antimony	02	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:28	CWO
Selenium	02	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:28	CWO
Thallium	02	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:28	CWO
Vanadium	02	SW6010C	17.7 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:28	CWO
Zinc	02	SW6010C	66.6 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:28	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	02	SW8270D SIM	Not Detected		500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-2 Laboratory Sample ID: 17I0319-02

Grab Date/Time: 09/08/2017 14:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
1,2-Dichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
1,2-Diphenylhydrazine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
1,3-Dichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
1,4-Dichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
1-Chloronaphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
1-Naphthylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2,3,4,6-Tetrachlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2,4,5-Trichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2,4,6-Trichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2,4-Dichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2,4-Dimethylphenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2,4-Dinitrophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2,4-Dinitrotoluene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2,6-Dichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2,6-Dinitrotoluene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2-Chloronaphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2-Chlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2-Methylnaphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2-Naphthylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2-Nitroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2-Nitrophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
3,3'-Dichlorobenzidine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
3-Methylcholanthrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
3-Nitroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
4,6-Dinitro-2-methylphenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results									
Sample I.D.	Finding 12-2	Laboratory Sample ID: 17I0319-02							
Grab Date/Time:		09/08/2017 14:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
4-Bromophenyl phenyl ether	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
4-Chloroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
4-Chlorophenyl phenyl ether	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
4-Nitroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
4-Nitrophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
7,12-Dimethylbenz (a) anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Acenaphthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Acenaphthylene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Acetophenone	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Aniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Benzidine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Benzo (a) anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Benzo (a) pyrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Benzo (b) fluoranthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Benzo (g,h,i) perylene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Benzo (k) fluoranthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Benzoic acid	02	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Benzyl alcohol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
bis (2-Chloroethoxy) methane	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
bis (2-Chloroethyl) ether	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
2,2'-Oxybis (1-chloropropane)	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
bis (2-Ethylhexyl) phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Butyl benzyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-2 Laboratory Sample ID: 17I0319-02

Grab Date/Time: 09/08/2017 14:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Dibenz (a,h) anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Dibenz (a,j) acridine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Dibenzofuran	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Diethyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Dimethyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Di-n-butyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Di-n-octyl phthalate	02	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Diphenylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Ethyl methanesulfonate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Fluoranthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Fluorene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Hexachlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Hexachlorobutadiene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Hexachlorocyclopentadiene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Hexachloroethane	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Indeno (1,2,3-cd) pyrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Isophorone	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
m+p-Cresols	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Methyl methanesulfonate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Naphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Nitrobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
n-Nitrosodimethylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
n-Nitrosodi-n-butylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
n-Nitrosodi-n-propylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
n-Nitrosodiphenylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-2 Laboratory Sample ID: 17I0319-02

Grab Date/Time: 09/08/2017 14:40

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
o+m+p-Cresols	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
o-Cresol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
p-(Dimethylamino)azobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
p-Chloro-m-cresol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Pentachloronitrobenzene (quintozone)	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Pentachlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Phenacetin	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Phenanthrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Phenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Pronamide	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Pyrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
Pyridine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/15/17 20:13	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	02	SW8270D	28.6 %	S	35-125		09/14/17 09:50	09/15/17 20:13	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	02	SW8270D	30.8 %	S	45-105		09/14/17 09:50	09/15/17 20:13	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	02	SW8270D	32.7 %	S	35-105		09/14/17 09:50	09/15/17 20:13	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	02	SW8270D	31.3 %	S	35-100		09/14/17 09:50	09/15/17 20:13	SKS
<i>Surr: Phenol-d5 (Surr)</i>	02	SW8270D	31.2 %	S	40-100		09/14/17 09:50	09/15/17 20:13	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	02	SW8270D	43.9 %		30-125		09/14/17 09:50	09/15/17 20:13	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	02	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 21:12	09/21/17 21:12	LBH
PCB as Aroclor 1221	02	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 21:12	09/21/17 21:12	LBH
PCB as Aroclor 1232	02	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 21:12	09/21/17 21:12	LBH
PCB as Aroclor 1242	02	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 21:12	09/21/17 21:12	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results									
Sample I.D.	Finding 12-2								
Grab Date/Time:			Laboratory Sample ID: 17I0319-02						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	02	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 21:12	09/21/17 21:12	LBH
PCB as Aroclor 1254	02	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 21:12	09/21/17 21:12	LBH
PCB as Aroclor 1260	02	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 21:12	09/21/17 21:12	LBH
Surr: DCB	02	SW8082A	65.0 %		30-105		09/21/17 21:12	09/21/17 21:12	LBH
Surr: TCMX	02	SW8082A	40.0 %		30-105		09/21/17 21:12	09/21/17 21:12	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	02	SW7196A	<0.20 mg/kg		0.20	1	09/15/17 17:03	09/21/17 14:35	CGT
Percent Solids	02	SM18 2540G	86.9 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-3 Laboratory Sample ID: 17I0319-03

Grab Date/Time: 09/08/2017 14:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	03	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:30	CWO
Aluminum	03RE1	SW6010C	26800 mg/kg	E	59.8	25	09/14/17 07:50	09/15/17 21:25	CWO
Arsenic	03	SW6010C	4.74 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:30	CWO
Barium	03	SW6010C	99.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:30	CWO
Beryllium	03	SW6010C	<0.200 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:30	CWO
Calcium	03RE1	SW6010C	12900 mg/kg		478	100	09/14/17 07:50	09/18/17 13:25	CWO
Cadmium	03	SW6010C	1.53 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:30	CWO
Cobalt	03	SW6010C	9.35 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:30	CWO
Chromium	03	SW6010C	19.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:30	CWO
Copper	03	SW6010C	9.87 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:30	CWO
Iron	03RE1	SW6010C	28800 mg/kg		239	100	09/14/17 07:50	09/18/17 13:25	CWO
Mercury	03	SW7471B	0.009 mg/kg		0.008	1	09/12/17 13:00	09/13/17 12:28	RCV
Potassium	03	SW6010C	7380 mg/kg		25.0	1	09/14/17 07:50	09/15/17 18:22	CWO
Magnesium	03RE1	SW6010C	7900 mg/kg		59.8	25	09/14/17 07:50	09/15/17 21:25	CWO
Manganese	03	SW6010C	249 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:30	CWO
Sodium	03	SW6010C	46.1 mg/kg		25.0	1	09/14/17 07:50	09/15/17 18:22	CWO
Nickel	03	SW6010C	10.1 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:30	CWO
Lead	03	SW6010C	4.51 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:30	CWO
Antimony	03	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:30	CWO
Selenium	03	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:30	CWO
Thallium	03	SW6010C	3.53 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:30	CWO
Vanadium	03	SW6010C	26.5 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:30	CWO
Zinc	03	SW6010C	59.4 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:30	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	03	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	03	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/18/17 23:38	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-3 Laboratory Sample ID: 17I0319-03

Grab Date/Time: 09/08/2017 14:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
1,2-Dichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
1,2-Diphenylhydrazine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
1,3-Dichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
1,4-Dichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
1-Chloronaphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
1-Naphthylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2,3,4,6-Tetrachlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2,4,5-Trichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2,4,6-Trichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2,4-Dichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2,4-Dimethylphenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2,4-Dinitrophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2,4-Dinitrotoluene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2,6-Dichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2,6-Dinitrotoluene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2-Chloronaphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2-Chlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2-Methylnaphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2-Naphthylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2-Nitroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2-Nitrophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
3,3'-Dichlorobenzidine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
3-Methylcholanthrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
3-Nitroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
4,6-Dinitro-2-methylphenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-3 Laboratory Sample ID: 17I0319-03

Grab Date/Time: 09/08/2017 14:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
4-Bromophenyl phenyl ether	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
4-Chloroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
4-Chlorophenyl phenyl ether	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
4-Nitroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
4-Nitrophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
7,12-Dimethylbenz (a) anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Acenaphthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Acenaphthylene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Acetophenone	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Aniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Benzidine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Benzo (a) anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Benzo (a) pyrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Benzo (b) fluoranthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Benzo (g,h,i) perylene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Benzo (k) fluoranthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Benzoic acid	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Benzyl alcohol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
bis (2-Chloroethoxy) methane	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
bis (2-Chloroethyl) ether	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
2,2'-Oxybis (1-chloropropane)	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
bis (2-Ethylhexyl) phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Butyl benzyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-3 Laboratory Sample ID: 17I0319-03

Grab Date/Time: 09/08/2017 14:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Dibenz (a,h) anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Dibenz (a,j) acridine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Dibenzofuran	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Diethyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Dimethyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Di-n-butyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Di-n-octyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Diphenylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Ethyl methanesulfonate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Fluoranthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Fluorene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Hexachlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Hexachlorobutadiene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Hexachlorocyclopentadiene	03	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Hexachloroethane	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Indeno (1,2,3-cd) pyrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Isophorone	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
m+p-Cresols	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Methyl methanesulfonate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Naphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Nitrobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
n-Nitrosodimethylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
n-Nitrosodi-n-butylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
n-Nitrosodi-n-propylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
n-Nitrosodiphenylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS



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Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-3 Laboratory Sample ID: 17I0319-03

Grab Date/Time: 09/08/2017 14:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Organic Compounds by GCMS

n-Nitrosopiperidine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
o+m+p-Cresols	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
o-Cresol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
p-(Dimethylamino)azobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
p-Chloro-m-cresol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Pentachloronitrobenzene (quintozone)	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Pentachlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Phenacetin	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Phenanthrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Phenol	03	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Pronamide	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Pyrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
Pyridine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/18/17 23:38	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	03	SW8270D	33.1 %	S	35-125		09/14/17 09:50	09/18/17 23:38	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	03	SW8270D	30.7 %	S	45-105		09/14/17 09:50	09/18/17 23:38	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	03	SW8270D	33.1 %	S	35-105		09/14/17 09:50	09/18/17 23:38	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	03	SW8270D	33.1 %	S	35-100		09/14/17 09:50	09/18/17 23:38	SKS
<i>Surr: Phenol-d5 (Surr)</i>	03	SW8270D	32.2 %	S	40-100		09/14/17 09:50	09/18/17 23:38	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	03	SW8270D	49.2 %		30-125		09/14/17 09:50	09/18/17 23:38	SKS

Organochlorine Pesticides and PCBs by GC/ECD

PCB as Aroclor 1016	03	SW8082A	<0.118 mg/kg dry	0.118	1	09/21/17 21:31	09/21/17 21:31	LBH
PCB as Aroclor 1221	03	SW8082A	<0.118 mg/kg dry	0.118	1	09/21/17 21:31	09/21/17 21:31	LBH
PCB as Aroclor 1232	03	SW8082A	<0.118 mg/kg dry	0.118	1	09/21/17 21:31	09/21/17 21:31	LBH
PCB as Aroclor 1242	03	SW8082A	<0.118 mg/kg dry	0.118	1	09/21/17 21:31	09/21/17 21:31	LBH



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Final Report

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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-3 Laboratory Sample ID: 17I0319-03

Grab Date/Time: 09/08/2017 14:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Organochlorine Pesticides and PCBs by GC/ECD

PCB as Aroclor 1248	03	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 21:31	09/21/17 21:31	LBH
PCB as Aroclor 1254	03	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 21:31	09/21/17 21:31	LBH
PCB as Aroclor 1260	03	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 21:31	09/21/17 21:31	LBH
Surr: DCB	03	SW8082A	60.0 %		30-105		09/21/17 21:31	09/21/17 21:31	LBH
Surr: TCMX	03	SW8082A	40.0 %		30-105		09/21/17 21:31	09/21/17 21:31	LBH

Wet Chemistry Analysis

Chromium, Hexavalent	03	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	03	SM18 2540G	83.9 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-4 Laboratory Sample ID: 17I0319-04

Grab Date/Time: 09/08/2017 14:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	04	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:32	CWO
Aluminum	04RE1	SW6010C	32400 mg/kg	E	60.7	25	09/14/17 07:50	09/15/17 21:29	CWO
Arsenic	04	SW6010C	5.26 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:32	CWO
Barium	04	SW6010C	100 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:32	CWO
Beryllium	04	SW6010C	<0.200 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:32	CWO
Calcium	04RE2	SW6010C	1580 mg/kg		48.5	10	09/14/17 07:50	09/19/17 16:52	CWO
Cadmium	04	SW6010C	1.48 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:32	CWO
Cobalt	04	SW6010C	15.8 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:32	CWO
Chromium	04	SW6010C	14.8 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:32	CWO
Copper	04	SW6010C	25.0 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:32	CWO
Iron	04RE1	SW6010C	34700 mg/kg		243	100	09/14/17 07:50	09/18/17 13:35	CWO
Mercury	04	SW7471B	0.010 mg/kg		0.008	1	09/12/17 13:00	09/13/17 12:31	RCV
Potassium	04	SW6010C	5250 mg/kg		25.0	1	09/14/17 07:50	09/15/17 18:29	CWO
Magnesium	04RE1	SW6010C	5640 mg/kg		60.7	25	09/14/17 07:50	09/15/17 21:29	CWO
Manganese	04	SW6010C	658 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:32	CWO
Sodium	04	SW6010C	42.9 mg/kg		25.0	1	09/14/17 07:50	09/15/17 18:29	CWO
Nickel	04	SW6010C	9.02 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:32	CWO
Lead	04	SW6010C	10.8 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:32	CWO
Antimony	04	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:32	CWO
Selenium	04	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:32	CWO
Thallium	04	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:32	CWO
Vanadium	04	SW6010C	27.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:32	CWO
Zinc	04	SW6010C	42.7 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:32	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	04	SW8270D SIM	Not Detected		500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-4 Laboratory Sample ID: 17I0319-04

Grab Date/Time: 09/08/2017 14:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
1,2-Dichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
1,2-Diphenylhydrazine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
1,3-Dichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
1,4-Dichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
1-Chloronaphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
1-Naphthylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2,3,4,6-Tetrachlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2,4,5-Trichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2,4,6-Trichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2,4-Dichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2,4-Dimethylphenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2,4-Dinitrophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2,4-Dinitrotoluene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2,6-Dichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2,6-Dinitrotoluene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2-Chloronaphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2-Chlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2-Methylnaphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2-Naphthylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2-Nitroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2-Nitrophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
3,3'-Dichlorobenzidine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
3-Methylcholanthrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
3-Nitroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
4,6-Dinitro-2-methylphenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS



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Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-4 Laboratory Sample ID: 17I0319-04

Grab Date/Time: 09/08/2017 14:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
4-Bromophenyl phenyl ether	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
4-Chloroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
4-Chlorophenyl phenyl ether	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
4-Nitroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
4-Nitrophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
7,12-Dimethylbenz (a) anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Acenaphthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Acenaphthylene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Acetophenone	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Aniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Benzidine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Benzo (a) anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Benzo (a) pyrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Benzo (b) fluoranthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Benzo (g,h,i) perylene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Benzo (k) fluoranthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Benzoic acid	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Benzyl alcohol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
bis (2-Chloroethoxy) methane	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
bis (2-Chloroethyl) ether	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
2,2'-Oxybis (1-chloropropane)	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
bis (2-Ethylhexyl) phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Butyl benzyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-4 Laboratory Sample ID: 17I0319-04

Grab Date/Time: 09/08/2017 14:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Dibenz (a,h) anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Dibenz (a,j) acridine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Dibenzofuran	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Diethyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Dimethyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Di-n-butyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Di-n-octyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Diphenylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Ethyl methanesulfonate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Fluoranthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Fluorene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Hexachlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Hexachlorobutadiene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Hexachlorocyclopentadiene	04	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Hexachloroethane	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Indeno (1,2,3-cd) pyrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Isophorone	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
m+p-Cresols	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Methyl methanesulfonate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Naphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Nitrobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
n-Nitrosodimethylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
n-Nitrosodi-n-butylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
n-Nitrosodi-n-propylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
n-Nitrosodiphenylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS



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Certificate of Analysis

Final Report

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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-4 Laboratory Sample ID: 17I0319-04

Grab Date/Time: 09/08/2017 14:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
o+m+p-Cresols	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
o-Cresol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
p-(Dimethylamino)azobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
p-Chloro-m-cresol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Pentachloronitrobenzene (quintozone)	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Pentachlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Phenacetin	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Phenanthrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Phenol	04	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Pronamide	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Pyrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
Pyridine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:09	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	04	SW8270D	36.6 %		35-125		09/14/17 09:50	09/19/17 00:09	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	04	SW8270D	32.2 %	S	45-105		09/14/17 09:50	09/19/17 00:09	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	04	SW8270D	30.0 %	S	35-105		09/14/17 09:50	09/19/17 00:09	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	04	SW8270D	30.3 %	S	35-100		09/14/17 09:50	09/19/17 00:09	SKS
<i>Surr: Phenol-d5 (Surr)</i>	04	SW8270D	32.2 %	S	40-100		09/14/17 09:50	09/19/17 00:09	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	04	SW8270D	54.6 %		30-125		09/14/17 09:50	09/19/17 00:09	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	04	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 21:51	09/21/17 21:51	LBH
PCB as Aroclor 1221	04	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 21:51	09/21/17 21:51	LBH
PCB as Aroclor 1232	04	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 21:51	09/21/17 21:51	LBH
PCB as Aroclor 1242	04	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 21:51	09/21/17 21:51	LBH



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-4 Laboratory Sample ID: 17I0319-04

Grab Date/Time: 09/08/2017 14:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Organochlorine Pesticides and PCBs by GC/ECD

PCB as Aroclor 1248	04	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 21:51	09/21/17 21:51	LBH
PCB as Aroclor 1254	04	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 21:51	09/21/17 21:51	LBH
PCB as Aroclor 1260	04	SW8082A	<0.118 mg/kg dry		0.118	1	09/21/17 21:51	09/21/17 21:51	LBH
Surr: DCB	04	SW8082A	75.0 %		30-105		09/21/17 21:51	09/21/17 21:51	LBH
Surr: TCMX	04	SW8082A	85.0 %		30-105		09/21/17 21:51	09/21/17 21:51	LBH

Wet Chemistry Analysis

Chromium, Hexavalent	04	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	04	SM18 2540G	84.7 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-5 Laboratory Sample ID: 17I0319-05

Grab Date/Time: 09/08/2017 14:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	05	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:34	CWO
Aluminum	05RE1	SW6010C	26300 mg/kg	E	57.1	25	09/14/17 07:50	09/15/17 21:33	CWO
Arsenic	05	SW6010C	4.10 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:34	CWO
Barium	05	SW6010C	76.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:34	CWO
Beryllium	05RE1	SW6010C	<0.365 mg/kg		0.365	2	09/14/17 07:50	09/19/17 17:47	CWO
Calcium	05RE2	SW6010C	721 mg/kg		45.7	10	09/14/17 07:50	09/19/17 16:54	CWO
Cadmium	05	SW6010C	1.63 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:34	CWO
Cobalt	05	SW6010C	10.3 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:34	CWO
Chromium	05	SW6010C	27.4 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:34	CWO
Copper	05	SW6010C	6.91 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:34	CWO
Iron	05RE1	SW6010C	26800 mg/kg		228	100	09/14/17 07:50	09/18/17 13:37	CWO
Mercury	05	SW7471B	<0.008 mg/kg		0.008	1	09/12/17 13:00	09/13/17 12:33	RCV
Potassium	05	SW6010C	5450 mg/kg		25.0	1	09/14/17 07:50	09/15/17 18:35	CWO
Magnesium	05RE1	SW6010C	5660 mg/kg		57.1	25	09/14/17 07:50	09/15/17 21:33	CWO
Manganese	05	SW6010C	193 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:34	CWO
Sodium	05	SW6010C	50.7 mg/kg		25.0	1	09/14/17 07:50	09/15/17 18:35	CWO
Nickel	05	SW6010C	12.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:34	CWO
Lead	05	SW6010C	11.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:34	CWO
Antimony	05	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:34	CWO
Selenium	05	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:34	CWO
Thallium	05	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:34	CWO
Vanadium	05	SW6010C	23.2 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:34	CWO
Zinc	05	SW6010C	58.6 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:34	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	05	SW8270D SIM	Not Detected		500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-5 Laboratory Sample ID: 17I0319-05

Grab Date/Time: 09/08/2017 14:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
1,2-Dichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
1,2-Diphenylhydrazine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
1,3-Dichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
1,4-Dichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
1-Chloronaphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
1-Naphthylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2,3,4,6-Tetrachlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2,4,5-Trichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2,4,6-Trichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2,4-Dichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2,4-Dimethylphenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2,4-Dinitrophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2,4-Dinitrotoluene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2,6-Dichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2,6-Dinitrotoluene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2-Chloronaphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2-Chlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2-Methylnaphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2-Naphthylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2-Nitroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2-Nitrophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
3,3'-Dichlorobenzidine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
3-Methylcholanthrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
3-Nitroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
4,6-Dinitro-2-methylphenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-5 Laboratory Sample ID: 17I0319-05

Grab Date/Time: 09/08/2017 14:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
4-Bromophenyl phenyl ether	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
4-Chloroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
4-Chlorophenyl phenyl ether	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
4-Nitroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
4-Nitrophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
7,12-Dimethylbenz (a) anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Acenaphthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Acenaphthylene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Acetophenone	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Aniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Benzidine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Benzo (a) anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Benzo (a) pyrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Benzo (b) fluoranthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Benzo (g,h,i) perylene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Benzo (k) fluoranthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Benzoic acid	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Benzyl alcohol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
bis (2-Chloroethoxy) methane	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
bis (2-Chloroethyl) ether	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
2,2'-Oxybis (1-chloropropane)	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
bis (2-Ethylhexyl) phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Butyl benzyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-5 Laboratory Sample ID: 17I0319-05

Grab Date/Time: 09/08/2017 14:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Dibenz (a,h) anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Dibenz (a,j) acridine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Dibenzofuran	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Diethyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Dimethyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Di-n-butyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Di-n-octyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Diphenylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Ethyl methanesulfonate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Fluoranthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Fluorene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Hexachlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Hexachlorobutadiene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Hexachlorocyclopentadiene	05	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Hexachloroethane	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Indeno (1,2,3-cd) pyrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Isophorone	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
m+p-Cresols	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Methyl methanesulfonate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Naphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Nitrobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
n-Nitrosodimethylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
n-Nitrosodi-n-butylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
n-Nitrosodi-n-propylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
n-Nitrosodiphenylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-5 Laboratory Sample ID: 17I0319-05

Grab Date/Time: 09/08/2017 14:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
o+m+p-Cresols	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
o-Cresol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
p-(Dimethylamino)azobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
p-Chloro-m-cresol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Pentachloronitrobenzene (quintozone)	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Pentachlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Phenacetin	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Phenanthrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Phenol	05	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Pronamide	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Pyrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
Pyridine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 00:39	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	05	SW8270D	38.2 %		35-125		09/14/17 09:50	09/19/17 00:39	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	05	SW8270D	33.4 %	S	45-105		09/14/17 09:50	09/19/17 00:39	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	05	SW8270D	31.7 %	S	35-105		09/14/17 09:50	09/19/17 00:39	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	05	SW8270D	32.4 %	S	35-100		09/14/17 09:50	09/19/17 00:39	SKS
<i>Surr: Phenol-d5 (Surr)</i>	05	SW8270D	34.7 %	S	40-100		09/14/17 09:50	09/19/17 00:39	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	05	SW8270D	50.2 %		30-125		09/14/17 09:50	09/19/17 00:39	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	05	SW8082A	<0.117 mg/kg dry		0.117	1	09/21/17 22:10	09/21/17 22:10	LBH
PCB as Aroclor 1221	05	SW8082A	<0.117 mg/kg dry		0.117	1	09/21/17 22:10	09/21/17 22:10	LBH
PCB as Aroclor 1232	05	SW8082A	<0.117 mg/kg dry		0.117	1	09/21/17 22:10	09/21/17 22:10	LBH
PCB as Aroclor 1242	05	SW8082A	<0.117 mg/kg dry		0.117	1	09/21/17 22:10	09/21/17 22:10	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results									
Sample I.D.	Finding 12-5								
Grab Date/Time:			Laboratory Sample ID: 17I0319-05						
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	05	SW8082A	<0.117 mg/kg dry		0.117	1	09/21/17 22:10	09/21/17 22:10	LBH
PCB as Aroclor 1254	05	SW8082A	<0.117 mg/kg dry		0.117	1	09/21/17 22:10	09/21/17 22:10	LBH
PCB as Aroclor 1260	05	SW8082A	<0.117 mg/kg dry		0.117	1	09/21/17 22:10	09/21/17 22:10	LBH
Surr: DCB	05	SW8082A	75.0 %		30-105		09/21/17 22:10	09/21/17 22:10	LBH
Surr: TCMX	05	SW8082A	80.0 %		30-105		09/21/17 22:10	09/21/17 22:10	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	05	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	05	SM18 2540G	85.8 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-6 Laboratory Sample ID: 17I0319-06

Grab Date/Time: 09/08/2017 15:00

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	06	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:36	CWO
Aluminum	06RE1	SW6010C	21500 mg/kg	E	57.3	25	09/14/17 07:50	09/15/17 21:37	CWO
Arsenic	06	SW6010C	3.73 mg/kg		1.00	1	09/14/17 07:50	09/18/17 17:36	CWO
Barium	06	SW6010C	95.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:36	CWO
Beryllium	06	SW6010C	<0.200 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:36	CWO
Calcium	06RE2	SW6010C	1250 mg/kg		45.9	10	09/14/17 07:50	09/19/17 17:05	CWO
Cadmium	06	SW6010C	1.48 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:36	CWO
Cobalt	06	SW6010C	9.39 mg/kg		0.200	1	09/14/17 07:50	09/18/17 17:36	CWO
Chromium	06	SW6010C	14.2 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:36	CWO
Copper	06	SW6010C	8.34 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:36	CWO
Iron	06RE1	SW6010C	25000 mg/kg		229	100	09/14/17 07:50	09/18/17 13:39	CWO
Mercury	06	SW7471B	0.025 mg/kg		0.008	1	09/12/17 13:00	09/13/17 12:36	RCV
Potassium	06	SW6010C	6520 mg/kg		25.0	1	09/14/17 07:50	09/15/17 18:41	CWO
Magnesium	06RE1	SW6010C	6390 mg/kg		57.3	25	09/14/17 07:50	09/15/17 21:37	CWO
Manganese	06	SW6010C	249 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:36	CWO
Sodium	06	SW6010C	35.1 mg/kg		25.0	1	09/14/17 07:50	09/15/17 18:41	CWO
Nickel	06	SW6010C	9.76 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:36	CWO
Lead	06	SW6010C	7.56 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:36	CWO
Antimony	06	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:50	09/18/17 17:36	CWO
Selenium	06	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:36	CWO
Thallium	06	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:50	09/18/17 17:36	CWO
Vanadium	06	SW6010C	21.3 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:36	CWO
Zinc	06	SW6010C	67.0 mg/kg		0.500	1	09/14/17 07:50	09/18/17 17:36	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	06	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/18/17 16:31	SKS
1,2,4,5-Tetrachlorobenzene	06	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/19/17 01:10	SKS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-6 Laboratory Sample ID: 17I0319-06

Grab Date/Time: 09/08/2017 15:00

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
1,2-Dichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
1,2-Diphenylhydrazine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
1,3-Dichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
1,4-Dichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
1-Chloronaphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
1-Naphthylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2,3,4,6-Tetrachlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2,4,5-Trichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2,4,6-Trichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2,4-Dichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2,4-Dimethylphenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2,4-Dinitrophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2,4-Dinitrotoluene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2,6-Dichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2,6-Dinitrotoluene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2-Chloronaphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2-Chlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2-Methylnaphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2-Naphthylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2-Nitroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2-Nitrophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
3,3'-Dichlorobenzidine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
3-Methylcholanthrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
3-Nitroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
4,6-Dinitro-2-methylphenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-6 Laboratory Sample ID: 17I0319-06

Grab Date/Time: 09/08/2017 15:00

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
4-Bromophenyl phenyl ether	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
4-Chloroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
4-Chlorophenyl phenyl ether	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
4-Nitroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
4-Nitrophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
7,12-Dimethylbenz (a) anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Acenaphthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Acenaphthylene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Acetophenone	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Aniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Benzidine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Benzo (a) anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Benzo (a) pyrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Benzo (b) fluoranthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Benzo (g,h,i) perylene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Benzo (k) fluoranthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Benzoic acid	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Benzyl alcohol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
bis (2-Chloroethoxy) methane	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
bis (2-Chloroethyl) ether	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
2,2'-Oxybis (1-chloropropane)	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
bis (2-Ethylhexyl) phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Butyl benzyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-6 Laboratory Sample ID: 17I0319-06

Grab Date/Time: 09/08/2017 15:00

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Dibenz (a,h) anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Dibenz (a,j) acridine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Dibenzofuran	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Diethyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Dimethyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Di-n-butyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Di-n-octyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Diphenylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Ethyl methanesulfonate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Fluoranthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Fluorene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Hexachlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Hexachlorobutadiene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Hexachlorocyclopentadiene	06	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Hexachloroethane	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Indeno (1,2,3-cd) pyrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Isophorone	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
m+p-Cresols	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Methyl methanesulfonate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Naphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Nitrobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
n-Nitrosodimethylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
n-Nitrosodi-n-butylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
n-Nitrosodi-n-propylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
n-Nitrosodiphenylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-6 Laboratory Sample ID: 17I0319-06

Grab Date/Time: 09/08/2017 15:00

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
o+m+p-Cresols	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
o-Cresol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
p-(Dimethylamino)azobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
p-Chloro-m-cresol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Pentachloronitrobenzene (quintozone)	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Pentachlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Phenacetin	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Phenanthrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Phenol	06	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Pronamide	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Pyrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
Pyridine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 01:10	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	06	SW8270D	38.4 %		35-125		09/14/17 09:50	09/19/17 01:10	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	06	SW8270D	33.7 %	S	45-105		09/14/17 09:50	09/19/17 01:10	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	06	SW8270D	33.0 %	S	35-105		09/14/17 09:50	09/19/17 01:10	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	06	SW8270D	31.9 %	S	35-100		09/14/17 09:50	09/19/17 01:10	SKS
<i>Surr: Phenol-d5 (Surr)</i>	06	SW8270D	32.5 %	S	40-100		09/14/17 09:50	09/19/17 01:10	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	06	SW8270D	52.7 %		30-125		09/14/17 09:50	09/19/17 01:10	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/21/17 22:29	09/21/17 22:29	LBH
PCB as Aroclor 1221	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/21/17 22:29	09/21/17 22:29	LBH
PCB as Aroclor 1232	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/21/17 22:29	09/21/17 22:29	LBH
PCB as Aroclor 1242	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/21/17 22:29	09/21/17 22:29	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0319

Analytical Results

Sample I.D. Finding 12-6 Laboratory Sample ID: 17I0319-06

Grab Date/Time: 09/08/2017 15:00

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Organochlorine Pesticides and PCBs by GC/ECD

PCB as Aroclor 1248	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/21/17 22:29	09/21/17 22:29	LBH
PCB as Aroclor 1254	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/21/17 22:29	09/21/17 22:29	LBH
PCB as Aroclor 1260	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/21/17 22:29	09/21/17 22:29	LBH
Surr: DCB	06	SW8082A	75.0 %		30-105		09/21/17 22:29	09/21/17 22:29	LBH
Surr: TCMX	06	SW8082A	70.0 %		30-105		09/21/17 22:29	09/21/17 22:29	LBH

Wet Chemistry Analysis

Chromium, Hexavalent	06	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	06	SM18 2540G	83.7 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Client Name: EEE Consulting (Blacksburg, VA)
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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results									
Sample I.D.		Laboratory Sample ID: 17I0320-01							
Grab Date/Time:		09/08/2017 08:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	01RE1	SW8015C	<0.50 mg/kg		0.50	1	09/13/17 17:05	09/13/17 17:05	LAO
Surr: 2,5-Dibromotoluene (FID)	01RE1	SW8015C	89.7 %		80-120		09/13/17 17:05	09/13/17 17:05	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	01RE1	SW8015C	22.2 mg/kg		10.0	1	09/19/17 15:30	09/21/17 17:46	CVH
Surr: Pentacosane (Surr)	01RE1	SW8015C	64.3 %		40-160		09/19/17 15:30	09/21/17 17:46	CVH



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 47-1 10-15 Laboratory Sample ID: 17I0320-02

Grab Date/Time: 09/08/2017 08:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	02	SW8015C	<0.12 mg/kg dry		0.12	1	09/13/17 15:56	09/13/17 15:56	LAO
Surr: 2,5-Dibromotoluene (FID)	02	SW8015C	106 %		80-120		09/13/17 15:56	09/13/17 15:56	LAO

Volatile Organic Compounds by GCMS

1,1,1,2-Tetrachloroethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,1,1-Trichloroethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,1,2,2-Tetrachloroethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,1,2-Trichloroethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,1-Dichloroethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,1-Dichloroethylene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,1-Dichloropropene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,2,3-Trichlorobenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,2,3-Trichloropropane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,2,4-Trichlorobenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,2,4-Trimethylbenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,2-Dibromo-3-chloropropane (DBCP)	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,2-Dibromoethane (EDB)	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,2-Dichlorobenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,2-Dichloroethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,2-Dichloropropane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,3,5-Trimethylbenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,3-Dichlorobenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,3-Dichloropropane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
1,4-Dichlorobenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
2,2-Dichloropropane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW



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Certificate of Analysis

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Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 47-1 10-15 Laboratory Sample ID: 17I0320-02

Grab Date/Time: 09/08/2017 08:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Organic Compounds by GCMS

2-Butanone (MEK)	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
2-Chlorotoluene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
2-Hexanone (MBK)	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
4-Chlorotoluene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
4-Isopropyltoluene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
4-Methyl-2-pentanone (MIBK)	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Acetone	02	SW8260B	16.4 ug/kg dry		12.2	1	09/12/17 12:34	09/12/17 12:34	JDW
Benzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Bromobenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Bromochloromethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Bromodichloromethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Bromoform	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Bromomethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Carbon disulfide	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Carbon tetrachloride	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Chlorobenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Chloroethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Chloroform	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Chloromethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
cis-1,2-Dichloroethylene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
cis-1,3-Dichloropropene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Dibromochloromethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Dibromomethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Dichlorodifluoromethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Di-isopropyl ether (DIPE)	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Ethylbenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results		Laboratory Sample ID: 17I0320-02							
Sample I.D.	47-1 10-15								
Grab Date/Time:		09/08/2017 08:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst

Volatile Organic Compounds by GCMS

Hexachlorobutadiene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Iodomethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Isopropylbenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
m+p-Xylenes	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Methylene chloride	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Methyl-t-butyl ether (MTBE)	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Naphthalene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
n-Butylbenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
n-Propylbenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
o-Xylene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
sec-Butylbenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Styrene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
tert-Butylbenzene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Tetrachloroethylene (PCE)	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Toluene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
trans-1,2-Dichloroethylene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
trans-1,3-Dichloropropene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Trichloroethylene	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Trichlorofluoromethane	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Vinyl acetate	02	SW8260B	<12.2 ug/kg dry		12.2	1	09/12/17 12:34	09/12/17 12:34	JDW
Vinyl chloride	02	SW8260B	<6.10 ug/kg dry		6.10	1	09/12/17 12:34	09/12/17 12:34	JDW
Xylenes, Total	02	SW8260B	<18.3 ug/kg dry		18.3	1	09/12/17 12:34	09/12/17 12:34	JDW
Surr: 1,2-Dichloroethane-d4 (Surr)	02	SW8260B	112 %		80-120		09/12/17 12:34	09/12/17 12:34	JDW
Surr: 4-Bromofluorobenzene (Surr)	02	SW8260B	98.0 %		85-120		09/12/17 12:34	09/12/17 12:34	JDW



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0320-02								
Grab Date/Time: 09/08/2017 08:55									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Surr: Dibromofluoromethane	02	SW8260B	98.4 %		80-119		09/12/17 12:34	09/12/17 12:34	JDW
(Surr)									
Surr: Toluene-d8 (Surr)	02	SW8260B	104 %		85-115		09/12/17 12:34	09/12/17 12:34	JDW
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	02	SW8015C	<10.8 mg/kg dry		10.8	1	09/19/17 15:30	09/20/17 19:18	CVH
Surr: Pentacosane (Surr)	02	SW8015C	75.0 %		40-160		09/19/17 15:30	09/20/17 19:18	CVH
Wet Chemistry Analysis									
Percent Solids	02	SM18 2540G	92.7 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/5/2017 13:11
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results									
Sample I.D.		Laboratory Sample ID: 17I0320-03							
Grab Date/Time:		09/08/2017 09:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	03	SW8015C	<0.10 mg/kg		0.10	1	09/13/17 11:55	09/13/17 11:55	LAO
Surr: 2,5-Dibromotoluene (FID)	03	SW8015C	94.4 %		80-120		09/13/17 11:55	09/13/17 11:55	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	03	SW8015C	<10.0 mg/kg		10.0	1	09/21/17 14:45	09/22/17 13:12	CVH
Surr: Pentacosane (Surr)	03	SW8015C	60.4 %		40-160		09/21/17 14:45	09/22/17 13:12	CVH



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0320-04								
Grab Date/Time:	09/08/2017 09:20								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	04	SW8015C	<0.12 mg/kg dry		0.12	1	09/13/17 16:19	09/13/17 16:19	LAO
Surr: 2,5-Dibromotoluene (FID)	04	SW8015C	111 %		80-120		09/13/17 16:19	09/13/17 16:19	LAO
Volatile Organic Compounds by GCMS									
1,1,1,2-Tetrachloroethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,1,1-Trichloroethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,1,2,2-Tetrachloroethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,1,2-Trichloroethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,1-Dichloroethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,1-Dichloroethylene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,1-Dichloropropene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,2,3-Trichlorobenzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,2,3-Trichloropropane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,2,4-Trichlorobenzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,2,4-Trimethylbenzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,2-Dibromo-3-chloropropane (DBCP)	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,2-Dibromoethane (EDB)	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,2-Dichlorobenzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,2-Dichloroethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,2-Dichloropropane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,3,5-Trimethylbenzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,3-Dichlorobenzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,3-Dichloropropane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
1,4-Dichlorobenzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
2,2-Dichloropropane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 47-2 16-17 Laboratory Sample ID: 17I0320-04

Grab Date/Time: 09/08/2017 09:20

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Organic Compounds by GCMS

2-Butanone (MEK)	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
2-Chlorotoluene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
2-Hexanone (MBK)	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
4-Chlorotoluene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
4-Isopropyltoluene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
4-Methyl-2-pentanone (MIBK)	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Acetone	04	SW8260B	16.5 ug/kg dry		11.3	1	09/12/17 12:57	09/12/17 12:57	JDW
Benzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Bromobenzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Bromochloromethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Bromodichloromethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Bromoform	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Bromomethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Carbon disulfide	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Carbon tetrachloride	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Chlorobenzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Chloroethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Chloroform	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Chloromethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
cis-1,2-Dichloroethylene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
cis-1,3-Dichloropropene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Dibromochloromethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Dibromomethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Dichlorodifluoromethane	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Di-isopropyl ether (DIPE)	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Ethylbenzene	04	SW8260B	<5.66 ug/kg dry		5.66	1	09/12/17 12:57	09/12/17 12:57	JDW



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results		Laboratory Sample ID: 17I0320-04							
Sample I.D.	47-2 16-17								
Grab Date/Time:		09/08/2017 09:20							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst

Volatile Organic Compounds by GCMS

Hexachlorobutadiene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Iodomethane	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Isopropylbenzene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
m+p-Xylenes	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Methylene chloride	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Methyl-t-butyl ether (MTBE)	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Naphthalene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
n-Butylbenzene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
n-Propylbenzene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
o-Xylene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
sec-Butylbenzene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Styrene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
tert-Butylbenzene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Tetrachloroethylene (PCE)	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Toluene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
trans-1,2-Dichloroethylene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
trans-1,3-Dichloropropene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Trichloroethylene	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Trichlorofluoromethane	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Vinyl acetate	04	SW8260B	<11.3 ug/kg dry	11.3	1	09/12/17 12:57	09/12/17 12:57	JDW
Vinyl chloride	04	SW8260B	<5.66 ug/kg dry	5.66	1	09/12/17 12:57	09/12/17 12:57	JDW
Xylenes, Total	04	SW8260B	<17.0 ug/kg dry	17.0	1	09/12/17 12:57	09/12/17 12:57	JDW
Surr: 1,2-Dichloroethane-d4 (Surr)	04	SW8260B	106 %	80-120		09/12/17 12:57	09/12/17 12:57	JDW
Surr: 4-Bromofluorobenzene (Surr)	04	SW8260B	97.7 %	85-120		09/12/17 12:57	09/12/17 12:57	JDW



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0320-04								
Grab Date/Time: 09/08/2017 09:20									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Surr: Dibromofluoromethane	04	SW8260B	99.1 %		80-119		09/12/17 12:57	09/12/17 12:57	JDW
(Surr)									
Surr: Toluene-d8 (Surr)	04	SW8260B	101 %		85-115		09/12/17 12:57	09/12/17 12:57	JDW
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	04	SW8015C	<10.9 mg/kg dry		10.9	1	09/21/17 14:45	09/22/17 13:38	CVH
Surr: Pentacosane (Surr)	04	SW8015C	76.1 %		40-160		09/21/17 14:45	09/22/17 13:38	CVH
Wet Chemistry Analysis									
Percent Solids	04	SM18 2540G	89.7 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results									
Sample I.D.		Laboratory Sample ID: 17I0320-05							
Grab Date/Time:		09/08/2017 09:50							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Hydrocarbons by GC									
TPH-Volatiles (GRO)	05RE1	SW8015C	<0.50 mg/kg		0.50	1	09/13/17 17:28	09/13/17 17:28	LAO
Surr: 2,5-Dibromotoluene (FID)	05RE1	SW8015C	87.9 %		80-120		09/13/17 17:28	09/13/17 17:28	LAO
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	05	SW8015C	13.6 mg/kg		10.0	1	09/21/17 14:45	09/22/17 15:21	CVH
Surr: Pentacosane (Surr)	05	SW8015C	95.3 %		40-160		09/21/17 14:45	09/22/17 15:21	CVH



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 47-3 23-24 Laboratory Sample ID: 17I0320-06

Grab Date/Time: 09/08/2017 10:05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Hydrocarbons by GC

TPH-Volatiles (GRO)	06	SW8015C	<0.11 mg/kg dry		0.11	1	09/13/17 16:42	09/13/17 16:42	LAO
Surr: 2,5-Dibromotoluene (FID)	06	SW8015C	112 %		80-120		09/13/17 16:42	09/13/17 16:42	LAO

Volatile Organic Compounds by GCMS

1,1,1,2-Tetrachloroethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,1,1-Trichloroethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,1,2,2-Tetrachloroethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,1,2-Trichloroethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,1-Dichloroethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,1-Dichloroethylene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,1-Dichloropropene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,2,3-Trichlorobenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,2,3-Trichloropropane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,2,4-Trichlorobenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,2,4-Trimethylbenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,2-Dibromo-3-chloropropane (DBCP)	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,2-Dibromoethane (EDB)	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,2-Dichlorobenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,2-Dichloroethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,2-Dichloropropane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,3,5-Trimethylbenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,3-Dichlorobenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,3-Dichloropropane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
1,4-Dichlorobenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
2,2-Dichloropropane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 47-3 23-24 Laboratory Sample ID: 17I0320-06

Grab Date/Time: 09/08/2017 10:05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Volatile Organic Compounds by GCMS

2-Butanone (MEK)	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
2-Chlorotoluene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
2-Hexanone (MBK)	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
4-Chlorotoluene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
4-Isopropyltoluene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
4-Methyl-2-pentanone (MIBK)	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Acetone	06	SW8260B	31.4 ug/kg dry		10.4	1	09/12/17 13:21	09/12/17 13:21	JDW
Benzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Bromobenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Bromochloromethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Bromodichloromethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Bromoform	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Bromomethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Carbon disulfide	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Carbon tetrachloride	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Chlorobenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Chloroethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Chloroform	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Chloromethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
cis-1,2-Dichloroethylene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
cis-1,3-Dichloropropene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Dibromochloromethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Dibromomethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Dichlorodifluoromethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Di-isopropyl ether (DIPE)	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Ethylbenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results		Laboratory Sample ID: 17I0320-06							
Sample I.D.	47-3 23-24								
Grab Date/Time:		09/08/2017 10:05							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst

Volatile Organic Compounds by GCMS

Hexachlorobutadiene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Iodomethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Isopropylbenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
m+p-Xylenes	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Methylene chloride	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Methyl-t-butyl ether (MTBE)	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Naphthalene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
n-Butylbenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
n-Propylbenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
o-Xylene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
sec-Butylbenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Styrene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
tert-Butylbenzene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Tetrachloroethylene (PCE)	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Toluene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
trans-1,2-Dichloroethylene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
trans-1,3-Dichloropropene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Trichloroethylene	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Trichlorofluoromethane	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Vinyl acetate	06	SW8260B	<10.4 ug/kg dry		10.4	1	09/12/17 13:21	09/12/17 13:21	JDW
Vinyl chloride	06	SW8260B	<5.21 ug/kg dry		5.21	1	09/12/17 13:21	09/12/17 13:21	JDW
Xylenes, Total	06	SW8260B	<15.6 ug/kg dry		15.6	1	09/12/17 13:21	09/12/17 13:21	JDW
Surr: 1,2-Dichloroethane-d4 (Surr)	06	SW8260B	113 %		80-120		09/12/17 13:21	09/12/17 13:21	JDW
Surr: 4-Bromofluorobenzene (Surr)	06	SW8260B	98.8 %		85-120		09/12/17 13:21	09/12/17 13:21	JDW



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results									
Sample I.D. 47-3 23-24				Laboratory Sample ID: 17I0320-06					
Grab Date/Time: 09/08/2017 10:05									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds by GCMS									
Surr: Dibromofluoromethane	06	SW8260B	102 %		80-119		09/12/17 13:21	09/12/17 13:21	JDW
(Surr)									
Surr: Toluene-d8 (Surr)	06	SW8260B	104 %		85-115		09/12/17 13:21	09/12/17 13:21	JDW
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	06	SW8015C	<11.2 mg/kg dry		11.2	1	09/21/17 14:45	09/22/17 15:47	CVH
Surr: Pentacosane (Surr)	06	SW8015C	65.9 %		40-160		09/21/17 14:45	09/22/17 15:47	CVH
Wet Chemistry Analysis									
Percent Solids	06	SM18 2540G	89.3 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/5/2017 13:11
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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 47-4 0-5 Laboratory Sample ID: 17I0320-07

Grab Date/Time: 09/08/2017 10:25

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	07	SW8015C	<10.0 mg/kg		10.0	1	09/21/17 14:45	09/22/17 16:13	CVH
<i>Surr: Pentacosane (Surr)</i>	07	SW8015C	48.5 %		40-160		09/21/17 14:45	09/22/17 16:13	CVH



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 47-4 22-23 Laboratory Sample ID: 17I0320-08

Grab Date/Time: 09/08/2017 10:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	08	SW8015C	<10.0 mg/kg		10.0	1	09/21/17 14:45	09/22/17 16:39	CVH
<i>Surr: Pentacosane (Surr)</i>	08	SW8015C	60.3 %		40-160		09/21/17 14:45	09/22/17 16:39	CVH



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Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/5/2017 13:11
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results									
Sample I.D.	47-5 0-5	Laboratory Sample ID:						17I0320-09	
Grab Date/Time:		09/08/2017 10:40							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	09	SW8015C	<10.0 mg/kg		10.0	1	09/21/17 14:45	09/22/17 17:05	CVH
<i>Surr: Pentacosane (Surr)</i>	09	SW8015C	78.2 %		40-160		09/21/17 14:45	09/22/17 17:05	CVH



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Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 47-5 20-23 Laboratory Sample ID: 17I0320-10

Grab Date/Time: 09/08/2017 10:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	10	SW8015C	<10.0 mg/kg		10.0	1	09/21/17 14:45	09/22/17 17:30	CVH
Surr: Pentacosane (Surr)	10	SW8015C	73.1 %		40-160		09/21/17 14:45	09/22/17 17:30	CVH



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Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/5/2017 13:11
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results									
Sample I.D.	53-1 0-5	Laboratory Sample ID:						17I0320-11	
Grab Date/Time:		09/08/2017 10:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Hydrocarbons by GC									
TPH-Semi-Volatiles (DRO)	11	SW8015C	<10.0 mg/kg		10.0	1	09/21/17 14:45	09/22/17 17:56	CVH
<i>Surr: Pentacosane (Surr)</i>	11	SW8015C	62.9 %		40-160		09/21/17 14:45	09/22/17 17:56	CVH



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 53-1 13-14 Laboratory Sample ID: 17I0320-12

Grab Date/Time: 09/08/2017 11:00

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Semivolatile Hydrocarbons by GC

TPH-Semi-Volatiles (DRO)	12	SW8015C	68.0 mg/kg		10.0	1	09/21/17 14:45	09/22/17 14:04	CVH
Surr: Pentacosane (Surr)	12	SW8015C	76.1 %		40-160		09/21/17 14:45	09/22/17 14:04	CVH



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Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 45-5A Spilled Material Laboratory Sample ID: 17I0320-13

Grab Date/Time: 09/08/2017 11:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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TCLP Metals by 6000/7000 Series Methods

TCLP Silver	13	SW6010C	<0.100 mg/L	0.100	1	09/15/17 08:30	09/15/17 16:20	CWO
TCLP Arsenic	13	SW6010C	<0.100 mg/L	0.100	1	09/15/17 08:30	09/15/17 16:21	CWO
TCLP Barium	13	SW6010C	<5.00 mg/L	5.00	1	09/15/17 08:30	09/15/17 16:21	CWO
TCLP Cadmium	13	SW6010C	<0.0400 mg/L	0.0400	1	09/15/17 08:30	09/15/17 16:21	CWO
TCLP Chromium	13	SW6010C	<0.100 mg/L	0.100	1	09/15/17 08:30	09/15/17 16:21	CWO
TCLP Mercury	13	SW7470A	<0.008 mg/L	0.008	1	09/15/17 10:30	09/18/17 10:21	RCV
TCLP Lead	13	SW6010C	5.40 mg/L	0.100	1	09/15/17 08:30	09/15/17 16:21	CWO
TCLP Selenium	13	SW6010C	<0.250 mg/L	0.250	1	09/15/17 08:30	09/15/17 16:21	CWO
TCLP Extraction Fluid, Metals	13	SW1311	2 #	--	1	09/14/17 15:48	09/15/17 08:22	RCV

TCLP Volatile Organic Compounds by GCMS

TCLP Extraction Fluid, ZHE	13	SW1311	1 #	--	1	09/13/17 15:00	09/14/17 16:57	KCS
TCLP 1,1-Dichloroethylene	13	SW8260B	<0.02 mg/L	0.02	1	09/14/17 00:00	09/14/17 16:37	KCS
TCLP 1,2-Dichloroethane	13	SW8260B	<0.02 mg/L	0.02	1	09/14/17 00:00	09/14/17 16:37	KCS
TCLP 1,4-Dichlorobenzene	13	SW8260B	<0.02 mg/L	0.02	1	09/14/17 00:00	09/14/17 16:37	KCS
TCLP 2-Butanone (MEK)	13	SW8260B	<0.20 mg/L	0.20	1	09/14/17 00:00	09/14/17 16:37	KCS
TCLP Benzene	13	SW8260B	<0.02 mg/L	0.02	1	09/14/17 00:00	09/14/17 16:37	KCS
TCLP Carbon tetrachloride	13	SW8260B	<0.02 mg/L	0.02	1	09/14/17 00:00	09/14/17 16:37	KCS
TCLP Chlorobenzene	13	SW8260B	<0.02 mg/L	0.02	1	09/14/17 00:00	09/14/17 16:37	KCS
TCLP Chloroform	13	SW8260B	<0.02 mg/L	0.02	1	09/14/17 00:00	09/14/17 16:37	KCS
TCLP Tetrachloroethylene (PCE)	13	SW8260B	<0.02 mg/L	0.02	1	09/14/17 00:00	09/14/17 16:37	KCS
TCLP Trichloroethylene	13	SW8260B	<0.02 mg/L	0.02	1	09/14/17 00:00	09/14/17 16:37	KCS
TCLP Vinyl chloride	13	SW8260B	<0.02 mg/L	0.02	1	09/14/17 00:00	09/14/17 16:37	KCS
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	13	SW8260B	108 %	70-120		09/14/17 00:00	09/14/17 16:37	KCS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 45-5A Spilled Material Laboratory Sample ID: 17I0320-13

Grab Date/Time: 09/08/2017 11:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
TCLP Volatile Organic Compounds by GCMS									
Surr: 4-Bromofluorobenzene (Surr)	13	SW8260B	94.6 %		75-120		09/14/17 00:00	09/14/17 16:37	KCS
Surr: Dibromofluoromethane (Surr)	13	SW8260B	106 %		80-119		09/14/17 00:00	09/14/17 16:37	KCS
Surr: Toluene-d8 (Surr)	13	SW8260B	100 %		85-120		09/14/17 00:00	09/14/17 16:37	KCS
TCLP Semivolatile Organic Compounds									
TCLP Extraction Fluid, SV Organics	13	SW1311	2 #	--	1		09/14/17 15:48	09/14/17 15:48	PMP
TCLP Semivolatile Organic Compounds by GCMS									
TCLP 2,4,5-Trichlorophenol	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP 2,4,6-Trichlorophenol	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP 2,4-Dinitrotoluene	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP Hexachlorobenzene	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP Hexachlorobutadiene	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP Hexachloroethane	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP m+p-Cresols	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP Nitrobenzene	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP o+m+p-Cresols	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP o-Cresol	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP Pentachlorophenol	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
TCLP Pyridine	13	SW8270D	<0.02 mg/L		0.02	1	09/20/17 09:25	09/20/17 20:09	SKS
Surr: 2,4,6-Tribromophenol (Surr)	13	SW8270D	83.2 %		20-86		09/20/17 09:25	09/20/17 20:09	SKS
Surr: 2-Fluorobiphenyl (Surr)	13	SW8270D	66.6 %		23-87		09/20/17 09:25	09/20/17 20:09	SKS
Surr: 2-Fluorophenol (Surr)	13	SW8270D	39.5 %		10-52		09/20/17 09:25	09/20/17 20:09	SKS
Surr: Nitrobenzene-d5 (Surr)	13	SW8270D	71.7 %		10-98.5		09/20/17 09:25	09/20/17 20:09	SKS
Surr: Phenol-d5 (Surr)	13	SW8270D	31.1 %		5-33		09/20/17 09:25	09/20/17 20:09	SKS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0320

Analytical Results

Sample I.D. 45-5A Spilled Material Laboratory Sample ID: 17I0320-13

Grab Date/Time: 09/08/2017 11:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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TCLP Semivolatile Organic Compounds by GCMS

Surr: p-Terphenyl-d14 (Surr)	13	SW8270D	87.3 %		27-133		09/20/17 09:25	09/20/17 20:09	SKS
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TCLP Organochlorine Herbicides by GC/ECD

TCLP 2,4,5-TP (Silvex)	13	SW8151A	<0.0005 mg/L		0.0005	1	09/18/17 14:15	09/20/17 19:37	CVH
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TCLP 2,4-D	13	SW8151A	<0.001 mg/L		0.001	1	09/18/17 14:15	09/20/17 19:37	CVH
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Surr: DCAA (Surr)	13	SW8151A	95.0 %		60-112		09/18/17 14:15	09/20/17 19:37	CVH
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TCLP Organochlorine Pesticides and PCBs by GC/ECD

TCLP Chlordane	13	SW8081B	<0.030 mg/L		0.030	1	09/18/17 16:39	09/18/17 16:39	LBH
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TCLP Endrin	13	SW8081B	<0.005 mg/L	C	0.005	1	09/18/17 16:39	09/18/17 16:39	LBH
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TCLP gamma-BHC (Lindane)	13	SW8081B	<0.005 mg/L		0.005	1	09/18/17 16:39	09/18/17 16:39	LBH
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TCLP Heptachlor	13	SW8081B	<0.005 mg/L		0.005	1	09/18/17 16:39	09/18/17 16:39	LBH
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TCLP Heptachlor Epoxide	13	SW8081B	<0.005 mg/L		0.005	1	09/18/17 16:39	09/18/17 16:39	LBH
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TCLP Methoxychlor	13	SW8081B	<0.005 mg/L		0.005	1	09/18/17 16:39	09/18/17 16:39	LBH
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TCLP Toxaphene	13	SW8081B	<0.500 mg/L		0.500	1	09/18/17 16:39	09/18/17 16:39	LBH
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Surr: TCMX	13	SW8081B	35.0 %		18-112		09/18/17 16:39	09/18/17 16:39	LBH
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Surr: DCB	13	SW8081B	60.0 %		27-131		09/18/17 16:39	09/18/17 16:39	LBH
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Final Report

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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-1 Laboratory Sample ID: 17I0322-01

Grab Date/Time: 09/11/2017 09:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	01	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:45	09/18/17 14:03	CWO
Aluminum	01RE1	SW6010C	26400 mg/kg	E	62.1	25	09/14/17 07:45	09/18/17 14:18	CWO
Arsenic	01	SW6010C	4.26 mg/kg		1.00	1	09/14/17 07:45	09/18/17 14:03	CWO
Barium	01	SW6010C	85.0 mg/kg		0.500	1	09/14/17 07:45	09/18/17 14:03	CWO
Beryllium	01	SW6010C	<0.497 mg/kg		0.497	1	09/14/17 07:45	09/18/17 14:02	CWO
Calcium	01RE1	SW6010C	970 mg/kg		124	25	09/14/17 07:45	09/18/17 14:18	CWO
Cadmium	01	SW6010C	1.60 mg/kg		0.200	1	09/14/17 07:45	09/18/17 14:03	CWO
Cobalt	01	SW6010C	9.09 mg/kg		0.200	1	09/14/17 07:45	09/18/17 14:03	CWO
Chromium	01	SW6010C	16.3 mg/kg		0.500	1	09/14/17 07:45	09/18/17 14:03	CWO
Copper	01	SW6010C	12.9 mg/kg		2.50	1	09/14/17 07:45	09/18/17 14:03	CWO
Iron	01RE1	SW6010C	26400 mg/kg		249	100	09/14/17 07:45	09/19/17 16:05	CWO
Mercury	01	SW7471B	0.039 mg/kg		0.008	1	09/18/17 10:30	09/19/17 10:19	RCV
Potassium	01	SW6010C	4340 mg/kg		25.0	1	09/14/17 07:45	09/18/17 15:09	CWO
Magnesium	01RE1	SW6010C	3340 mg/kg		62.1	25	09/14/17 07:45	09/18/17 14:18	CWO
Manganese	01	SW6010C	233 mg/kg		0.500	1	09/14/17 07:45	09/18/17 14:03	CWO
Sodium	01	SW6010C	38.7 mg/kg		25.0	1	09/14/17 07:45	09/18/17 15:09	CWO
Nickel	01	SW6010C	9.34 mg/kg		0.500	1	09/14/17 07:45	09/18/17 14:03	CWO
Lead	01	SW6010C	11.0 mg/kg		0.500	1	09/14/17 07:45	09/18/17 14:03	CWO
Antimony	01	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:45	09/18/17 14:03	CWO
Selenium	01	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 14:03	CWO
Thallium	01	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 14:03	CWO
Vanadium	01	SW6010C	32.1 mg/kg		0.500	1	09/14/17 07:45	09/18/17 14:03	CWO
Zinc	01	SW6010C	67.2 mg/kg		0.500	1	09/14/17 07:45	09/18/17 14:03	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	01	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/19/17 14:27	SKS
1,2,4,5-Tetrachlorobenzene	01	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/19/17 14:27	SKS



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-1 Laboratory Sample ID: 17I0322-01

Grab Date/Time: 09/11/2017 09:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
1,2-Dichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
1,2-Diphenylhydrazine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
1,3-Dichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
1,4-Dichlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
1-Chloronaphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
1-Naphthylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2,3,4,6-Tetrachlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2,4,5-Trichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2,4,6-Trichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2,4-Dichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2,4-Dimethylphenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2,4-Dinitrophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2,4-Dinitrotoluene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2,6-Dichlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2,6-Dinitrotoluene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2-Chloronaphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2-Chlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2-Methylnaphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2-Naphthylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2-Nitroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2-Nitrophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
3,3'-Dichlorobenzidine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
3-Methylcholanthrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
3-Nitroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
4,6-Dinitro-2-methylphenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS



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Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-1 Laboratory Sample ID: 17I0322-01

Grab Date/Time: 09/11/2017 09:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
4-Bromophenyl phenyl ether	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
4-Chloroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
4-Chlorophenyl phenyl ether	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
4-Nitroaniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
4-Nitrophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
7,12-Dimethylbenz (a)anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Acenaphthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Acenaphthylene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Acetophenone	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Aniline	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Benzidine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Benzo (a) anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Benzo (a) pyrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Benzo (b) fluoranthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Benzo (g,h,i) perylene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Benzo (k) fluoranthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Benzoic acid	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Benzyl alcohol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
bis (2-Chloroethoxy) methane	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
bis (2-Chloroethyl) ether	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
2,2'-Oxybis(1-chloropropane)	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Butyl benzyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-01								
Grab Date/Time:	09/11/2017 09:45								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Dibenz (a,h) anthracene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Dibenz (a,j) acridine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Dibenzofuran	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Diethyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Dimethyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Di-n-butyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Di-n-octyl phthalate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Diphenylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Ethyl methanesulfonate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Fluoranthene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Fluorene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Hexachlorobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Hexachlorobutadiene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Hexachlorocyclopentadiene	01	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Hexachloroethane	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Indeno (1,2,3-cd) pyrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Isophorone	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
m+p-Cresols	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Methyl methanesulfonate	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Naphthalene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Nitrobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
n-Nitrosodimethylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
n-Nitrosodi-n-butylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
n-Nitrosodi-n-propylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
n-Nitrosodiphenylamine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-1 Laboratory Sample ID: 17I0322-01

Grab Date/Time: 09/11/2017 09:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
o+m+p-Cresols	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
o-Cresol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
p-(Dimethylamino)azobenzene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
p-Chloro-m-cresol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Pentachloronitrobenzene (quintozone)	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Pentachlorophenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Phenacetin	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Phenanthrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Phenol	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Pronamide	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Pyrene	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
Pyridine	01	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:27	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	01	SW8270D	30.6 %	S	35-125		09/14/17 09:50	09/19/17 14:27	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	01	SW8270D	31.0 %	S	45-105		09/14/17 09:50	09/19/17 14:27	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	01	SW8270D	32.0 %	S	35-105		09/14/17 09:50	09/19/17 14:27	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	01	SW8270D	31.8 %	S	35-100		09/14/17 09:50	09/19/17 14:27	SKS
<i>Surr: Phenol-d5 (Surr)</i>	01	SW8270D	31.8 %	S	40-100		09/14/17 09:50	09/19/17 14:27	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	01	SW8270D	41.6 %		30-125		09/14/17 09:50	09/19/17 14:27	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	01	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 22:49	09/21/17 22:49	LBH
PCB as Aroclor 1221	01	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 22:49	09/21/17 22:49	LBH
PCB as Aroclor 1232	01	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 22:49	09/21/17 22:49	LBH
PCB as Aroclor 1242	01	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 22:49	09/21/17 22:49	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-01								
Grab Date/Time:		09/11/2017 09:45							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	01	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 22:49	09/21/17 22:49	LBH
PCB as Aroclor 1254	01	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 22:49	09/21/17 22:49	LBH
PCB as Aroclor 1260	01	SW8082A	<0.114 mg/kg dry		0.114	1	09/21/17 22:49	09/21/17 22:49	LBH
Surr: DCB	01	SW8082A	75.0 %		30-105		09/21/17 22:49	09/21/17 22:49	LBH
Surr: TCMX	01	SW8082A	70.0 %		30-105		09/21/17 22:49	09/21/17 22:49	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	01	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	01	SM18 2540G	83.8 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-2 Laboratory Sample ID: 17I0322-02

Grab Date/Time: 09/11/2017 09:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	02	SW6010C	0.514 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:38	CWO
Aluminum	02RE1	SW6010C	12800 mg/kg		57.6	25	09/14/17 07:45	09/18/17 14:22	CWO
Arsenic	02	SW6010C	3.14 mg/kg		1.00	1	09/14/17 07:45	09/18/17 17:38	CWO
Barium	02	SW6010C	115 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:38	CWO
Beryllium	02RE1	SW6010C	<0.368 mg/kg		0.368	2	09/14/17 07:45	09/19/17 17:32	CWO
Calcium	02RE1	SW6010C	91600 mg/kg		921	200	09/14/17 07:45	09/19/17 16:07	CWO
Cadmium	02	SW6010C	1.39 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:38	CWO
Cobalt	02	SW6010C	8.79 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:38	CWO
Chromium	02	SW6010C	9.43 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:38	CWO
Copper	02	SW6010C	22.3 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:38	CWO
Iron	02RE1	SW6010C	17400 mg/kg		57.6	25	09/14/17 07:45	09/18/17 14:22	CWO
Mercury	02RE1	SW7471B	0.081 mg/kg		0.008	1	09/18/17 10:30	09/19/17 11:58	RCV
Potassium	02	SW6010C	4200 mg/kg		25.0	1	09/14/17 07:45	09/18/17 15:29	CWO
Magnesium	02RE1	SW6010C	29800 mg/kg		460	200	09/14/17 07:45	09/19/17 16:07	CWO
Manganese	02	SW6010C	210 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:38	CWO
Sodium	02	SW6010C	221 mg/kg		25.0	1	09/14/17 07:45	09/18/17 15:29	CWO
Nickel	02	SW6010C	10.7 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:38	CWO
Lead	02	SW6010C	22.1 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:38	CWO
Antimony	02	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:45	09/18/17 17:38	CWO
Selenium	02	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:38	CWO
Thallium	02	SW6010C	3.71 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:38	CWO
Vanadium	02	SW6010C	29.8 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:38	CWO
Zinc	02	SW6010C	63.8 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:38	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	02	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/19/17 14:58	SKS
1,2,4,5-Tetrachlorobenzene	02	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/19/17 14:58	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-02								
Grab Date/Time:	09/11/2017 09:50								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
1,2-Dichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
1,2-Diphenylhydrazine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
1,3-Dichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
1,4-Dichlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
1-Chloronaphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
1-Naphthylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2,3,4,6-Tetrachlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2,4,5-Trichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2,4,6-Trichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2,4-Dichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2,4-Dimethylphenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2,4-Dinitrophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2,4-Dinitrotoluene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2,6-Dichlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2,6-Dinitrotoluene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2-Chloronaphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2-Chlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2-Methylnaphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2-Naphthylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2-Nitroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2-Nitrophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
3,3'-Dichlorobenzidine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
3-Methylcholanthrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
3-Nitroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
4,6-Dinitro-2-methylphenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-02								
Grab Date/Time:	09/11/2017 09:50								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
4-Bromophenyl phenyl ether	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
4-Chloroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
4-Chlorophenyl phenyl ether	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
4-Nitroaniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
4-Nitrophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
7,12-Dimethylbenz (a) anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Acenaphthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Acenaphthylene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Acetophenone	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Aniline	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Benzidine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Benzo (a) anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Benzo (a) pyrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Benzo (b) fluoranthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Benzo (g,h,i) perylene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Benzo (k) fluoranthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Benzoic acid	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Benzyl alcohol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
bis (2-Chloroethoxy) methane	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
bis (2-Chloroethyl) ether	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
2,2'-Oxybis (1-chloropropane)	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
bis (2-Ethylhexyl) phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Butyl benzyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-02								
Grab Date/Time:	09/11/2017 09:50								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Dibenz (a,h) anthracene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Dibenz (a,j) acridine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Dibenzofuran	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Diethyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Dimethyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Di-n-butyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Di-n-octyl phthalate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Diphenylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Ethyl methanesulfonate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Fluoranthene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Fluorene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Hexachlorobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Hexachlorobutadiene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Hexachlorocyclopentadiene	02	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Hexachloroethane	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Indeno (1,2,3-cd) pyrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Isophorone	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
m+p-Cresols	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Methyl methanesulfonate	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Naphthalene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Nitrobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
n-Nitrosodimethylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
n-Nitrosodi-n-butylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
n-Nitrosodi-n-propylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
n-Nitrosodiphenylamine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-2 Laboratory Sample ID: 17I0322-02

Grab Date/Time: 09/11/2017 09:50

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
o+m+p-Cresols	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
o-Cresol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
p-(Dimethylamino)azobenzene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
p-Chloro-m-cresol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Pentachloronitrobenzene (quintozone)	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Pentachlorophenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Phenacetin	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Phenanthrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Phenol	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Pronamide	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Pyrene	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
Pyridine	02	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 14:58	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	02	SW8270D	30.6 %	S	35-125		09/14/17 09:50	09/19/17 14:58	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	02	SW8270D	28.6 %	S	45-105		09/14/17 09:50	09/19/17 14:58	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	02	SW8270D	30.3 %	S	35-105		09/14/17 09:50	09/19/17 14:58	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	02	SW8270D	28.9 %	S	35-100		09/14/17 09:50	09/19/17 14:58	SKS
<i>Surr: Phenol-d5 (Surr)</i>	02	SW8270D	30.0 %	S	40-100		09/14/17 09:50	09/19/17 14:58	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	02	SW8270D	37.9 %		30-125		09/14/17 09:50	09/19/17 14:58	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	02	SW8082A	<0.116 mg/kg dry		0.116	1	09/21/17 23:08	09/21/17 23:08	LBH
PCB as Aroclor 1221	02	SW8082A	<0.116 mg/kg dry		0.116	1	09/21/17 23:08	09/21/17 23:08	LBH
PCB as Aroclor 1232	02	SW8082A	<0.116 mg/kg dry		0.116	1	09/21/17 23:08	09/21/17 23:08	LBH
PCB as Aroclor 1242	02	SW8082A	<0.116 mg/kg dry		0.116	1	09/21/17 23:08	09/21/17 23:08	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-02								
Grab Date/Time:		09/11/2017 09:50							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	02	SW8082A	<0.116 mg/kg dry		0.116	1	09/21/17 23:08	09/21/17 23:08	LBH
PCB as Aroclor 1254	02	SW8082A	<0.116 mg/kg dry		0.116	1	09/21/17 23:08	09/21/17 23:08	LBH
PCB as Aroclor 1260	02	SW8082A	<0.116 mg/kg dry		0.116	1	09/21/17 23:08	09/21/17 23:08	LBH
Surr: DCB	02	SW8082A	80.0 %		30-105		09/21/17 23:08	09/21/17 23:08	LBH
Surr: TCMX	02	SW8082A	90.0 %		30-105		09/21/17 23:08	09/21/17 23:08	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	02	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	02	SM18 2540G	80.7 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-3 Laboratory Sample ID: 17I0322-03

Grab Date/Time: 09/11/2017 09:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	03	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:40	CWO
Aluminum	03RE1	SW6010C	21200 mg/kg		61.6	25	09/14/17 07:45	09/18/17 14:26	CWO
Arsenic	03	SW6010C	5.87 mg/kg		1.00	1	09/14/17 07:45	09/18/17 17:40	CWO
Barium	03	SW6010C	146 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:40	CWO
Beryllium	03RE1	SW6010C	<0.394 mg/kg		0.394	2	09/14/17 07:45	09/19/17 17:34	CWO
Calcium	03RE1	SW6010C	9980 mg/kg		123	25	09/14/17 07:45	09/18/17 14:26	CWO
Cadmium	03	SW6010C	1.99 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:40	CWO
Cobalt	03	SW6010C	11.9 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:40	CWO
Chromium	03	SW6010C	17.2 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:40	CWO
Copper	03	SW6010C	38.8 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:40	CWO
Iron	03RE1	SW6010C	27800 mg/kg		247	100	09/14/17 07:45	09/19/17 16:09	CWO
Mercury	03	SW7471B	0.035 mg/kg		0.008	1	09/18/17 10:30	09/19/17 10:25	RCV
Potassium	03RE1	SW6010C	3710 mg/kg		616	25	09/14/17 07:45	09/18/17 14:24	CWO
Magnesium	03RE1	SW6010C	8920 mg/kg		61.6	25	09/14/17 07:45	09/18/17 14:26	CWO
Manganese	03	SW6010C	186 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:40	CWO
Sodium	03	SW6010C	125 mg/kg		25.0	1	09/14/17 07:45	09/18/17 15:35	CWO
Nickel	03	SW6010C	13.3 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:40	CWO
Lead	03	SW6010C	34.2 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:40	CWO
Antimony	03	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:45	09/18/17 17:40	CWO
Selenium	03	SW6010C	2.65 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:40	CWO
Thallium	03	SW6010C	2.67 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:40	CWO
Vanadium	03	SW6010C	46.2 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:40	CWO
Zinc	03	SW6010C	69.8 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:40	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	03	SW8270D SIM	Present	500	1	09/14/17 09:50	09/19/17 15:29	SKS
1,2,4,5-Tetrachlorobenzene	03	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/19/17 15:29	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-03								
Grab Date/Time:	09/11/2017 09:55								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
1,2-Dichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
1,2-Diphenylhydrazine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
1,3-Dichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
1,4-Dichlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
1-Chloronaphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
1-Naphthylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2,3,4,6-Tetrachlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2,4,5-Trichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2,4,6-Trichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2,4-Dichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2,4-Dimethylphenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2,4-Dinitrophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2,4-Dinitrotoluene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2,6-Dichlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2,6-Dinitrotoluene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2-Chloronaphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2-Chlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2-Methylnaphthalene	03	SW8270D	139 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2-Naphthylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2-Nitroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2-Nitrophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
3,3'-Dichlorobenzidine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
3-Methylcholanthrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
3-Nitroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
4,6-Dinitro-2-methylphenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-3 Laboratory Sample ID: 17I0322-03

Grab Date/Time: 09/11/2017 09:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
4-Bromophenyl phenyl ether	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
4-Chloroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
4-Chlorophenyl phenyl ether	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
4-Nitroaniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
4-Nitrophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
7,12-Dimethylbenz (a) anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Acenaphthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Acenaphthylene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Acetophenone	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Aniline	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Benzidine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Benzo (a) anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Benzo (a) pyrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Benzo (b) fluoranthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Benzo (g,h,i) perylene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Benzo (k) fluoranthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Benzoic acid	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Benzyl alcohol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
bis (2-Chloroethoxy) methane	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
bis (2-Chloroethyl) ether	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
2,2'-Oxybis (1-chloropropane)	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
bis (2-Ethylhexyl) phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Butyl benzyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-03								
Grab Date/Time:	09/11/2017 09:55								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Dibenz (a,h) anthracene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Dibenz (a,j) acridine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Dibenzofuran	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Diethyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Dimethyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Di-n-butyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Di-n-octyl phthalate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Diphenylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Ethyl methanesulfonate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Fluoranthene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Fluorene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Hexachlorobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Hexachlorobutadiene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Hexachlorocyclopentadiene	03	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Hexachloroethane	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Indeno (1,2,3-cd) pyrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Isophorone	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
m+p-Cresols	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Methyl methanesulfonate	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Naphthalene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Nitrobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
n-Nitrosodimethylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
n-Nitrosodi-n-butylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
n-Nitrosodi-n-propylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
n-Nitrosodiphenylamine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-3 Laboratory Sample ID: 17I0322-03

Grab Date/Time: 09/11/2017 09:55

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
o+m+p-Cresols	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
o-Cresol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
p-(Dimethylamino)azobenzene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
p-Chloro-m-cresol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Pentachloronitrobenzene (quintozone)	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Pentachlorophenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Phenacetin	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Phenanthrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Phenol	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Pronamide	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Pyrene	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
Pyridine	03	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 15:29	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	03	SW8270D	25.4 %	S	35-125		09/14/17 09:50	09/19/17 15:29	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	03	SW8270D	24.1 %	S	45-105		09/14/17 09:50	09/19/17 15:29	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	03	SW8270D	21.9 %	S	35-105		09/14/17 09:50	09/19/17 15:29	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	03	SW8270D	22.9 %	S	35-100		09/14/17 09:50	09/19/17 15:29	SKS
<i>Surr: Phenol-d5 (Surr)</i>	03	SW8270D	23.4 %	S	40-100		09/14/17 09:50	09/19/17 15:29	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	03	SW8270D	38.6 %		30-125		09/14/17 09:50	09/19/17 15:29	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	03	SW8082A	<0.119 mg/kg dry		0.119	1	09/21/17 23:28	09/21/17 23:28	LBH
PCB as Aroclor 1221	03	SW8082A	<0.119 mg/kg dry		0.119	1	09/21/17 23:28	09/21/17 23:28	LBH
PCB as Aroclor 1232	03	SW8082A	<0.119 mg/kg dry		0.119	1	09/21/17 23:28	09/21/17 23:28	LBH
PCB as Aroclor 1242	03	SW8082A	<0.119 mg/kg dry		0.119	1	09/21/17 23:28	09/21/17 23:28	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-03								
Grab Date/Time:		09/11/2017 09:55							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	03	SW8082A	<0.119 mg/kg dry		0.119	1	09/21/17 23:28	09/21/17 23:28	LBH
PCB as Aroclor 1254	03	SW8082A	<0.119 mg/kg dry		0.119	1	09/21/17 23:28	09/21/17 23:28	LBH
PCB as Aroclor 1260	03	SW8082A	<0.119 mg/kg dry		0.119	1	09/21/17 23:28	09/21/17 23:28	LBH
Surr: DCB	03	SW8082A	80.0 %		30-105		09/21/17 23:28	09/21/17 23:28	LBH
Surr: TCMX	03	SW8082A	80.0 %		30-105		09/21/17 23:28	09/21/17 23:28	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	03	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	03	SM18 2540G	81.5 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-04								
Grab Date/Time:	09/11/2017 10:00								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	04	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:42	CWO
Aluminum	04RE1	SW6010C	32700 mg/kg	E	60.0	25	09/14/17 07:45	09/18/17 14:29	CWO
Arsenic	04	SW6010C	4.67 mg/kg		1.00	1	09/14/17 07:45	09/18/17 17:42	CWO
Barium	04	SW6010C	108 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:42	CWO
Beryllium	04	SW6010C	<0.200 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:42	CWO
Calcium	04RE1	SW6010C	1090 mg/kg		120	25	09/14/17 07:45	09/18/17 14:29	CWO
Cadmium	04	SW6010C	1.86 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:42	CWO
Cobalt	04	SW6010C	14.3 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:42	CWO
Chromium	04	SW6010C	22.6 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:42	CWO
Copper	04	SW6010C	19.2 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:42	CWO
Iron	04RE1	SW6010C	27900 mg/kg		240	100	09/14/17 07:45	09/19/17 16:10	CWO
Mercury	04	SW7471B	0.038 mg/kg		0.008	1	09/18/17 10:30	09/19/17 10:33	RCV
Potassium	04RE1	SW6010C	9600 mg/kg		600	25	09/14/17 07:45	09/18/17 14:28	CWO
Magnesium	04RE1	SW6010C	8150 mg/kg		60.0	25	09/14/17 07:45	09/18/17 14:29	CWO
Manganese	04	SW6010C	328 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:42	CWO
Sodium	04	SW6010C	46.0 mg/kg		25.0	1	09/14/17 07:45	09/18/17 15:59	CWO
Nickel	04	SW6010C	14.4 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:42	CWO
Lead	04	SW6010C	33.0 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:42	CWO
Antimony	04	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:45	09/18/17 17:42	CWO
Selenium	04	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:42	CWO
Thallium	04	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:42	CWO
Vanadium	04	SW6010C	30.0 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:42	CWO
Zinc	04	SW6010C	99.5 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:42	CWO
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	04	SW8270D SIM	Not Detected		500	1	09/14/17 09:50	09/19/17 16:01	SKS
1,2,4,5-Tetrachlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-04								
Grab Date/Time:	09/11/2017 10:00								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
1,2-Dichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
1,2-Diphenylhydrazine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
1,3-Dichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
1,4-Dichlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
1-Chloronaphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
1-Naphthylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2,3,4,6-Tetrachlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2,4,5-Trichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2,4,6-Trichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2,4-Dichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2,4-Dimethylphenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2,4-Dinitrophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2,4-Dinitrotoluene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2,6-Dichlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2,6-Dinitrotoluene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2-Chloronaphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2-Chlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2-Methylnaphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2-Naphthylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2-Nitroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2-Nitrophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
3,3'-Dichlorobenzidine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
3-Methylcholanthrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
3-Nitroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
4,6-Dinitro-2-methylphenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-04								
Grab Date/Time:	09/11/2017 10:00								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
4-Bromophenyl phenyl ether	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
4-Chloroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
4-Chlorophenyl phenyl ether	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
4-Nitroaniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
4-Nitrophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
7,12-Dimethylbenz (a) anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Acenaphthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Acenaphthylene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Acetophenone	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Aniline	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Benzidine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Benzo (a) anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Benzo (a) pyrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Benzo (b) fluoranthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Benzo (g,h,i) perylene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Benzo (k) fluoranthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Benzoic acid	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Benzyl alcohol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
bis (2-Chloroethoxy) methane	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
bis (2-Chloroethyl) ether	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
2,2'-Oxybis (1-chloropropane)	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
bis (2-Ethylhexyl) phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Butyl benzyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-04								
Grab Date/Time:	09/11/2017 10:00								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Dibenz (a,h) anthracene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Dibenz (a,j) acridine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Dibenzofuran	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Diethyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Dimethyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Di-n-butyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Di-n-octyl phthalate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Diphenylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Ethyl methanesulfonate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Fluoranthene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Fluorene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Hexachlorobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Hexachlorobutadiene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Hexachlorocyclopentadiene	04	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Hexachloroethane	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Indeno (1,2,3-cd) pyrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Isophorone	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
m+p-Cresols	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Methyl methanesulfonate	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Naphthalene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Nitrobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
n-Nitrosodimethylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
n-Nitrosodi-n-butylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
n-Nitrosodi-n-propylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
n-Nitrosodiphenylamine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-4 Laboratory Sample ID: 17I0322-04

Grab Date/Time: 09/11/2017 10:00

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
o+m+p-Cresols	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
o-Cresol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
p-(Dimethylamino)azobenzene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
p-Chloro-m-cresol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Pentachloronitrobenzene (quintozone)	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Pentachlorophenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Phenacetin	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Phenanthrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Phenol	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Pronamide	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Pyrene	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
Pyridine	04	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:01	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	04	SW8270D	33.7 %	S	35-125		09/14/17 09:50	09/19/17 16:01	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	04	SW8270D	34.8 %	S	45-105		09/14/17 09:50	09/19/17 16:01	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	04	SW8270D	35.1 %		35-105		09/14/17 09:50	09/19/17 16:01	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	04	SW8270D	34.0 %	S	35-100		09/14/17 09:50	09/19/17 16:01	SKS
<i>Surr: Phenol-d5 (Surr)</i>	04	SW8270D	34.7 %	S	40-100		09/14/17 09:50	09/19/17 16:01	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	04	SW8270D	48.4 %		30-125		09/14/17 09:50	09/19/17 16:01	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	04	SW8082A	<0.112 mg/kg dry		0.112	1	09/21/17 23:47	09/21/17 23:47	LBH
PCB as Aroclor 1221	04	SW8082A	<0.112 mg/kg dry		0.112	1	09/21/17 23:47	09/21/17 23:47	LBH
PCB as Aroclor 1232	04	SW8082A	<0.112 mg/kg dry		0.112	1	09/21/17 23:47	09/21/17 23:47	LBH
PCB as Aroclor 1242	04	SW8082A	<0.112 mg/kg dry		0.112	1	09/21/17 23:47	09/21/17 23:47	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-04								
Grab Date/Time: 09/11/2017 10:00									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	04	SW8082A	<0.112 mg/kg dry		0.112	1	09/21/17 23:47	09/21/17 23:47	LBH
PCB as Aroclor 1254	04	SW8082A	<0.112 mg/kg dry		0.112	1	09/21/17 23:47	09/21/17 23:47	LBH
PCB as Aroclor 1260	04	SW8082A	<0.112 mg/kg dry		0.112	1	09/21/17 23:47	09/21/17 23:47	LBH
Surr: DCB	04	SW8082A	75.0 %		30-105		09/21/17 23:47	09/21/17 23:47	LBH
Surr: TCMX	04	SW8082A	70.0 %		30-105		09/21/17 23:47	09/21/17 23:47	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	04	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	04	SM18 2540G	89.2 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-5 Laboratory Sample ID: 17I0322-05

Grab Date/Time: 09/11/2017 10:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	05	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:53	CWO
Aluminum	05RE1	SW6010C	32500 mg/kg	E	57.5	25	09/14/17 07:45	09/18/17 14:33	CWO
Arsenic	05	SW6010C	4.62 mg/kg		1.00	1	09/14/17 07:45	09/18/17 17:53	CWO
Barium	05	SW6010C	96.0 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:53	CWO
Beryllium	05	SW6010C	<0.200 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:53	CWO
Calcium	05RE1	SW6010C	1510 mg/kg		115	25	09/14/17 07:45	09/18/17 14:33	CWO
Cadmium	05	SW6010C	1.90 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:53	CWO
Cobalt	05	SW6010C	11.9 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:53	CWO
Chromium	05	SW6010C	22.3 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:53	CWO
Copper	05	SW6010C	17.1 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:53	CWO
Iron	05RE1	SW6010C	30100 mg/kg		230	100	09/14/17 07:45	09/19/17 16:12	CWO
Mercury	05	SW7471B	0.029 mg/kg		0.008	1	09/18/17 10:30	09/19/17 10:41	RCV
Potassium	05	SW6010C	8180 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:06	CWO
Magnesium	05RE1	SW6010C	7440 mg/kg		57.5	25	09/14/17 07:45	09/18/17 14:33	CWO
Manganese	05	SW6010C	273 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:53	CWO
Sodium	05	SW6010C	51.7 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:06	CWO
Nickel	05	SW6010C	14.7 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:53	CWO
Lead	05	SW6010C	40.1 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:53	CWO
Antimony	05	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:45	09/18/17 17:53	CWO
Selenium	05	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:53	CWO
Thallium	05	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:53	CWO
Vanadium	05	SW6010C	30.4 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:53	CWO
Zinc	05	SW6010C	108 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:53	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	05	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/19/17 16:32	SKS
1,2,4,5-Tetrachlorobenzene	05	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/19/17 16:32	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-05								
Grab Date/Time:	09/11/2017 10:10								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
1,2-Dichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
1,2-Diphenylhydrazine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
1,3-Dichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
1,4-Dichlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
1-Chloronaphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
1-Naphthylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2,3,4,6-Tetrachlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2,4,5-Trichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2,4,6-Trichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2,4-Dichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2,4-Dimethylphenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2,4-Dinitrophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2,4-Dinitrotoluene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2,6-Dichlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2,6-Dinitrotoluene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2-Chloronaphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2-Chlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2-Methylnaphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2-Naphthylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2-Nitroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2-Nitrophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
3,3'-Dichlorobenzidine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
3-Methylcholanthrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
3-Nitroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
4,6-Dinitro-2-methylphenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-5 Laboratory Sample ID: 17I0322-05

Grab Date/Time: 09/11/2017 10:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
4-Bromophenyl phenyl ether	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
4-Chloroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
4-Chlorophenyl phenyl ether	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
4-Nitroaniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
4-Nitrophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
7,12-Dimethylbenz (a) anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Acenaphthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Acenaphthylene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Acetophenone	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Aniline	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Benzidine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Benzo (a) anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Benzo (a) pyrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Benzo (b) fluoranthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Benzo (g,h,i) perylene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Benzo (k) fluoranthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Benzoic acid	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Benzyl alcohol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
bis (2-Chloroethoxy) methane	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
bis (2-Chloroethyl) ether	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
2,2'-Oxybis (1-chloropropane)	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
bis (2-Ethylhexyl) phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Butyl benzyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	13-5	Laboratory Sample ID: 17I0322-05							
Grab Date/Time:		09/11/2017 10:10							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Dibenz (a,h) anthracene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Dibenz (a,j) acridine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Dibenzofuran	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Diethyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Dimethyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Di-n-butyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Di-n-octyl phthalate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Diphenylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Ethyl methanesulfonate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Fluoranthene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Fluorene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Hexachlorobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Hexachlorobutadiene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Hexachlorocyclopentadiene	05	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Hexachloroethane	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Indeno (1,2,3-cd) pyrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Isophorone	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
m+p-Cresols	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Methyl methanesulfonate	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Naphthalene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Nitrobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
n-Nitrosodimethylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
n-Nitrosodi-n-butylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
n-Nitrosodi-n-propylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
n-Nitrosodiphenylamine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-5 Laboratory Sample ID: 17I0322-05

Grab Date/Time: 09/11/2017 10:10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
o+m+p-Cresols	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
o-Cresol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
p-(Dimethylamino)azobenzene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
p-Chloro-m-cresol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Pentachloronitrobenzene (quintozone)	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Pentachlorophenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Phenacetin	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Phenanthrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Phenol	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Pronamide	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Pyrene	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
Pyridine	05	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 16:32	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	05	SW8270D	32.2 %	S	35-125		09/14/17 09:50	09/19/17 16:32	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	05	SW8270D	32.2 %	S	45-105		09/14/17 09:50	09/19/17 16:32	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	05	SW8270D	34.4 %	S	35-105		09/14/17 09:50	09/19/17 16:32	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	05	SW8270D	32.5 %	S	35-100		09/14/17 09:50	09/19/17 16:32	SKS
<i>Surr: Phenol-d5 (Surr)</i>	05	SW8270D	33.6 %	S	40-100		09/14/17 09:50	09/19/17 16:32	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	05	SW8270D	44.6 %		30-125		09/14/17 09:50	09/19/17 16:32	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	05	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 00:06	09/22/17 00:06	LBH
PCB as Aroclor 1221	05	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 00:06	09/22/17 00:06	LBH
PCB as Aroclor 1232	05	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 00:06	09/22/17 00:06	LBH
PCB as Aroclor 1242	05	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 00:06	09/22/17 00:06	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-05								
Grab Date/Time: 09/11/2017 10:10									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	05	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 00:06	09/22/17 00:06	LBH
PCB as Aroclor 1254	05	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 00:06	09/22/17 00:06	LBH
PCB as Aroclor 1260	05	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 00:06	09/22/17 00:06	LBH
Surr: DCB	05	SW8082A	65.0 %		30-105		09/22/17 00:06	09/22/17 00:06	LBH
Surr: TCMX	05	SW8082A	60.0 %		30-105		09/22/17 00:06	09/22/17 00:06	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	05	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	05	SM18 2540G	82.8 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-06								
Grab Date/Time:	09/11/2017 10:15								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Silver	06	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:55	CWO
Aluminum	06RE1	SW6010C	25800 mg/kg	E	61.6	25	09/14/17 07:45	09/18/17 14:38	CWO
Arsenic	06	SW6010C	6.15 mg/kg		1.00	1	09/14/17 07:45	09/18/17 17:55	CWO
Barium	06	SW6010C	97.1 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:55	CWO
Beryllium	06RE1	SW6010C	<0.986 mg/kg		0.986	5	09/14/17 07:45	09/19/17 17:36	CWO
Calcium	06RE1	SW6010C	6650 mg/kg		123	25	09/14/17 07:45	09/18/17 14:38	CWO
Cadmium	06	SW6010C	3.50 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:55	CWO
Cobalt	06	SW6010C	9.75 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:55	CWO
Chromium	06	SW6010C	24.7 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:55	CWO
Copper	06	SW6010C	34.4 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:55	CWO
Iron	06RE1	SW6010C	35600 mg/kg		247	100	09/14/17 07:45	09/19/17 16:14	CWO
Mercury	06	SW7471B	0.073 mg/kg		0.008	1	09/18/17 10:30	09/19/17 10:49	RCV
Potassium	06	SW6010C	5810 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:12	CWO
Magnesium	06RE1	SW6010C	8790 mg/kg		61.6	25	09/14/17 07:45	09/18/17 14:38	CWO
Manganese	06	SW6010C	280 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:55	CWO
Sodium	06	SW6010C	73.7 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:12	CWO
Nickel	06	SW6010C	17.4 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:55	CWO
Lead	06	SW6010C	116 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:55	CWO
Antimony	06	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:45	09/18/17 17:55	CWO
Selenium	06	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:55	CWO
Thallium	06	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:55	CWO
Vanadium	06	SW6010C	33.9 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:55	CWO
Zinc	06	SW6010C	209 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:55	CWO
Semivolatile Organic Compounds by GCMS									
2,3,7,8-TCDD (SIM)	06	SW8270D SIM	Not Detected		500	1	09/14/17 09:50	09/19/17 17:03	SKS
1,2,4,5-Tetrachlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-6 Laboratory Sample ID: 17I0322-06

Grab Date/Time: 09/11/2017 10:15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
1,2-Dichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
1,2-Diphenylhydrazine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
1,3-Dichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
1,4-Dichlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
1-Chloronaphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
1-Naphthylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2,3,4,6-Tetrachlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2,4,5-Trichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2,4,6-Trichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2,4-Dichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2,4-Dimethylphenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2,4-Dinitrophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2,4-Dinitrotoluene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2,6-Dichlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2,6-Dinitrotoluene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2-Chloronaphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2-Chlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2-Methylnaphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2-Naphthylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2-Nitroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2-Nitrophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
3,3'-Dichlorobenzidine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
3-Methylcholanthrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
3-Nitroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
4,6-Dinitro-2-methylphenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-6 Laboratory Sample ID: 17I0322-06

Grab Date/Time: 09/11/2017 10:15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
4-Bromophenyl phenyl ether	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
4-Chloroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
4-Chlorophenyl phenyl ether	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
4-Nitroaniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
4-Nitrophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
7,12-Dimethylbenz (a)anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Acenaphthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Acenaphthylene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Acetophenone	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Aniline	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Benzidine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Benzo (a) anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Benzo (a) pyrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Benzo (b) fluoranthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Benzo (g,h,i) perylene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Benzo (k) fluoranthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Benzoic acid	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Benzyl alcohol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
bis (2-Chloroethoxy) methane	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
bis (2-Chloroethyl) ether	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
2,2'-Oxybis(1-chloropropane)	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
bis (2-Ethylhexyl) phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Butyl benzyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-06								
Grab Date/Time:	09/11/2017 10:15								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Dibenz (a,h) anthracene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Dibenz (a,j) acridine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Dibenzofuran	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Diethyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Dimethyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Di-n-butyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Di-n-octyl phthalate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Diphenylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Ethyl methanesulfonate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Fluoranthene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Fluorene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Hexachlorobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Hexachlorobutadiene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Hexachlorocyclopentadiene	06	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Hexachloroethane	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Indeno (1,2,3-cd) pyrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Isophorone	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
m+p-Cresols	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Methyl methanesulfonate	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Naphthalene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Nitrobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
n-Nitrosodimethylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
n-Nitrosodi-n-butylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
n-Nitrosodi-n-propylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
n-Nitrosodiphenylamine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-6 Laboratory Sample ID: 17I0322-06

Grab Date/Time: 09/11/2017 10:15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
o+m+p-Cresols	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
o-Cresol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
p-(Dimethylamino)azobenzene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
p-Chloro-m-cresol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Pentachloronitrobenzene (quintozone)	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Pentachlorophenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Phenacetin	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Phenanthrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Phenol	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Pronamide	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Pyrene	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
Pyridine	06	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:03	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	06	SW8270D	33.0 %	S	35-125		09/14/17 09:50	09/19/17 17:03	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	06	SW8270D	33.5 %	S	45-105		09/14/17 09:50	09/19/17 17:03	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	06	SW8270D	35.6 %		35-105		09/14/17 09:50	09/19/17 17:03	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	06	SW8270D	33.7 %	S	35-100		09/14/17 09:50	09/19/17 17:03	SKS
<i>Surr: Phenol-d5 (Surr)</i>	06	SW8270D	34.8 %	S	40-100		09/14/17 09:50	09/19/17 17:03	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	06	SW8270D	46.2 %		30-125		09/14/17 09:50	09/19/17 17:03	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/22/17 00:26	09/22/17 00:26	LBH
PCB as Aroclor 1221	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/22/17 00:26	09/22/17 00:26	LBH
PCB as Aroclor 1232	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/22/17 00:26	09/22/17 00:26	LBH
PCB as Aroclor 1242	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/22/17 00:26	09/22/17 00:26	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-06								
Grab Date/Time: 09/11/2017 10:15									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/22/17 00:26	09/22/17 00:26	LBH
PCB as Aroclor 1254	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/22/17 00:26	09/22/17 00:26	LBH
PCB as Aroclor 1260	06	SW8082A	<0.115 mg/kg dry		0.115	1	09/22/17 00:26	09/22/17 00:26	LBH
Surr: DCB	06	SW8082A	80.0 %		30-105		09/22/17 00:26	09/22/17 00:26	LBH
Surr: TCMX	06	SW8082A	85.0 %		30-105		09/22/17 00:26	09/22/17 00:26	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	06	SW7196A	0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	06	SM18 2540G	79.8 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-7 Laboratory Sample ID: 17I0322-07

Grab Date/Time: 09/11/2017 10:18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	07	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:57	CWO
Aluminum	07RE1	SW6010C	29100 mg/kg	E	58.0	25	09/14/17 07:45	09/18/17 14:42	CWO
Arsenic	07	SW6010C	4.86 mg/kg		1.00	1	09/14/17 07:45	09/18/17 17:57	CWO
Barium	07	SW6010C	86.7 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:57	CWO
Beryllium	07RE1	SW6010C	<0.371 mg/kg		0.371	2	09/14/17 07:45	09/19/17 17:39	CWO
Calcium	07RE1	SW6010C	3510 mg/kg		116	25	09/14/17 07:45	09/18/17 14:42	CWO
Cadmium	07	SW6010C	1.97 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:57	CWO
Cobalt	07	SW6010C	11.2 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:57	CWO
Chromium	07	SW6010C	20.1 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:57	CWO
Copper	07	SW6010C	20.1 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:57	CWO
Iron	07RE1	SW6010C	32600 mg/kg		232	100	09/14/17 07:45	09/19/17 16:16	CWO
Mercury	07	SW7471B	0.025 mg/kg		0.008	1	09/18/17 10:30	09/19/17 10:52	RCV
Potassium	07	SW6010C	7190 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:18	CWO
Magnesium	07RE1	SW6010C	7390 mg/kg		58.0	25	09/14/17 07:45	09/18/17 14:42	CWO
Manganese	07	SW6010C	258 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:57	CWO
Sodium	07	SW6010C	55.0 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:18	CWO
Nickel	07	SW6010C	13.4 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:57	CWO
Lead	07	SW6010C	26.2 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:57	CWO
Antimony	07	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:45	09/18/17 17:57	CWO
Selenium	07	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:57	CWO
Thallium	07	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:57	CWO
Vanadium	07	SW6010C	32.3 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:57	CWO
Zinc	07	SW6010C	87.3 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:57	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	07	SW8270D SIM	Not Detected	500	1	09/14/17 09:50	09/19/17 17:34	SKS
1,2,4,5-Tetrachlorobenzene	07	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/19/17 17:34	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-07								
Grab Date/Time:	09/11/2017 10:18								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
1,2-Dichlorobenzene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
1,2-Diphenylhydrazine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
1,3-Dichlorobenzene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
1,4-Dichlorobenzene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
1-Chloronaphthalene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
1-Naphthylamine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2,3,4,6-Tetrachlorophenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2,4,5-Trichlorophenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2,4,6-Trichlorophenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2,4-Dichlorophenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2,4-Dimethylphenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2,4-Dinitrophenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2,4-Dinitrotoluene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2,6-Dichlorophenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2,6-Dinitrotoluene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2-Chloronaphthalene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2-Chlorophenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2-Methylnaphthalene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2-Naphthylamine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2-Nitroaniline	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2-Nitrophenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
3,3'-Dichlorobenzidine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
3-Methylcholanthrene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
3-Nitroaniline	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
4,6-Dinitro-2-methylphenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-07								
Grab Date/Time:	09/11/2017 10:18								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
4-Bromophenyl phenyl ether	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
4-Chloroaniline	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
4-Chlorophenyl phenyl ether	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
4-Nitroaniline	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
4-Nitrophenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
7,12-Dimethylbenz (a) anthracene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Acenaphthene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Acenaphthylene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Acetophenone	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Aniline	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Anthracene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Benzidine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Benzo (a) anthracene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Benzo (a) pyrene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Benzo (b) fluoranthene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Benzo (g,h,i) perylene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Benzo (k) fluoranthene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Benzoic acid	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Benzyl alcohol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
bis (2-Chloroethoxy) methane	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
bis (2-Chloroethyl) ether	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
2,2'-Oxybis (1-chloropropane)	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
bis (2-Ethylhexyl) phthalate	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Butyl benzyl phthalate	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-7 Laboratory Sample ID: 17I0322-07

Grab Date/Time: 09/11/2017 10:18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Dibenz (a,h) anthracene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Dibenz (a,j) acridine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Dibenzofuran	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Diethyl phthalate	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Dimethyl phthalate	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Di-n-butyl phthalate	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Di-n-octyl phthalate	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Diphenylamine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Ethyl methanesulfonate	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Fluoranthene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Fluorene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Hexachlorobenzene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Hexachlorobutadiene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Hexachlorocyclopentadiene	07	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Hexachloroethane	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Indeno (1,2,3-cd) pyrene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Isophorone	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
m+p-Cresols	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Methyl methanesulfonate	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Naphthalene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Nitrobenzene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
n-Nitrosodimethylamine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
n-Nitrosodi-n-butylamine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
n-Nitrosodi-n-propylamine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
n-Nitrosodiphenylamine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-7 Laboratory Sample ID: 17I0322-07

Grab Date/Time: 09/11/2017 10:18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
o+m+p-Cresols	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
o-Cresol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
p-(Dimethylamino)azobenzene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
p-Chloro-m-cresol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Pentachloronitrobenzene (quintozone)	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Pentachlorophenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Phenacetin	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Phenanthrene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Phenol	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Pronamide	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Pyrene	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
Pyridine	07	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 17:34	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	07	SW8270D	27.9 %	S	35-125		09/14/17 09:50	09/19/17 17:34	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	07	SW8270D	29.9 %	S	45-105		09/14/17 09:50	09/19/17 17:34	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	07	SW8270D	31.9 %	S	35-105		09/14/17 09:50	09/19/17 17:34	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	07	SW8270D	30.3 %	S	35-100		09/14/17 09:50	09/19/17 17:34	SKS
<i>Surr: Phenol-d5 (Surr)</i>	07	SW8270D	30.9 %	S	40-100		09/14/17 09:50	09/19/17 17:34	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	07	SW8270D	41.1 %		30-125		09/14/17 09:50	09/19/17 17:34	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	07	SW8082A	<0.114 mg/kg dry		0.114	1	09/22/17 00:45	09/22/17 00:45	LBH
PCB as Aroclor 1221	07	SW8082A	<0.114 mg/kg dry		0.114	1	09/22/17 00:45	09/22/17 00:45	LBH
PCB as Aroclor 1232	07	SW8082A	<0.114 mg/kg dry		0.114	1	09/22/17 00:45	09/22/17 00:45	LBH
PCB as Aroclor 1242	07	SW8082A	<0.114 mg/kg dry		0.114	1	09/22/17 00:45	09/22/17 00:45	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-07								
Grab Date/Time: 09/11/2017 10:18									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	07	SW8082A	<0.114 mg/kg dry		0.114	1	09/22/17 00:45	09/22/17 00:45	LBH
PCB as Aroclor 1254	07	SW8082A	<0.114 mg/kg dry		0.114	1	09/22/17 00:45	09/22/17 00:45	LBH
PCB as Aroclor 1260	07	SW8082A	<0.114 mg/kg dry		0.114	1	09/22/17 00:45	09/22/17 00:45	LBH
Surr: DCB	07	SW8082A	75.0 %		30-105		09/22/17 00:45	09/22/17 00:45	LBH
Surr: TCMX	07	SW8082A	85.0 %		30-105		09/22/17 00:45	09/22/17 00:45	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	07	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	07	SM18 2540G	87.0 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-8 Laboratory Sample ID: 17I0322-08

Grab Date/Time: 09/11/2017 10:22

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	08	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:59	CWO
Aluminum	08RE1	SW6010C	25400 mg/kg	E	59.6	25	09/14/17 07:45	09/18/17 14:58	CWO
Arsenic	08	SW6010C	6.04 mg/kg		1.00	1	09/14/17 07:45	09/18/17 17:59	CWO
Barium	08	SW6010C	242 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:59	CWO
Beryllium	08	SW6010C	0.440 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:59	CWO
Calcium	08RE1	SW6010C	9920 mg/kg		119	25	09/14/17 07:45	09/18/17 14:58	CWO
Cadmium	08	SW6010C	1.85 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:59	CWO
Cobalt	08	SW6010C	9.86 mg/kg		0.200	1	09/14/17 07:45	09/18/17 17:59	CWO
Chromium	08	SW6010C	21.4 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:59	CWO
Copper	08	SW6010C	33.1 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:59	CWO
Iron	08RE1	SW6010C	25300 mg/kg		238	100	09/14/17 07:45	09/19/17 16:18	CWO
Mercury	08	SW7471B	0.057 mg/kg		0.008	1	09/18/17 10:30	09/19/17 10:55	RCV
Potassium	08	SW6010C	5280 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:24	CWO
Magnesium	08RE1	SW6010C	6250 mg/kg		59.6	25	09/14/17 07:45	09/18/17 14:58	CWO
Manganese	08	SW6010C	352 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:59	CWO
Sodium	08	SW6010C	951 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:24	CWO
Nickel	08	SW6010C	13.6 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:59	CWO
Lead	08	SW6010C	26.3 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:59	CWO
Antimony	08	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:45	09/18/17 17:59	CWO
Selenium	08	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:59	CWO
Thallium	08	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 17:59	CWO
Vanadium	08	SW6010C	31.3 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:59	CWO
Zinc	08	SW6010C	214 mg/kg		0.500	1	09/14/17 07:45	09/18/17 17:59	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	08	SW8270D SIM	Present	500	1	09/14/17 09:50	09/19/17 19:08	SKS
1,2,4,5-Tetrachlorobenzene	08	SW8270D	<83.3 ug/kg	83.3	1	09/14/17 09:50	09/19/17 19:08	SKS



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Certificate of Analysis

Final Report

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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-8 Laboratory Sample ID: 17I0322-08

Grab Date/Time: 09/11/2017 10:22

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
1,2-Dichlorobenzene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
1,2-Diphenylhydrazine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
1,3-Dichlorobenzene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
1,4-Dichlorobenzene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
1-Chloronaphthalene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
1-Naphthylamine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2,3,4,6-Tetrachlorophenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2,4,5-Trichlorophenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2,4,6-Trichlorophenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2,4-Dichlorophenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2,4-Dimethylphenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2,4-Dinitrophenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2,4-Dinitrotoluene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2,6-Dichlorophenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2,6-Dinitrotoluene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2-Chloronaphthalene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2-Chlorophenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2-Methylnaphthalene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2-Naphthylamine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2-Nitroaniline	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2-Nitrophenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
3,3'-Dichlorobenzidine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
3-Methylcholanthrene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
3-Nitroaniline	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
4,6-Dinitro-2-methylphenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS



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Certificate of Analysis

Final Report

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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-8 Laboratory Sample ID: 17I0322-08

Grab Date/Time: 09/11/2017 10:22

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
4-Bromophenyl phenyl ether	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
4-Chloroaniline	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
4-Chlorophenyl phenyl ether	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
4-Nitroaniline	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
4-Nitrophenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
7,12-Dimethylbenz (a)anthracene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Acenaphthene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Acenaphthylene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Acetophenone	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Aniline	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Anthracene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Benzidine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Benzo (a) anthracene	08	SW8270D	257 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Benzo (a) pyrene	08	SW8270D	246 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Benzo (b) fluoranthene	08	SW8270D	203 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Benzo (g,h,i) perylene	08	SW8270D	97.4 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Benzo (k) fluoranthene	08	SW8270D	97.4 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Benzoic acid	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Benzyl alcohol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
bis (2-Chloroethoxy) methane	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
bis (2-Chloroethyl) ether	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
2,2'-Oxybis(1-chloropropane)	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
bis (2-Ethylhexyl) phthalate	08	SW8270D	227 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Butyl benzyl phthalate	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-08								
Grab Date/Time:	09/11/2017 10:22								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	08	SW8270D	195 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Dibenz (a,h) anthracene	08	SW8270D	96.0 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Dibenz (a,j) acridine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Dibenzofuran	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Diethyl phthalate	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Dimethyl phthalate	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Di-n-butyl phthalate	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Di-n-octyl phthalate	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Diphenylamine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Ethyl methanesulfonate	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Fluoranthene	08	SW8270D	470 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Fluorene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Hexachlorobenzene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Hexachlorobutadiene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Hexachlorocyclopentadiene	08	SW8270D	<83.3 ug/kg	C	83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Hexachloroethane	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Indeno (1,2,3-cd) pyrene	08	SW8270D	133 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Isophorone	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
m+p-Cresols	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Methyl methanesulfonate	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Naphthalene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Nitrobenzene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
n-Nitrosodimethylamine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
n-Nitrosodi-n-butylamine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
n-Nitrosodi-n-propylamine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
n-Nitrosodiphenylamine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-8 Laboratory Sample ID: 17I0322-08

Grab Date/Time: 09/11/2017 10:22

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
o+m+p-Cresols	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
o-Cresol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
p-(Dimethylamino)azobenzene	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
p-Chloro-m-cresol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Pentachloronitrobenzene (quintozone)	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Pentachlorophenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Phenacetin	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Phenanthrene	08	SW8270D	590 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Phenol	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Pronamide	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Pyrene	08	SW8270D	688 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
Pyridine	08	SW8270D	<83.3 ug/kg		83.3	1	09/14/17 09:50	09/19/17 19:08	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	08	SW8270D	31.6 %	S	35-125		09/14/17 09:50	09/19/17 19:08	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	08	SW8270D	30.7 %	S	45-105		09/14/17 09:50	09/19/17 19:08	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	08	SW8270D	26.7 %	S	35-105		09/14/17 09:50	09/19/17 19:08	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	08	SW8270D	30.4 %	S	35-100		09/14/17 09:50	09/19/17 19:08	SKS
<i>Surr: Phenol-d5 (Surr)</i>	08	SW8270D	29.8 %	S	40-100		09/14/17 09:50	09/19/17 19:08	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	08	SW8270D	43.9 %		30-125		09/14/17 09:50	09/19/17 19:08	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	08	SW8082A	<0.121 mg/kg dry		0.121	1	09/22/17 01:04	09/22/17 01:04	LBH
PCB as Aroclor 1221	08	SW8082A	<0.121 mg/kg dry		0.121	1	09/22/17 01:04	09/22/17 01:04	LBH
PCB as Aroclor 1232	08	SW8082A	<0.121 mg/kg dry		0.121	1	09/22/17 01:04	09/22/17 01:04	LBH
PCB as Aroclor 1242	08	SW8082A	<0.121 mg/kg dry		0.121	1	09/22/17 01:04	09/22/17 01:04	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-8 Laboratory Sample ID: 17I0322-08

Grab Date/Time: 09/11/2017 10:22

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Organochlorine Pesticides and PCBs by GC/ECD

PCB as Aroclor 1248	08	SW8082A	<0.121 mg/kg dry		0.121	1	09/22/17 01:04	09/22/17 01:04	LBH
PCB as Aroclor 1254	08	SW8082A	<0.121 mg/kg dry		0.121	1	09/22/17 01:04	09/22/17 01:04	LBH
PCB as Aroclor 1260	08	SW8082A	<0.121 mg/kg dry		0.121	1	09/22/17 01:04	09/22/17 01:04	LBH
Surr: DCB	08	SW8082A	70.0 %		30-105		09/22/17 01:04	09/22/17 01:04	LBH
Surr: TCMX	08	SW8082A	80.0 %		30-105		09/22/17 01:04	09/22/17 01:04	LBH

Wet Chemistry Analysis

Chromium, Hexavalent	08	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	08	SM18 2540G	82.3 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-9 Laboratory Sample ID: 17I0322-09

Grab Date/Time: 09/11/2017 10:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	09	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:01	CWO
Aluminum	09RE1	SW6010C	33200 mg/kg	E	59.4	25	09/14/17 07:45	09/18/17 15:02	CWO
Arsenic	09RE1	SW6010C	5.75 mg/kg		1.90	2	09/14/17 07:45	09/19/17 17:43	CWO
Barium	09	SW6010C	97.2 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:01	CWO
Beryllium	09RE1	SW6010C	<0.380 mg/kg		0.380	2	09/14/17 07:45	09/19/17 17:43	CWO
Calcium	09RE1	SW6010C	3850 mg/kg		119	25	09/14/17 07:45	09/18/17 15:02	CWO
Cadmium	09	SW6010C	2.00 mg/kg		0.200	1	09/14/17 07:45	09/18/17 18:01	CWO
Cobalt	09	SW6010C	12.5 mg/kg		0.200	1	09/14/17 07:45	09/18/17 18:01	CWO
Chromium	09	SW6010C	25.6 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:01	CWO
Copper	09	SW6010C	11.9 mg/kg		2.50	1	09/14/17 07:45	09/18/17 18:01	CWO
Iron	09RE1	SW6010C	28700 mg/kg		238	100	09/14/17 07:45	09/19/17 16:40	CWO
Mercury	09	SW7471B	0.028 mg/kg		0.008	1	09/18/17 10:30	09/19/17 10:57	RCV
Potassium	09RE1	SW6010C	9180 mg/kg		594	25	09/14/17 07:45	09/18/17 15:01	CWO
Magnesium	09RE1	SW6010C	7900 mg/kg		59.4	25	09/14/17 07:45	09/18/17 15:02	CWO
Manganese	09	SW6010C	316 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:01	CWO
Sodium	09	SW6010C	56.7 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:30	CWO
Nickel	09	SW6010C	15.1 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:01	CWO
Lead	09	SW6010C	30.8 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:01	CWO
Antimony	09	SW6010C	5.22 mg/kg		5.00	1	09/14/17 07:45	09/18/17 18:01	CWO
Selenium	09	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 18:01	CWO
Thallium	09	SW6010C	3.91 mg/kg		2.50	1	09/14/17 07:45	09/18/17 18:01	CWO
Vanadium	09	SW6010C	33.4 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:01	CWO
Zinc	09	SW6010C	93.9 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:01	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	09	SW8270D SIM	Not Detected	500	1	09/21/17 13:45	09/25/17 17:13	EWS
1,2,4,5-Tetrachlorobenzene	09	SW8270D	<83.3 ug/kg	83.3	1	09/21/17 13:45	09/22/17 17:30	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-9 Laboratory Sample ID: 17I0322-09

Grab Date/Time: 09/11/2017 10:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
1,2-Dichlorobenzene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
1,2-Diphenylhydrazine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
1,3-Dichlorobenzene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
1,4-Dichlorobenzene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
1-Chloronaphthalene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
1-Naphthylamine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2,3,4,6-Tetrachlorophenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2,4,5-Trichlorophenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2,4,6-Trichlorophenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2,4-Dichlorophenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2,4-Dimethylphenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2,4-Dinitrophenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2,4-Dinitrotoluene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2,6-Dichlorophenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2,6-Dinitrotoluene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2-Chloronaphthalene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2-Chlorophenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2-Methylnaphthalene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2-Naphthylamine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2-Nitroaniline	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2-Nitrophenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
3,3'-Dichlorobenzidine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
3-Methylcholanthrene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
3-Nitroaniline	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
4,6-Dinitro-2-methylphenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS



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Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-09								
Grab Date/Time:	09/11/2017 10:30								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
4-Bromophenyl phenyl ether	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
4-Chloroaniline	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
4-Chlorophenyl phenyl ether	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
4-Nitroaniline	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
4-Nitrophenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
7,12-Dimethylbenz (a) anthracene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Acenaphthene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Acenaphthylene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Acetophenone	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Aniline	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Anthracene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Benzidine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Benzo (a) anthracene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Benzo (a) pyrene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Benzo (b) fluoranthene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Benzo (g,h,i) perylene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Benzo (k) fluoranthene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Benzoic acid	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Benzyl alcohol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
bis (2-Chloroethoxy) methane	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
bis (2-Chloroethyl) ether	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
2,2'-Oxybis (1-chloropropane)	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
bis (2-Ethylhexyl) phthalate	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Butyl benzyl phthalate	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	13-9	Laboratory Sample ID: 17I0322-09							
Grab Date/Time:		09/11/2017 10:30							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Dibenz (a,h) anthracene	09	SW8270D	<83.3 ug/kg	C	83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Dibenz (a,j) acridine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Dibenzofuran	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Diethyl phthalate	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Dimethyl phthalate	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Di-n-butyl phthalate	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Di-n-octyl phthalate	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Diphenylamine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Ethyl methanesulfonate	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Fluoranthene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Fluorene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Hexachlorobenzene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Hexachlorobutadiene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Hexachlorocyclopentadiene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Hexachloroethane	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Indeno (1,2,3-cd) pyrene	09	SW8270D	<83.3 ug/kg	C	83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Isophorone	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
m+p-Cresols	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Methyl methanesulfonate	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Naphthalene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Nitrobenzene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
n-Nitrosodimethylamine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
n-Nitrosodi-n-butylamine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
n-Nitrosodi-n-propylamine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
n-Nitrosodiphenylamine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-9 Laboratory Sample ID: 17I0322-09

Grab Date/Time: 09/11/2017 10:30

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
o+m+p-Cresols	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
o-Cresol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
p-(Dimethylamino)azobenzene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
p-Chloro-m-cresol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Pentachloronitrobenzene (quintozone)	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Pentachlorophenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Phenacetin	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Phenanthrene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Phenol	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Pronamide	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Pyrene	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
Pyridine	09	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 17:30	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	09	SW8270D	46.4 %		35-125		09/21/17 13:45	09/22/17 17:30	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	09	SW8270D	60.1 %		45-105		09/21/17 13:45	09/22/17 17:30	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	09	SW8270D	46.5 %		35-105		09/21/17 13:45	09/22/17 17:30	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	09	SW8270D	58.2 %		35-100		09/21/17 13:45	09/22/17 17:30	SKS
<i>Surr: Phenol-d5 (Surr)</i>	09	SW8270D	56.1 %		40-100		09/21/17 13:45	09/22/17 17:30	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	09	SW8270D	75.2 %		30-125		09/21/17 13:45	09/22/17 17:30	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	09	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 14:16	09/22/17 14:16	LBH
PCB as Aroclor 1221	09	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 14:16	09/22/17 14:16	LBH
PCB as Aroclor 1232	09	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 14:16	09/22/17 14:16	LBH
PCB as Aroclor 1242	09	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 14:16	09/22/17 14:16	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-09								
Grab Date/Time:		09/11/2017 10:30							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	09	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 14:16	09/22/17 14:16	LBH
PCB as Aroclor 1254	09	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 14:16	09/22/17 14:16	LBH
PCB as Aroclor 1260	09	SW8082A	<0.118 mg/kg dry		0.118	1	09/22/17 14:16	09/22/17 14:16	LBH
Surr: DCB	09	SW8082A	65.0 %		30-105		09/22/17 14:16	09/22/17 14:16	LBH
Surr: TCMX	09	SW8082A	60.0 %		30-105		09/22/17 14:16	09/22/17 14:16	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	09	SW7196A	<0.20 mg/kg		0.20	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	09	SM18 2540G	84.8 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-10 Laboratory Sample ID: 17I0322-10

Grab Date/Time: 09/11/2017 10:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
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Metals (Total) by EPA 6000/7000 Series Methods

Silver	10	SW6010C	<0.500 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:03	CWO
Aluminum	10RE1	SW6010C	28900 mg/kg	E	61.1	25	09/14/17 07:45	09/18/17 15:06	CWO
Arsenic	10	SW6010C	4.94 mg/kg		1.00	1	09/14/17 07:45	09/18/17 18:03	CWO
Barium	10	SW6010C	94.5 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:03	CWO
Beryllium	10RE1	SW6010C	<0.391 mg/kg		0.391	2	09/14/17 07:45	09/19/17 17:45	CWO
Calcium	10RE1	SW6010C	1880 mg/kg		122	25	09/14/17 07:45	09/18/17 15:06	CWO
Cadmium	10	SW6010C	2.08 mg/kg		0.200	1	09/14/17 07:45	09/18/17 18:03	CWO
Cobalt	10	SW6010C	10.7 mg/kg		0.200	1	09/14/17 07:45	09/18/17 18:03	CWO
Chromium	10	SW6010C	20.1 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:03	CWO
Copper	10	SW6010C	101 mg/kg		2.50	1	09/14/17 07:45	09/18/17 18:03	CWO
Iron	10RE1	SW6010C	28900 mg/kg		244	100	09/14/17 07:45	09/19/17 16:42	CWO
Mercury	10	SW7471B	0.039 mg/kg		0.008	1	09/18/17 10:30	09/19/17 11:00	RCV
Potassium	10	SW6010C	7220 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:37	CWO
Magnesium	10RE1	SW6010C	5870 mg/kg		61.1	25	09/14/17 07:45	09/18/17 15:06	CWO
Manganese	10	SW6010C	272 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:03	CWO
Sodium	10	SW6010C	45.6 mg/kg		25.0	1	09/14/17 07:45	09/18/17 16:37	CWO
Nickel	10	SW6010C	13.3 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:03	CWO
Lead	10	SW6010C	131 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:03	CWO
Antimony	10	SW6010C	<5.00 mg/kg		5.00	1	09/14/17 07:45	09/18/17 18:03	CWO
Selenium	10	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 18:03	CWO
Thallium	10	SW6010C	<2.50 mg/kg		2.50	1	09/14/17 07:45	09/18/17 18:03	CWO
Vanadium	10	SW6010C	32.4 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:03	CWO
Zinc	10	SW6010C	105 mg/kg		0.500	1	09/14/17 07:45	09/18/17 18:03	CWO

Semivolatile Organic Compounds by GCMS

2,3,7,8-TCDD (SIM)	10	SW8270D SIM	Not Detected	500	1	09/21/17 13:45	09/25/17 17:13	EWS
1,2,4,5-Tetrachlorobenzene	10	SW8270D	<83.3 ug/kg	83.3	1	09/21/17 13:45	09/22/17 18:01	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-10								
Grab Date/Time:	09/11/2017 10:35								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
1,2,4-Trichlorobenzene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
1,2-Dichlorobenzene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
1,2-Diphenylhydrazine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
1,3-Dichlorobenzene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
1,4-Dichlorobenzene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
1-Chloronaphthalene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
1-Naphthylamine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2,3,4,6-Tetrachlorophenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2,4,5-Trichlorophenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2,4,6-Trichlorophenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2,4-Dichlorophenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2,4-Dimethylphenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2,4-Dinitrophenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2,4-Dinitrotoluene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2,6-Dichlorophenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2,6-Dinitrotoluene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2-Chloronaphthalene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2-Chlorophenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2-Methylnaphthalene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2-Naphthylamine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2-Nitroaniline	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2-Nitrophenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
3,3'-Dichlorobenzidine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
3-Methylcholanthrene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
3-Nitroaniline	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
4,6-Dinitro-2-methylphenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-10								
Grab Date/Time:	09/11/2017 10:35								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
4-Aminobiphenyl	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
4-Bromophenyl phenyl ether	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
4-Chloroaniline	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
4-Chlorophenyl phenyl ether	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
4-Nitroaniline	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
4-Nitrophenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
7,12-Dimethylbenz (a)anthracene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Acenaphthene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Acenaphthylene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Acetophenone	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Aniline	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Anthracene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Benzidine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Benzo (a) anthracene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Benzo (a) pyrene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Benzo (b) fluoranthene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Benzo (g,h,i) perylene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Benzo (k) fluoranthene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Benzoic acid	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Benzyl alcohol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
bis (2-Chloroethoxy) methane	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
bis (2-Chloroethyl) ether	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
2,2'-Oxybis(1-chloropropane)	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
bis (2-Ethylhexyl) phthalate	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Butyl benzyl phthalate	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-10								
Grab Date/Time:	09/11/2017 10:35								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
Chrysene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Dibenz (a,h) anthracene	10	SW8270D	<83.3 ug/kg	C	83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Dibenz (a,j) acridine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Dibenzofuran	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Diethyl phthalate	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Dimethyl phthalate	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Di-n-butyl phthalate	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Di-n-octyl phthalate	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Diphenylamine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Ethyl methanesulfonate	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Fluoranthene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Fluorene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Hexachlorobenzene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Hexachlorobutadiene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Hexachlorocyclopentadiene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Hexachloroethane	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Indeno (1,2,3-cd) pyrene	10	SW8270D	<83.3 ug/kg	C	83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Isophorone	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
m+p-Cresols	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Methyl methanesulfonate	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Naphthalene	10	SW8270D	156 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Nitrobenzene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
n-Nitrosodimethylamine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
n-Nitrosodi-n-butylamine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
n-Nitrosodi-n-propylamine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
n-Nitrosodiphenylamine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS



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Final Report

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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results

Sample I.D. 13-10 Laboratory Sample ID: 17I0322-10

Grab Date/Time: 09/11/2017 10:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compounds by GCMS									
n-Nitrosopiperidine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
o+m+p-Cresols	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
o-Cresol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
p-(Dimethylamino)azobenzene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
p-Chloro-m-cresol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Pentachloronitrobenzene (quintozone)	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Pentachlorophenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Phenacetin	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Phenanthrene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Phenol	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Pronamide	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Pyrene	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
Pyridine	10	SW8270D	<83.3 ug/kg		83.3	1	09/21/17 13:45	09/22/17 18:01	SKS
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	10	SW8270D	61.2 %		35-125		09/21/17 13:45	09/22/17 18:01	SKS
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	10	SW8270D	61.3 %		45-105		09/21/17 13:45	09/22/17 18:01	SKS
<i>Surr: 2-Fluorophenol (Surr)</i>	10	SW8270D	74.0 %		35-105		09/21/17 13:45	09/22/17 18:01	SKS
<i>Surr: Nitrobenzene-d5 (Surr)</i>	10	SW8270D	58.6 %		35-100		09/21/17 13:45	09/22/17 18:01	SKS
<i>Surr: Phenol-d5 (Surr)</i>	10	SW8270D	56.3 %		40-100		09/21/17 13:45	09/22/17 18:01	SKS
<i>Surr: p-Terphenyl-d14 (Surr)</i>	10	SW8270D	62.9 %		30-125		09/21/17 13:45	09/22/17 18:01	SKS
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1016	10	SW8082A	<0.113 mg/kg dry		0.113	1	09/22/17 14:36	09/22/17 14:36	LBH
PCB as Aroclor 1221	10	SW8082A	<0.113 mg/kg dry		0.113	1	09/22/17 14:36	09/22/17 14:36	LBH
PCB as Aroclor 1232	10	SW8082A	<0.113 mg/kg dry		0.113	1	09/22/17 14:36	09/22/17 14:36	LBH
PCB as Aroclor 1242	10	SW8082A	<0.113 mg/kg dry		0.113	1	09/22/17 14:36	09/22/17 14:36	LBH



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Laboratory Order ID: 17I0322

Analytical Results									
Sample I.D.	Laboratory Sample ID: 17I0322-10								
Grab Date/Time: 09/11/2017 10:35									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and PCBs by GC/ECD									
PCB as Aroclor 1248	10	SW8082A	<0.113 mg/kg dry		0.113	1	09/22/17 14:36	09/22/17 14:36	LBH
PCB as Aroclor 1254	10	SW8082A	<0.113 mg/kg dry		0.113	1	09/22/17 14:36	09/22/17 14:36	LBH
PCB as Aroclor 1260	10	SW8082A	<0.113 mg/kg dry		0.113	1	09/22/17 14:36	09/22/17 14:36	LBH
<i>Surr: DCB</i>	10	SW8082A	80.0 %		30-105		09/22/17 14:36	09/22/17 14:36	LBH
<i>Surr: TCMX</i>	10	SW8082A	75.0 %		30-105		09/22/17 14:36	09/22/17 14:36	LBH
Wet Chemistry Analysis									
Chromium, Hexavalent	10	SW7196A	<0.005 mg/kg		0.005	1	09/20/17 17:05	09/21/17 14:54	CGT
Percent Solids	10	SM18 2540G	87.6 %		0.10	1	09/19/17 10:00	09/19/17 10:00	JCM



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Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Analytical Summary

Preparation Method:

Preparation Method:

17I0320-02	AWS
17I0320-04	AWS
17I0320-06	AWS
17I0322-08	EPA PLM

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analysis					
17I0299-01	2.51 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0299-02	2.55 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0299-03	2.55 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0299-04	2.51 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0299-05	2.52 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0299-06	2.53 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0317-01	2.55 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0317-02	2.59 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0317-03	2.50 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0317-04	2.55 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0317-05	2.50 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0317-06	2.51 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0319-01	2.53 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
17I0319-02	2.54 g / 100 mL	SW7196A	BAI0388	SAI0513	AI70069
Wet Chemistry Analysis					
		Preparation Method:	No Prep Wet Chem		
17I0300-05	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0317-01	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0317-02	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0317-03	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0317-04	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0317-05	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0317-06	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0319-01	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0319-02	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0319-03	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0319-04	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0319-05	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0319-06	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0320-02	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0320-04	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0320-06	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0322-01	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0322-02	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0322-03	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
17I0322-04	1.00 g / 1.00 mL	SM18 2540G	BAI0451	SAI0481	
Wet Chemistry Analysis		Preparation Method:	No Prep Wet Chem		
17I0322-05	1.00 g / 1.00 mL	SM18 2540G	BAI0452	SAI0481	
17I0322-06	1.00 g / 1.00 mL	SM18 2540G	BAI0452	SAI0481	
17I0322-07	1.00 g / 1.00 mL	SM18 2540G	BAI0452	SAI0481	
17I0322-08	1.00 g / 1.00 mL	SM18 2540G	BAI0452	SAI0481	
17I0322-09	1.00 g / 1.00 mL	SM18 2540G	BAI0452	SAI0481	
17I0322-10	1.00 g / 1.00 mL	SM18 2540G	BAI0452	SAI0481	
Wet Chemistry Analysis		Preparation Method:	No Prep Wet Chem		
17I0319-03	2.51 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0319-04	2.54 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0319-05	2.53 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0319-06	2.52 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0322-01	2.50 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0322-02	2.56 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0322-03	2.53 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0322-04	2.54 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0322-05	2.53 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0322-06	2.52 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0322-07	2.51 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0322-08	2.55 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0322-09	2.51 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
17I0322-10	100 g / 100 mL	SW7196A	BAI0539	SAI0521	AI70100
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID

TCLP Metals by 6000/7000 Series Methods

Preparation Method: SW1311 Metals



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0320-13	100 g / 2000 mL	SW1311	BAI0347	SAI0340	
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
TCLP Semivolatile Organic Compounds		Preparation Method:	SW1311 SVOC		
17I0320-13	100 mL / 2000 mL	SW1311	BAI0552	SAI0524	AI70066
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
TCLP Volatile Organic Compounds by GCMS		Preparation Method:	SW1311 ZHE		
17I0320-13	15.0 g / 300 mL	SW1311	BAI0343	SAI0335	AH70111
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
TCLP Metals by 6000/7000 Series Methods		Preparation Method:	SW3010A		
17I0320-13	10.0 mL / 50.0 mL	SW6010C	BAI0349	SAI0366	AI70067
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods		Preparation Method:	SW3050B		
17I0299-01	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-01	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-01RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-01RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-01RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083
17I0299-02	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-02	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-02RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-02RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-02RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083
17I0299-02RE2	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-03	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-03	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-03RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0299-03RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-03RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083
17I0299-04	1.04 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-04	1.04 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-04RE1	1.04 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-04RE1	1.04 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-04RE1	1.04 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083
17I0299-05	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-05	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-05RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-05RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-05RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083
17I0299-06	1.02 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-06	1.02 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0299-06RE1	1.02 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0299-06RE1	1.02 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-01	1.08 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-01	1.08 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-01RE1	1.08 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-01RE1	1.08 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-01RE2	1.08 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-02	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-02	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-02RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-02RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-02RE2	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-03	1.04 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-03	1.04 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-03RE1	1.04 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-03RE1	1.04 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-03RE2	1.04 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-04	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-04	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-04RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-04RE1	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0317-04RE2	1.07 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-05	1.09 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-05	1.09 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-05RE1	1.09 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-05RE1	1.09 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-05RE2	1.09 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-06	1.06 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-06	1.06 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-06RE1	1.06 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0317-06RE1	1.06 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0317-06RE2	1.06 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-01	1.05 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-01	1.05 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-01RE1	1.05 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-01RE1	1.05 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-02	1.01 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-02	1.01 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-02RE1	1.01 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-02RE1	1.01 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-02RE2	1.01 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083
17I0319-03	1.05 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-03	1.05 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-03RE1	1.05 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-03RE1	1.05 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-03RE2	1.05 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083
17I0319-04	1.03 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-04	1.03 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-04RE1	1.03 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-04RE1	1.03 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-04RE2	1.03 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083
17I0319-05	1.10 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-05	1.10 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-05RE1	1.10 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-05RE1	1.10 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-05RE1	1.10 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0319-05RE2	1.10 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083
17I0319-06	1.09 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-06	1.09 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-06RE1	1.09 g / 50.0 mL	SW6010C	BAI0298	SAI0362	AI70068
17I0319-06RE1	1.09 g / 50.0 mL	SW6010C	BAI0298	SAI0393	AI70074
17I0319-06RE2	1.09 g / 50.0 mL	SW6010C	BAI0298	SAI0453	AI70083
Metals (Total) by EPA 6000/7000 Series Methods		Preparation Method:	SW3050B		
17I0322-01	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0393	AI70074
17I0322-01	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-01RE1	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-01RE1	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0453	AI70083
17I0322-02	1.09 g / 50.0 mL	SW6010C	BAI0299	SAI0393	AI70074
17I0322-02	1.09 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-02RE1	1.09 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-02RE1	1.09 g / 50.0 mL	SW6010C	BAI0299	SAI0453	AI70083
17I0322-03	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0393	AI70074
17I0322-03	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-03RE1	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-03RE1	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0453	AI70083
17I0322-04	1.04 g / 50.0 mL	SW6010C	BAI0299	SAI0393	AI70074
17I0322-04	1.04 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-04RE1	1.04 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-04RE1	1.04 g / 50.0 mL	SW6010C	BAI0299	SAI0453	AI70083
17I0322-05	1.09 g / 50.0 mL	SW6010C	BAI0299	SAI0393	AI70074
17I0322-05	1.09 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-05RE1	1.09 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-05RE1	1.09 g / 50.0 mL	SW6010C	BAI0299	SAI0453	AI70083
17I0322-06	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0393	AI70074
17I0322-06	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-06RE1	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-06RE1	1.01 g / 50.0 mL	SW6010C	BAI0299	SAI0453	AI70083
17I0322-07	1.08 g / 50.0 mL	SW6010C	BAI0299	SAI0393	AI70074
17I0322-07	1.08 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-07RE1	1.08 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-07RE1	1.08 g / 50.0 mL	SW6010C	BAI0299	SAI0453	AI70083
17I0322-08	1.05 g / 50.0 mL	SW6010C	BAI0299	SAI0393	AI70074



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0322-08	1.05 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-08RE1	1.05 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-08RE1	1.05 g / 50.0 mL	SW6010C	BAI0299	SAI0453	AI70083
17I0322-09	1.05 g / 50.0 mL	SW6010C	BAI0299	SAI0393	AI70074
17I0322-09	1.05 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-09RE1	1.05 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-09RE1	1.05 g / 50.0 mL	SW6010C	BAI0299	SAI0453	AI70083
17I0322-10	1.02 g / 50.0 mL	SW6010C	BAI0299	SAI0393	AI70074
17I0322-10	1.02 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-10RE1	1.02 g / 50.0 mL	SW6010C	BAI0299	SAI0396	AI70073
17I0322-10RE1	1.02 g / 50.0 mL	SW6010C	BAI0299	SAI0453	AI70083

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Organochlorine Herbicides by GC/ECD					
17I0299-01	30.2 g / 5.00 mL	SW8151A	BAI0384	SAI0468	AI70065
TCLP Organochlorine Pesticides and PCBs by GC/ECD					
17I0320-13	100 mL / 1.00 mL	SW8081B	BAI0406	SAI0428	AD70062
TCLP Organochlorine Herbicides by GC/ECD					
17I0320-13	100 mL / 5.00 mL	SW8151A	BAI0413	SAI0507	AI70097
TCLP Semivolatile Organic Compounds by GCMS					
17I0320-13	100 mL / 1.00 mL	SW8270D	BAI0484	SAI0527	AI70063
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Organochlorine Pesticides and PCBs by GC/ECD					
17I0299-01	31.2 g / 5.00 mL	SW8081B	BAI0510	SAI0582	AI70057



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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0299-02	32.2 g / 5.00 mL	SW8081B	BAI0510	SAI0582	AI70057
17I0299-03	30.4 g / 5.00 mL	SW8081B	BAI0510	SAI0582	AI70057
17I0299-04	31.0 g / 5.00 mL	SW8081B	BAI0510	SAI0582	AI70057
17I0299-05	32.2 g / 5.00 mL	SW8081B	BAI0510	SAI0590	AI70057
17I0299-06	30.1 g / 5.00 mL	SW8081B	BAI0510	SAI0582	AI70057
17I0299-06RE1	30.1 g / 5.00 mL	SW8081B	BAI0510	SAI0590	AI70057
Organochlorine Pesticides and PCBs by GC/ECD		Preparation Method:	SW3550B		
17I0317-01	30.1 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0317-02	31.6 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0317-03	30.4 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0317-04	30.1 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0317-05	30.0 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0317-06	30.1 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0319-01	30.0 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0319-02	30.3 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0319-03	30.4 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0319-04	30.0 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0319-05	30.0 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0319-06	31.2 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0322-01	31.3 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0322-02	32.0 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0322-03	31.0 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0322-04	30.1 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0322-05	30.6 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0322-06	32.7 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0322-07	30.2 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
17I0322-08	30.2 g / 5.00 mL	SW8082A	BAI0530	SAI0542	AG70131
Organochlorine Pesticides and PCBs by GC/ECD		Preparation Method:	SW3550B		
17I0322-09	30.0 g / 5.00 mL	SW8082A	BAI0569	SAI0577	AG70131
17I0322-10	30.2 g / 5.00 mL	SW8082A	BAI0569	SAI0577	AG70131
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Organic Compounds by GCMS		Preparation Method:	SW3550C		
17I0317-01	30.1 g / 1.00 mL	SW8270D	BAI0317	SAI0356	AI70066



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0317-02	30.2 g / 1.00 mL	SW8270D	BAI0317	SAI0403	AI70066
17I0317-03	30.0 g / 1.00 mL	SW8270D	BAI0317	SAI0403	AI70066
17I0317-04	30.3 g / 1.00 mL	SW8270D	BAI0317	SAI0403	AI70066
17I0317-05	32.5 g / 1.00 mL	SW8270D	BAI0317	SAI0403	AI70066
17I0317-06	30.1 g / 1.00 mL	SW8270D	BAI0317	SAI0403	AI70066
17I0319-01	30.4 g / 1.00 mL	SW8270D	BAI0317	SAI0403	AI70066
17I0319-02	30.4 g / 1.00 mL	SW8270D	BAI0317	SAI0356	AI70066
17I0319-03	32.5 g / 1.00 mL	SW8270D	BAI0317	SAI0403	AI70066
17I0319-04	31.7 g / 1.00 mL	SW8270D	BAI0317	SAI0403	AI70066
17I0319-05	30.3 g / 1.00 mL	SW8270D	BAI0317	SAI0403	AI70066
17I0319-06	30.8 g / 1.00 mL	SW8270D	BAI0317	SAI0403	AI70066
17I0322-01	30.5 g / 1.00 mL	SW8270D	BAI0317	SAI0432	AI70066
17I0322-02	30.3 g / 1.00 mL	SW8270D	BAI0317	SAI0432	AI70066
17I0322-03	30.0 g / 1.00 mL	SW8270D	BAI0317	SAI0432	AI70066
17I0322-04	31.5 g / 1.00 mL	SW8270D	BAI0317	SAI0432	AI70066
17I0322-05	30.0 g / 1.00 mL	SW8270D	BAI0317	SAI0432	AI70066
17I0322-06	32.8 g / 1.00 mL	SW8270D	BAI0317	SAI0432	AI70066
17I0322-07	32.8 g / 1.00 mL	SW8270D	BAI0317	SAI0432	AI70066
17I0322-08	30.3 g / 1.00 mL	SW8270D	BAI0317	SAI0432	AI70066
17I0317-01	30.1 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0317-02	30.2 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0317-03	30.0 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0317-04	30.3 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0317-05	32.5 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0317-06	30.1 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0319-01	30.4 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0319-02	30.4 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0319-03	32.5 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0319-04	31.7 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0319-05	30.3 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0319-06	30.8 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0356	AI70066
17I0322-01	30.5 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0432	AI70066
17I0322-02	30.3 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0432	AI70066
17I0322-03	30.0 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0432	AI70066
17I0322-04	31.5 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0432	AI70066
17I0322-05	30.0 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0432	AI70066



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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0322-06	32.8 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0432	AI70066
17I0322-07	32.8 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0432	AI70066
17I0322-08	30.3 g / 1.00 mL	SW8270D SIM	BAI0317	SAI0432	AI70066
Semivolatile Organic Compounds by GCMS					
17I0322-09	30.5 g / 1.00 mL	SW8270D	BAI0547	SAI0594	AI70063
17I0322-10	31.7 g / 1.00 mL	SW8270D	BAI0547	SAI0594	AI70063
17I0322-09	30.5 g / 1.00 mL	SW8270D SIM	BAI0547	SAI0595	AI70063
17I0322-10	31.7 g / 1.00 mL	SW8270D SIM	BAI0547	SAI0595	AI70063
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Hydrocarbons by GC					
17I0299-01	5.00 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0299-02	1.00 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0299-03	5.08 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0299-04	5.05 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0299-05	5.01 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0299-06	5.03 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0300-05	6.29 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0300-12	5.13 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0300-13	5.03 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0300-14	5.00 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0301-01	5.12 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0301-02	5.15 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0301-03	5.05 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0301-04	5.12 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0301-05	5.01 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0301-06	5.03 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0301-07	5.03 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0301-08	5.09 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0301-09	5.16 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
17I0301-10	5.04 g / 5.00 mL	SW8015C	BAI0276	SAI0304	AI70036
Volatile Hydrocarbons by GC					
17I0320-01	5.05 g / 5.00 mL	SW8015C	BAI0278	SAI0300	AF70032
17I0320-01RE1	1.00 g / 5.00 mL	SW8015C	BAI0278	SAI0300	AF70032



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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0320-02	4.68 g / 5.00 mL	SW8015C	BAI0278	SAI0300	AF70032
17I0320-03	5.14 g / 5.00 mL	SW8015C	BAI0278	SAI0300	AF70032
17I0320-04	4.71 g / 5.00 mL	SW8015C	BAI0278	SAI0300	AF70032
17I0320-05	5.05 g / 5.00 mL	SW8015C	BAI0278	SAI0300	AF70032
17I0320-05RE1	1.00 g / 5.00 mL	SW8015C	BAI0278	SAI0300	AF70032
17I0320-06	5.28 g / 5.00 mL	SW8015C	BAI0278	SAI0300	AF70032

Volatile Organic Compounds by GCMS		Preparation Method:	SW5030B		
17I0320-02	4.42 g / 5.00 mL	SW8260B	BAI0280	SAI0281	AI70017
17I0320-04	4.93 g / 5.00 mL	SW8260B	BAI0280	SAI0281	AI70017
17I0320-06	5.38 g / 5.00 mL	SW8260B	BAI0280	SAI0281	AI70017

TCLP Volatile Organic Compounds by GCMS		Preparation Method:	SW5030B		
17I0320-13	0.250 mL / 5.00 mL	SW8260B	BAI0331	SAI0327	AH70111

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0320-13	1.00 mL / 20.0 mL	SW7470A	BAI0359	SAI0384	AI70071

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0320-13	1.00 mL / 20.0 mL	SW7470A	BAI0359	SAI0384	AI70071

Metals (Total) by EPA 6000/7000 Series Methods		Preparation Method:	SW7471A		
17I0299-01	0.592 g / 20.0 mL	SW7471B	BAI0247	SAI0271	AI70054
17I0299-02	0.531 g / 20.0 mL	SW7471B	BAI0247	SAI0271	AI70054
Metals (Total) by EPA 6000/7000 Series Methods		Preparation Method:	SW7471A		
17I0299-03	0.533 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0299-04	0.525 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0299-04RE1	0.525 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0299-05	0.512 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0299-06	0.580 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0299-06RE1	0.580 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0317-01	0.523 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0317-02	0.583 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0317-03	0.591 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0317-04	0.539 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054



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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0317-05	0.544 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0317-06	0.532 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0319-01	0.539 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0319-02	0.557 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0319-03	0.524 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0319-04	0.579 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0319-05	0.585 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
17I0319-06	0.520 g / 20.0 mL	SW7471B	BAI0253	SAI0271	AI70054
Metals (Total) by EPA 6000/7000 Series Methods		Preparation Method:	SW7471A		
17I0322-01	0.511 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
17I0322-02	0.589 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
17I0322-02RE1	0.589 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
17I0322-03	0.513 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
17I0322-04	0.510 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
17I0322-05	0.561 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
17I0322-06	0.521 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
17I0322-07	0.575 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
17I0322-08	0.549 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
17I0322-09	0.532 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
17I0322-10	0.509 g / 20.0 mL	SW7471B	BAI0393	SAI0425	AI70077
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Hydrocarbons by GC		Preparation Method:	SW8100		
17I0299-01	54.1 g / 1.00 mL	SW8015C	BAI0261	SAI0322	AH70099
Semivolatile Hydrocarbons by GC		Preparation Method:	SW8100		
17I0299-02	51.0 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0299-02RE1	51.0 g / 1.00 mL	SW8015C	BAI0285	SAI0369	AH70127
17I0299-02RE2	51.0 g / 1.00 mL	SW8015C	BAI0285	SAI0402	AH70099
17I0299-03	50.8 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0299-03RE1	50.8 g / 1.00 mL	SW8015C	BAI0285	SAI0369	AH70127
17I0299-03RE2	50.8 g / 1.00 mL	SW8015C	BAI0285	SAI0402	AH70099
17I0299-04	50.0 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0299-04RE1	50.0 g / 1.00 mL	SW8015C	BAI0285	SAI0369	AH70127
17I0299-05	51.0 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099



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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17I0299-05RE1	51.0 g / 1.00 mL	SW8015C	BAI0285	SAI0369	AH70127
17I0299-05RE2	51.0 g / 1.00 mL	SW8015C	BAI0285	SAI0402	AH70099
17I0299-06	51.0 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0299-06RE1	51.0 g / 1.00 mL	SW8015C	BAI0285	SAI0369	AH70127
17I0299-06RE2	51.0 g / 1.00 mL	SW8015C	BAI0285	SAI0402	AH70099
17I0300-01	50.1 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-01RE1	50.1 g / 1.00 mL	SW8015C	BAI0285	SAI0369	AH70127
17I0300-02	50.3 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-03	52.1 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-04	50.1 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-06	50.9 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-07	50.4 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-08	50.3 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-09	50.9 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-10	51.4 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-11	50.4 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-12	50.3 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-13	51.8 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0300-14	52.3 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0301-01	50.1 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
17I0301-02	51.3 g / 1.00 mL	SW8015C	BAI0285	SAI0345	AH70099
Semivolatile Hydrocarbons by GC		Preparation Method:	SW8100		
17I0301-03	50.1 g / 1.00 mL	SW8015C	BAI0465	SAI0474	AI70089
17I0301-04	50.4 g / 1.00 mL	SW8015C	BAI0465	SAI0474	AI70089
17I0301-05	50.8 g / 1.00 mL	SW8015C	BAI0465	SAI0474	AI70089
17I0301-06	50.6 g / 1.00 mL	SW8015C	BAI0465	SAI0474	AI70089
17I0301-07	50.1 g / 1.00 mL	SW8015C	BAI0465	SAI0474	AI70089
17I0301-08	50.9 g / 1.00 mL	SW8015C	BAI0465	SAI0474	AI70089
17I0301-09	50.8 g / 1.00 mL	SW8015C	BAI0465	SAI0474	AI70089
17I0301-10	50.6 g / 1.00 mL	SW8015C	BAI0465	SAI0474	AI70089
17I0320-01	50.7 g / 1.00 mL	SW8015C	BAI0465	SAI0474	AI70089
17I0320-01RE1	50.7 g / 1.00 mL	SW8015C	BAI0465	SAI0531	AI70105
17I0320-02	50.0 g / 1.00 mL	SW8015C	BAI0465	SAI0474	AI70089
Semivolatile Hydrocarbons by GC		Preparation Method:	SW8100		
17I0320-03	50.8 g / 1.00 mL	SW8015C	BAI0549	SAI0584	AI70105
17I0320-04	51.2 g / 1.00 mL	SW8015C	BAI0549	SAI0584	AI70105



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17I0320-05	50.6 g / 1.00 mL	SW8015C	BAI0549	SAI0584	AI70105
17I0320-06	50.0 g / 1.00 mL	SW8015C	BAI0549	SAI0584	AI70105
17I0320-07	50.5 g / 1.00 mL	SW8015C	BAI0549	SAI0584	AI70105
17I0320-08	51.4 g / 1.00 mL	SW8015C	BAI0549	SAI0584	AI70105
17I0320-09	51.9 g / 1.00 mL	SW8015C	BAI0549	SAI0584	AI70105
17I0320-10	50.2 g / 1.00 mL	SW8015C	BAI0549	SAI0584	AI70105
17I0320-11	53.1 g / 1.00 mL	SW8015C	BAI0549	SAI0584	AI70105
17I0320-12	50.0 g / 1.00 mL	SW8015C	BAI0549	SAI0584	AI70105



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAI0247 - SW7471A

<u>Blank (BAI0247-BLK1)</u>										Prepared: 09/12/2017 Analyzed: 09/13/2017
Mercury	<0.008 mg/kg	0.008	mg/kg							
<u>LCS (BAI0247-BS1)</u>										Prepared: 09/12/2017 Analyzed: 09/13/2017
Mercury	0.094 mg/kg	0.008	mg/kg	0.0849	mg/kg	110	80-120			
<u>LCS Dup (BAI0247-BSD1)</u>										Prepared: 09/12/2017 Analyzed: 09/13/2017
Mercury	0.092 mg/kg	0.008	mg/kg	0.0859	mg/kg	107	80-120	1.51	20	
<u>Matrix Spike (BAI0247-MS1)</u>		<u>Source: 17I0063-02</u>								Prepared: 09/12/2017 Analyzed: 09/13/2017
Mercury	0.110 mg/kg	0.008	mg/kg	0.0885	0.018 mg/kg	105	80-120			
<u>Matrix Spike (BAI0247-MS2)</u>		<u>Source: 17I0063-05</u>								Prepared: 09/12/2017 Analyzed: 09/13/2017
Mercury	0.134 mg/kg	0.008	mg/kg	0.0947	0.026 mg/kg	114	80-120			
<u>Matrix Spike Dup (BAI0247-MSD1)</u>		<u>Source: 17I0063-02</u>								Prepared: 09/12/2017 Analyzed: 09/13/2017
Mercury	0.119 mg/kg	0.008	mg/kg	0.0973	0.018 mg/kg	104	80-120	7.29	20	
<u>Matrix Spike Dup (BAI0247-MSD2)</u>		<u>Source: 17I0063-05</u>								Prepared: 09/12/2017 Analyzed: 09/13/2017
Mercury	0.111 mg/kg	0.008	mg/kg	0.0846	0.026 mg/kg	101	80-120	18.5	20	

Batch BAI0253 - SW7471A

<u>Blank (BAI0253-BLK1)</u>										Prepared: 09/12/2017 Analyzed: 09/13/2017
Mercury	<0.008 mg/kg	0.008	mg/kg							
<u>LCS (BAI0253-BS1)</u>										Prepared: 09/12/2017 Analyzed: 09/13/2017
Mercury	0.086 mg/kg	0.008	mg/kg	0.0877	mg/kg	98.6	80-120			



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0253 - SW7471A

LCS Dup (BAI0253-BSD1)		Prepared: 09/12/2017 Analyzed: 09/13/2017							
Mercury	0.105 mg/kg	0.008	mg/kg	0.0984	mg/kg	107	80-120	19.5	20
Matrix Spike (BAI0253-MS1)		Source: 17I0299-05 Prepared: 09/12/2017 Analyzed: 09/13/2017							
Mercury	0.257 mg/kg	0.008	mg/kg	0.0962	0.072 mg/kg	192	80-120		M
Matrix Spike (BAI0253-MS2)		Source: 17I0317-02 Prepared: 09/12/2017 Analyzed: 09/13/2017							
Mercury	0.121 mg/kg	0.008	mg/kg	0.0947	0.015 mg/kg	112	80-120		
Matrix Spike Dup (BAI0253-MSD1)		Source: 17I0299-05 Prepared: 09/12/2017 Analyzed: 09/13/2017							
Mercury	0.212 mg/kg	0.008	mg/kg	0.0893	0.072 mg/kg	156	80-120	19.5	20 M
Matrix Spike Dup (BAI0253-MSD2)		Source: 17I0317-02 Prepared: 09/12/2017 Analyzed: 09/13/2017							
Mercury	0.110 mg/kg	0.008	mg/kg	0.0859	0.015 mg/kg	110	80-120	9.71	20

Batch BAI0298 - SW3050B

Blank (BAI0298-BLK1)		Prepared: 09/14/2017 Analyzed: 09/18/2017							
Cobalt	<0.200 mg/kg	0.200	mg/kg						
Nickel	<0.500 mg/kg	0.500	mg/kg						
Vanadium	<0.500 mg/kg	0.500	mg/kg						
Antimony	<5.00 mg/kg	5.00	mg/kg						
Iron	7.26 mg/kg	2.50	mg/kg						B
Chromium	<0.500 mg/kg	0.500	mg/kg						
Thallium	<2.50 mg/kg	2.50	mg/kg						
Copper	<2.50 mg/kg	2.50	mg/kg						
Beryllium	<0.200 mg/kg	0.200	mg/kg						
Silver	<0.500 mg/kg	0.500	mg/kg						
Manganese	<0.500 mg/kg	0.500	mg/kg						
Barium	<0.500 mg/kg	0.500	mg/kg						
Lead	<0.500 mg/kg	0.500	mg/kg						
Magnesium	<2.50 mg/kg	2.50	mg/kg						
Arsenic	<1.00 mg/kg	1.00	mg/kg						
Calcium	<5.00 mg/kg	5.00	mg/kg						



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAI0298 - SW3050B

Blank (BAI0298-BLK1)		Prepared: 09/14/2017 Analyzed: 09/18/2017						
Selenium	<2.50 mg/kg	2.50	mg/kg					
Cadmium	<0.200 mg/kg	0.200	mg/kg					
Zinc	<0.500 mg/kg	0.500	mg/kg					

Blank (BAI0298-BLK2)		Prepared: 09/14/2017 Analyzed: 09/15/2017						
Magnesium	<2.50 mg/kg	2.50	mg/kg					
Aluminum	<2.50 mg/kg	2.50	mg/kg					
Iron	8.22 mg/kg	2.50	mg/kg					
Potassium	<25.0 mg/kg	25.0	mg/kg					
Sodium	<25.0 mg/kg	25.0	mg/kg					

LCS (BAI0298-BS1)		Prepared: 09/14/2017 Analyzed: 09/18/2017						
Beryllium	93.6 mg/kg	0.200	mg/kg	99.1	mg/kg	94.4	80-120	
Calcium	99.1 mg/kg	5.00	mg/kg	99.1	mg/kg	100	80-120	
Barium	98.0 mg/kg	0.500	mg/kg	99.1	mg/kg	98.9	80-120	
Cadmium	96.4 mg/kg	0.200	mg/kg	99.1	mg/kg	97.3	80-120	
Manganese	97.0 mg/kg	0.500	mg/kg	99.1	mg/kg	97.9	80-120	
Cobalt	96.6 mg/kg	0.200	mg/kg	99.1	mg/kg	97.5	80-120	
Chromium	95.7 mg/kg	0.500	mg/kg	99.1	mg/kg	96.6	80-120	
Thallium	94.6 mg/kg	2.50	mg/kg	99.1	mg/kg	95.5	80-120	
Arsenic	89.9 mg/kg	1.00	mg/kg	99.1	mg/kg	90.7	80-120	
Copper	97.3 mg/kg	2.50	mg/kg	99.1	mg/kg	98.2	80-120	
Nickel	96.7 mg/kg	0.500	mg/kg	99.1	mg/kg	97.6	80-120	
Silver	4.88 mg/kg	0.500	mg/kg	4.96	mg/kg	98.4	80-120	
Iron	99.2 mg/kg	2.50	mg/kg	99.1	mg/kg	100	80-120	
Lead	94.5 mg/kg	0.500	mg/kg	99.1	mg/kg	95.3	80-120	
Selenium	90.5 mg/kg	2.50	mg/kg	99.1	mg/kg	91.3	80-120	
Vanadium	95.6 mg/kg	0.500	mg/kg	99.1	mg/kg	96.4	80-120	
Magnesium	98.6 mg/kg	2.50	mg/kg	99.1	mg/kg	99.4	80-120	
Antimony	92.4 mg/kg	5.00	mg/kg	99.1	mg/kg	93.2	80-120	
Zinc	95.3 mg/kg	0.500	mg/kg	99.1	mg/kg	96.1	80-120	



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Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/5/2017 13:11
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0298 - SW3050B

LCS (BAI0298-BS2)						
Prepared: 09/14/2017 Analyzed: 09/15/2017						
Potassium	236 mg/kg	25.0	mg/kg	248 mg/kg	95.2	80-120
Magnesium	98.5 mg/kg	2.50	mg/kg	99.1 mg/kg	99.4	80-120
Sodium	246 mg/kg	25.0	mg/kg	248 mg/kg	99.1	80-120
Aluminum	96.9 mg/kg	2.50	mg/kg	99.1 mg/kg	97.7	80-120
Iron	104 mg/kg	2.50	mg/kg	99.1 mg/kg	105	80-120

LCS Dup (BAI0298-BSD1)						
Prepared: 09/14/2017 Analyzed: 09/18/2017						
Chromium	97.6 mg/kg	0.500	mg/kg	99.0 mg/kg	98.6	80-120 1.91
Selenium	93.5 mg/kg	2.50	mg/kg	99.0 mg/kg	94.4	80-120 3.25
Cadmium	97.6 mg/kg	0.200	mg/kg	99.0 mg/kg	98.6	80-120 1.23
Beryllium	95.5 mg/kg	0.200	mg/kg	99.0 mg/kg	96.5	80-120 2.08
Magnesium	100 mg/kg	2.50	mg/kg	99.0 mg/kg	101	80-120 1.72
Iron	104 mg/kg	2.50	mg/kg	99.0 mg/kg	105	80-120 4.55
Copper	99.2 mg/kg	2.50	mg/kg	99.0 mg/kg	100	80-120 1.95
Lead	97.6 mg/kg	0.500	mg/kg	99.0 mg/kg	98.6	80-120 3.24
Nickel	98.6 mg/kg	0.500	mg/kg	99.0 mg/kg	99.6	80-120 1.93
Barium	99.9 mg/kg	0.500	mg/kg	99.0 mg/kg	101	80-120 1.92
Manganese	99.5 mg/kg	0.500	mg/kg	99.0 mg/kg	100	80-120 2.52
Cobalt	98.3 mg/kg	0.200	mg/kg	99.0 mg/kg	99.2	80-120 1.72
Calcium	101 mg/kg	5.00	mg/kg	99.0 mg/kg	102	80-120 1.93
Thallium	96.7 mg/kg	2.50	mg/kg	99.0 mg/kg	97.6	80-120 2.13
Silver	4.92 mg/kg	0.500	mg/kg	4.95 mg/kg	99.4	80-120 0.965
Vanadium	97.5 mg/kg	0.500	mg/kg	99.0 mg/kg	98.5	80-120 2.01
Arsenic	92.5 mg/kg	1.00	mg/kg	99.0 mg/kg	93.4	80-120 2.84
Antimony	96.0 mg/kg	5.00	mg/kg	99.0 mg/kg	97.0	80-120 3.85
Zinc	96.7 mg/kg	0.500	mg/kg	99.0 mg/kg	97.6	80-120 1.43

LCS Dup (BAI0298-BSD2)						
Prepared: 09/14/2017 Analyzed: 09/15/2017						
Potassium	251 mg/kg	25.0	mg/kg	248 mg/kg	102	80-120 6.34
Sodium	259 mg/kg	25.0	mg/kg	248 mg/kg	105	80-120 5.47
Aluminum	103 mg/kg	2.50	mg/kg	99.0 mg/kg	104	80-120 5.85
Iron	112 mg/kg	2.50	mg/kg	99.0 mg/kg	113	80-120 7.68



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Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0298 - SW3050B

LCS Dup (BAI0298-BSD2)		Prepared: 09/14/2017 Analyzed: 09/15/2017							
Magnesium	103 mg/kg	2.50	mg/kg	99.0	mg/kg	104	80-120	4.30	20

Matrix Spike (BAI0298-MS1)		Source: 17I0299-02 Prepared: 09/14/2017 Analyzed: 09/18/2017							
Thallium	75.8 mg/kg	2.50	mg/kg	92.8	<2.50 mg/kg	81.7	75-125		
Beryllium	81.7 mg/kg	0.200	mg/kg	92.8	<0.200 mg/kg	88.1	75-125		
Calcium	961 mg/kg	5.00	mg/kg	92.8	1240 mg/kg	-304	75-125		M, E
Magnesium	1740 mg/kg	2.50	mg/kg	92.8	1350 mg/kg	421	75-125		M, E
Cadmium	84.9 mg/kg	0.200	mg/kg	92.8	2.57 mg/kg	88.7	75-125		
Iron	20500 mg/kg	2.50	mg/kg	92.8	27700 mg/kg	-7830	75-125		M, E
Cobalt	86.2 mg/kg	0.200	mg/kg	92.8	3.79 mg/kg	88.8	75-125		
Selenium	78.0 mg/kg	2.50	mg/kg	92.8	<2.50 mg/kg	84.1	75-125		
Antimony	21.1 mg/kg	5.00	mg/kg	92.8	<5.00 mg/kg	22.7	75-125		M
Chromium	106 mg/kg	0.500	mg/kg	92.8	27.0 mg/kg	85.4	75-125		
Copper	97.6 mg/kg	2.50	mg/kg	92.8	10.2 mg/kg	94.2	75-125		
Lead	102 mg/kg	0.500	mg/kg	92.8	12.5 mg/kg	97.0	75-125		
Arsenic	85.1 mg/kg	1.00	mg/kg	92.8	7.76 mg/kg	83.4	75-125		
Barium	166 mg/kg	0.500	mg/kg	92.8	54.9 mg/kg	120	75-125		
Manganese	156 mg/kg	0.500	mg/kg	92.8	69.6 mg/kg	93.4	75-125		
Nickel	90.4 mg/kg	0.500	mg/kg	92.8	6.48 mg/kg	90.4	75-125		
Silver	4.48 mg/kg	0.500	mg/kg	4.64	<0.500 mg/kg	96.5	75-125		
Vanadium	119 mg/kg	0.500	mg/kg	92.8	48.4 mg/kg	75.8	75-125		
Zinc	173 mg/kg	0.500	mg/kg	92.8	65.4 mg/kg	116	75-125		

Matrix Spike (BAI0298-MS2)		Source: 17I0317-03 Prepared: 09/14/2017 Analyzed: 09/18/2017							
Cobalt	87.8 mg/kg	0.200	mg/kg	98.0	7.42 mg/kg	82.0	75-125		
Iron	16400 mg/kg	2.50	mg/kg	98.0	18300 mg/kg	-2000	75-125		M, E
Barium	152 mg/kg	0.500	mg/kg	98.0	63.6 mg/kg	90.0	75-125		
Cadmium	85.0 mg/kg	0.200	mg/kg	98.0	2.03 mg/kg	84.6	75-125		
Magnesium	3600 mg/kg	2.50	mg/kg	98.0	3830 mg/kg	-236	75-125		M, E
Arsenic	82.5 mg/kg	1.00	mg/kg	98.0	6.70 mg/kg	77.3	75-125		
Manganese	253 mg/kg	0.500	mg/kg	98.0	167 mg/kg	86.9	75-125		
Thallium	76.4 mg/kg	2.50	mg/kg	98.0	<2.50 mg/kg	77.9	75-125		



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Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/5/2017 13:11
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0298 - SW3050B

Matrix Spike (BAI0298-MS2)		Source: 17I0317-03		Prepared: 09/14/2017 Analyzed: 09/18/2017			
Nickel	92.8 mg/kg	0.500	mg/kg	98.0	10.2 mg/kg	84.2	75-125
Antimony	17.4 mg/kg	5.00	mg/kg	98.0	<5.00 mg/kg	17.8	75-125
Chromium	104 mg/kg	0.500	mg/kg	98.0	21.8 mg/kg	83.7	75-125
Vanadium	113 mg/kg	0.500	mg/kg	98.0	28.8 mg/kg	85.4	75-125
Selenium	77.6 mg/kg	2.50	mg/kg	98.0	<2.50 mg/kg	79.2	75-125
Lead	99.3 mg/kg	0.500	mg/kg	98.0	17.7 mg/kg	83.3	75-125
Copper	96.4 mg/kg	2.50	mg/kg	98.0	11.9 mg/kg	86.2	75-125
Beryllium	82.9 mg/kg	0.200	mg/kg	98.0	<0.200 mg/kg	84.6	75-125
Calcium	1080 mg/kg	5.00	mg/kg	98.0	853 mg/kg	230	75-125
Silver	4.40 mg/kg	0.500	mg/kg	4.90	<0.500 mg/kg	89.8	75-125
Zinc	199 mg/kg	0.500	mg/kg	98.0	125 mg/kg	75.3	75-125

Matrix Spike (BAI0298-MS3)		Source: 17I0299-02		Prepared: 09/14/2017 Analyzed: 09/15/2017			
Aluminum	26100 mg/kg	2.50	mg/kg	92.8	28700 mg/kg	-2830	75-125
Iron	22500 mg/kg	2.50	mg/kg	92.8	27700 mg/kg	-5620	75-125
Magnesium	1940 mg/kg	2.50	mg/kg	92.8	1350 mg/kg	641	75-125
Potassium	2860 mg/kg	25.0	mg/kg	232	1950 mg/kg	396	75-125
Sodium	362 mg/kg	25.0	mg/kg	232	123 mg/kg	103	75-125

Matrix Spike (BAI0298-MS4)		Source: 17I0317-03		Prepared: 09/14/2017 Analyzed: 09/15/2017			
Sodium	263 mg/kg	25.0	mg/kg	245	26.7 mg/kg	96.5	75-125
Potassium	4750 mg/kg	25.0	mg/kg	245	4210 mg/kg	222	75-125
Aluminum	25200 mg/kg	2.50	mg/kg	98.0	21000 mg/kg	4350	75-125
Iron	18800 mg/kg	2.50	mg/kg	98.0	18300 mg/kg	436	75-125
Magnesium	4190 mg/kg	2.50	mg/kg	98.0	3830 mg/kg	363	75-125

Matrix Spike Dup (BAI0298-MSD1)		Source: 17I0299-02		Prepared: 09/14/2017 Analyzed: 09/18/2017			
Cadmium	91.8 mg/kg	0.200	mg/kg	99.3	2.57 mg/kg	89.8	75-125 7.81 20
Iron	24000 mg/kg	2.50	mg/kg	99.3	27700 mg/kg	-3730	75-125 16.0 20 M, E
Copper	105 mg/kg	2.50	mg/kg	99.3	10.2 mg/kg	95.7	75-125 7.52 20
Nickel	97.4 mg/kg	0.500	mg/kg	99.3	6.48 mg/kg	91.6	75-125 7.50 20
Selenium	84.5 mg/kg	2.50	mg/kg	99.3	<2.50 mg/kg	85.0	75-125 7.91 20
Lead	104 mg/kg	0.500	mg/kg	99.3	12.5 mg/kg	92.3	75-125 1.66 20



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201 Church Street
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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0298 - SW3050B

Matrix Spike Dup (BAI0298-MSD1)	Source: 17I0299-02		Prepared: 09/14/2017 Analyzed: 09/18/2017							
Chromium	114 mg/kg	0.500	mg/kg	99.3	27.0 mg/kg	87.2	75-125	6.70	20	
Manganese	165 mg/kg	0.500	mg/kg	99.3	69.6 mg/kg	96.2	75-125	5.53	20	
Vanadium	132 mg/kg	0.500	mg/kg	99.3	48.4 mg/kg	84.3	75-125	10.7	20	
Magnesium	1780 mg/kg	2.50	mg/kg	99.3	1350 mg/kg	439	75-125	2.53	20	M, E
Calcium	963 mg/kg	5.00	mg/kg	99.3	1240 mg/kg	-282	75-125	0.217	20	M, E
Silver	4.75 mg/kg	0.500	mg/kg	4.97	<0.500 mg/kg	95.6	75-125	5.81	20	
Cobalt	92.5 mg/kg	0.200	mg/kg	99.3	3.79 mg/kg	89.3	75-125	7.06	20	
Barium	170 mg/kg	0.500	mg/kg	99.3	54.9 mg/kg	116	75-125	2.48	20	
Beryllium	88.7 mg/kg	0.200	mg/kg	99.3	<0.200 mg/kg	89.3	75-125	8.16	20	
Arsenic	91.7 mg/kg	1.00	mg/kg	99.3	7.76 mg/kg	84.5	75-125	7.51	20	
Thallium	76.3 mg/kg	2.50	mg/kg	99.3	<2.50 mg/kg	76.8	75-125	0.627	20	
Antimony	23.7 mg/kg	5.00	mg/kg	99.3	<5.00 mg/kg	23.8	75-125	11.5	20	M
Zinc	175 mg/kg	0.500	mg/kg	99.3	65.4 mg/kg	111	75-125	1.47	20	

Matrix Spike Dup (BAI0298-MSD2)	Source: 17I0317-03		Prepared: 09/14/2017 Analyzed: 09/18/2017							
Arsenic	76.6 mg/kg	1.00	mg/kg	91.1	6.70 mg/kg	76.7	75-125	7.49	20	
Silver	4.13 mg/kg	0.500	mg/kg	4.55	<0.500 mg/kg	90.8	75-125	6.29	20	
Thallium	66.9 mg/kg	2.50	mg/kg	91.1	<2.50 mg/kg	73.4	75-125	13.2	20	M
Iron	15800 mg/kg	2.50	mg/kg	91.1	18300 mg/kg	-2840	75-125	3.88	20	M, E
Selenium	70.7 mg/kg	2.50	mg/kg	91.1	<2.50 mg/kg	77.7	75-125	9.29	20	
Vanadium	105 mg/kg	0.500	mg/kg	91.1	28.8 mg/kg	84.1	75-125	6.55	20	
Barium	147 mg/kg	0.500	mg/kg	91.1	63.6 mg/kg	91.5	75-125	3.26	20	
Nickel	84.9 mg/kg	0.500	mg/kg	91.1	10.2 mg/kg	82.0	75-125	8.83	20	
Chromium	96.5 mg/kg	0.500	mg/kg	91.1	21.8 mg/kg	82.0	75-125	7.43	20	
Copper	90.3 mg/kg	2.50	mg/kg	91.1	11.9 mg/kg	86.0	75-125	6.59	20	
Calcium	866 mg/kg	5.00	mg/kg	91.1	853 mg/kg	14.6	75-125	21.8	20	M, P, E
Beryllium	75.8 mg/kg	0.200	mg/kg	91.1	<0.200 mg/kg	83.2	75-125	8.97	20	
Magnesium	3280 mg/kg	2.50	mg/kg	91.1	3830 mg/kg	-609	75-125	9.42	20	M, E
Manganese	230 mg/kg	0.500	mg/kg	91.1	167 mg/kg	68.7	75-125	9.34	20	M
Cadmium	78.6 mg/kg	0.200	mg/kg	91.1	2.03 mg/kg	84.1	75-125	7.86	20	
Cobalt	81.3 mg/kg	0.200	mg/kg	91.1	7.42 mg/kg	81.2	75-125	7.71	20	
Lead	91.1 mg/kg	0.500	mg/kg	91.1	17.7 mg/kg	80.6	75-125	8.63	20	



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0298 - SW3050B

Matrix Spike Dup (BAI0298-MSD2)		Source: 17I0317-03		Prepared: 09/14/2017 Analyzed: 09/18/2017					
Antimony	15.7 mg/kg	5.00	mg/kg	91.1	<5.00 mg/kg	17.3	75-125	10.3	20 M
Zinc	183 mg/kg	0.500	mg/kg	91.1	125 mg/kg	63.7	75-125	8.30	20 M
Matrix Spike Dup (BAI0298-MSD3)		Source: 17I0299-02		Prepared: 09/14/2017 Analyzed: 09/15/2017					
Potassium	3060 mg/kg	25.0	mg/kg	248	1950 mg/kg	448	75-125	6.51	20 M
Magnesium	1980 mg/kg	2.50	mg/kg	99.3	1350 mg/kg	638	75-125	1.98	20 M, E
Aluminum	30900 mg/kg	2.50	mg/kg	99.3	28700 mg/kg	2150	75-125	16.7	20 M, E
Sodium	394 mg/kg	25.0	mg/kg	248	123 mg/kg	109	75-125	8.50	20
Iron	26400 mg/kg	2.50	mg/kg	99.3	27700 mg/kg	-1290	75-125	16.1	20 M, E
Matrix Spike Dup (BAI0298-MSD4)		Source: 17I0317-03		Prepared: 09/14/2017 Analyzed: 09/15/2017					
Iron	18200 mg/kg	2.50	mg/kg	91.1	18300 mg/kg	-101	75-125	2.80	20 M, E
Aluminum	26200 mg/kg	2.50	mg/kg	91.1	21000 mg/kg	5790	75-125	3.91	20 M, E
Potassium	4460 mg/kg	25.0	mg/kg	228	4210 mg/kg	111	75-125	6.33	20
Magnesium	3840 mg/kg	2.50	mg/kg	91.1	3830 mg/kg	13.7	75-125	8.56	20 M, E
Sodium	247 mg/kg	25.0	mg/kg	228	26.7 mg/kg	96.9	75-125	6.19	20

Batch BAI0299 - SW3050B

Blank (BAI0299-BLK1)		Prepared: 09/14/2017 Analyzed: 09/18/2017					
Vanadium	<0.500 mg/kg	0.500	mg/kg				
Copper	<2.50 mg/kg	2.50	mg/kg				
Iron	4.39 mg/kg	2.50	mg/kg				
Cadmium	<0.200 mg/kg	0.200	mg/kg				
Beryllium	<0.200 mg/kg	0.200	mg/kg				
Thallium	<2.50 mg/kg	2.50	mg/kg				
Silver	<0.500 mg/kg	0.500	mg/kg				
Calcium	<5.00 mg/kg	5.00	mg/kg				
Lead	<0.500 mg/kg	0.500	mg/kg				
Magnesium	<2.50 mg/kg	2.50	mg/kg				
Manganese	<0.500 mg/kg	0.500	mg/kg				
Antimony	<5.00 mg/kg	5.00	mg/kg				



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAI0299 - SW3050B

Blank (BAI0299-BLK1)				Prepared: 09/14/2017 Analyzed: 09/18/2017			
Barium	<0.500 mg/kg	0.500	mg/kg				
Cobalt	<0.200 mg/kg	0.200	mg/kg				
Chromium	<0.500 mg/kg	0.500	mg/kg				
Selenium	<2.50 mg/kg	2.50	mg/kg				
Arsenic	<1.00 mg/kg	1.00	mg/kg				
Nickel	<0.500 mg/kg	0.500	mg/kg				
Zinc	<0.500 mg/kg	0.500	mg/kg				

Blank (BAI0299-BLK2)				Prepared: 09/14/2017 Analyzed: 09/18/2017			
Aluminum	<2.50 mg/kg	2.50	mg/kg				
Iron	4.48 mg/kg	2.50	mg/kg				B
Sodium	<25.0 mg/kg	25.0	mg/kg				
Magnesium	<2.50 mg/kg	2.50	mg/kg				
Calcium	<5.00 mg/kg	5.00	mg/kg				B
Potassium	<25.0 mg/kg	25.0	mg/kg				

LCS (BAI0299-BS1)							
Nickel	93.6 mg/kg	0.500	mg/kg	93.7	mg/kg	99.9	80-120
Manganese	93.8 mg/kg	0.500	mg/kg	93.7	mg/kg	100	80-120
Silver	4.62 mg/kg	0.500	mg/kg	4.69	mg/kg	98.6	80-120
Antimony	90.5 mg/kg	5.00	mg/kg	93.7	mg/kg	96.6	80-120
Selenium	88.5 mg/kg	2.50	mg/kg	93.7	mg/kg	94.4	80-120
Lead	92.2 mg/kg	0.500	mg/kg	93.7	mg/kg	98.3	80-120
Magnesium	95.1 mg/kg	2.50	mg/kg	93.7	mg/kg	101	80-120
Calcium	97.6 mg/kg	5.00	mg/kg	93.7	mg/kg	104	80-120
Arsenic	87.0 mg/kg	1.00	mg/kg	93.7	mg/kg	92.8	80-120
Thallium	81.9 mg/kg	2.50	mg/kg	93.7	mg/kg	87.4	80-120
Barium	94.9 mg/kg	0.500	mg/kg	93.7	mg/kg	101	80-120
Chromium	92.5 mg/kg	0.500	mg/kg	93.7	mg/kg	98.6	80-120
Cobalt	93.2 mg/kg	0.200	mg/kg	93.7	mg/kg	99.4	80-120
Vanadium	92.5 mg/kg	0.500	mg/kg	93.7	mg/kg	98.7	80-120
Cadmium	92.7 mg/kg	0.200	mg/kg	93.7	mg/kg	98.9	80-120



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0299 - SW3050B

LCS (BAI0299-BS1)						
Prepared: 09/14/2017 Analyzed: 09/18/2017						
Beryllium	90.0 mg/kg	0.200	mg/kg	93.7 mg/kg	96.0	80-120
Iron	97.0 mg/kg	2.50	mg/kg	93.7 mg/kg	103	80-120
Copper	93.9 mg/kg	2.50	mg/kg	93.7 mg/kg	100	80-120
Zinc	91.6 mg/kg	0.500	mg/kg	93.7 mg/kg	97.7	80-120

LCS (BAI0299-BS2)						
Prepared: 09/14/2017 Analyzed: 09/18/2017						
Sodium	256 mg/kg	25.0	mg/kg	234 mg/kg	109	80-120
Aluminum	102 mg/kg	2.50	mg/kg	93.7 mg/kg	109	80-120
Potassium	242 mg/kg	25.0	mg/kg	234 mg/kg	103	80-120
Calcium	102 mg/kg	5.00	mg/kg	93.7 mg/kg	109	80-120
Magnesium	92.3 mg/kg	2.50	mg/kg	93.7 mg/kg	98.5	80-120
Iron	96.8 mg/kg	2.50	mg/kg	93.7 mg/kg	103	80-120

LCS Dup (BAI0299-BSD1)						
Prepared: 09/14/2017 Analyzed: 09/18/2017						
Lead	96.3 mg/kg	0.500	mg/kg	98.7 mg/kg	97.5	80-120 4.37 20
Calcium	100 mg/kg	5.00	mg/kg	98.7 mg/kg	101	80-120 2.48 20
Magnesium	99.5 mg/kg	2.50	mg/kg	98.7 mg/kg	101	80-120 4.53 20
Arsenic	91.5 mg/kg	1.00	mg/kg	98.7 mg/kg	92.7	80-120 5.05 20
Cadmium	96.9 mg/kg	0.200	mg/kg	98.7 mg/kg	98.2	80-120 4.49 20
Beryllium	94.7 mg/kg	0.200	mg/kg	98.7 mg/kg	95.9	80-120 5.11 20
Cobalt	97.7 mg/kg	0.200	mg/kg	98.7 mg/kg	99.0	80-120 4.74 20
Manganese	98.4 mg/kg	0.500	mg/kg	98.7 mg/kg	99.7	80-120 4.81 20
Silver	4.85 mg/kg	0.500	mg/kg	4.94 mg/kg	98.2	80-120 4.78 20
Nickel	98.1 mg/kg	0.500	mg/kg	98.7 mg/kg	99.3	80-120 4.68 20
Barium	99.1 mg/kg	0.500	mg/kg	98.7 mg/kg	100	80-120 4.39 20
Thallium	85.5 mg/kg	2.50	mg/kg	98.7 mg/kg	86.6	80-120 4.31 20
Vanadium	97.0 mg/kg	0.500	mg/kg	98.7 mg/kg	98.2	80-120 4.68 20
Antimony	94.7 mg/kg	5.00	mg/kg	98.7 mg/kg	96.0	80-120 4.55 20
Selenium	92.1 mg/kg	2.50	mg/kg	98.7 mg/kg	93.3	80-120 3.96 20
Chromium	97.0 mg/kg	0.500	mg/kg	98.7 mg/kg	98.2	80-120 4.79 20
Copper	98.6 mg/kg	2.50	mg/kg	98.7 mg/kg	99.9	80-120 4.89 20
Iron	101 mg/kg	2.50	mg/kg	98.7 mg/kg	102	80-120 3.64 20



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0299 - SW3050B

LCS Dup (BAI0299-BSD1)		Prepared: 09/14/2017 Analyzed: 09/18/2017							
Zinc	95.9 mg/kg	0.500	mg/kg	98.7 mg/kg	97.1	80-120	4.62	20	

LCS Dup (BAI0299-BSD2)		Prepared: 09/14/2017 Analyzed: 09/18/2017							
Calcium	107 mg/kg	5.00	mg/kg	98.7 mg/kg	108	80-120	4.82	20	
Aluminum	108 mg/kg	2.50	mg/kg	98.7 mg/kg	110	80-120	5.57	20	
Magnesium	98.7 mg/kg	2.50	mg/kg	98.7 mg/kg	99.9	80-120	6.65	20	
Sodium	273 mg/kg	25.0	mg/kg	247 mg/kg	110	80-120	6.37	20	
Iron	103 mg/kg	2.50	mg/kg	98.7 mg/kg	104	80-120	5.75	20	
Potassium	260 mg/kg	25.0	mg/kg	247 mg/kg	105	80-120	7.23	20	

Matrix Spike (BAI0299-MS1)		Source: 17I0322-01 Prepared: 09/14/2017 Analyzed: 09/18/2017							
Cadmium	77.0 mg/kg	0.200	mg/kg	94.6 1.60 mg/kg	79.7	75-125			
Chromium	92.1 mg/kg	0.500	mg/kg	94.6 16.3 mg/kg	80.1	75-125			
Iron	16700 mg/kg	2.50	mg/kg	94.6 16800 mg/kg	-167	75-125			M, E
Magnesium	2590 mg/kg	2.50	mg/kg	94.6 2680 mg/kg	-87.4	75-125			M, E
Copper	91.4 mg/kg	2.50	mg/kg	94.6 12.9 mg/kg	83.1	75-125			
Calcium	736 mg/kg	5.00	mg/kg	94.6 738 mg/kg	-1.85	75-125			M
Selenium	69.3 mg/kg	2.50	mg/kg	94.6 <2.50 mg/kg	73.2	75-125			M
Cobalt	84.1 mg/kg	0.200	mg/kg	94.6 9.09 mg/kg	79.3	75-125			
Lead	85.4 mg/kg	0.500	mg/kg	94.6 11.0 mg/kg	78.7	75-125			
Antimony	19.9 mg/kg	5.00	mg/kg	94.6 <5.00 mg/kg	21.0	75-125			M
Thallium	69.2 mg/kg	2.50	mg/kg	94.6 <2.50 mg/kg	73.1	75-125			M
Manganese	305 mg/kg	0.500	mg/kg	94.6 233 mg/kg	76.7	75-125			
Silver	3.96 mg/kg	0.500	mg/kg	4.73 <0.500 mg/kg	83.7	75-125			
Arsenic	74.0 mg/kg	1.00	mg/kg	94.6 4.26 mg/kg	73.7	75-125			M
Barium	159 mg/kg	0.500	mg/kg	94.6 85.0 mg/kg	78.6	75-125			
Vanadium	108 mg/kg	0.500	mg/kg	94.6 32.1 mg/kg	79.8	75-125			
Nickel	85.1 mg/kg	0.500	mg/kg	94.6 9.34 mg/kg	80.0	75-125			
Beryllium	75.6 mg/kg	0.200	mg/kg	94.6 <0.200 mg/kg	79.9	75-125			
Zinc	138 mg/kg	0.500	mg/kg	94.6 67.2 mg/kg	74.4	75-125			M



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0299 - SW3050B

Matrix Spike (BAI0299-MS2)	Source: 17I0322-01		Prepared: 09/14/2017 Analyzed: 09/18/2017						
Iron	18300 mg/kg	2.50	mg/kg	94.6	16800 mg/kg	1590	75-125		M, E
Calcium	865 mg/kg	5.00	mg/kg	94.6	738 mg/kg	135	75-125		M, E
Potassium	4410 mg/kg	25.0	mg/kg	237	4340 mg/kg	30.9	75-125		M
Magnesium	3030 mg/kg	2.50	mg/kg	94.6	2680 mg/kg	378	75-125		M, E
Aluminum	28000 mg/kg	2.50	mg/kg	94.6	25400 mg/kg	2770	75-125		M, E
Sodium	289 mg/kg	25.0	mg/kg	237	38.7 mg/kg	106	75-125		

Matrix Spike Dup (BAI0299-MSD1)	Source: 17I0322-01		Prepared: 09/14/2017 Analyzed: 09/18/2017						
Thallium	65.3 mg/kg	2.50	mg/kg	96.8	<2.50 mg/kg	67.5	75-125	5.68	20 M
Manganese	311 mg/kg	0.500	mg/kg	96.8	233 mg/kg	80.7	75-125	1.80	20
Magnesium	2700 mg/kg	2.50	mg/kg	96.8	2680 mg/kg	29.3	75-125	4.19	20 M, E
Barium	160 mg/kg	0.500	mg/kg	96.8	85.0 mg/kg	78.0	75-125	0.722	20
Calcium	741 mg/kg	5.00	mg/kg	96.8	738 mg/kg	3.12	75-125	0.647	20 M
Antimony	18.2 mg/kg	5.00	mg/kg	96.8	<5.00 mg/kg	18.8	75-125	8.76	20 M
Vanadium	109 mg/kg	0.500	mg/kg	96.8	32.1 mg/kg	79.1	75-125	0.948	20
Cobalt	84.2 mg/kg	0.200	mg/kg	96.8	9.09 mg/kg	77.6	75-125	0.0439	20
Beryllium	76.2 mg/kg	0.200	mg/kg	96.8	<0.200 mg/kg	78.7	75-125	0.757	20
Copper	92.7 mg/kg	2.50	mg/kg	96.8	12.9 mg/kg	82.5	75-125	1.36	20
Chromium	93.8 mg/kg	0.500	mg/kg	96.8	16.3 mg/kg	80.2	75-125	1.93	20
Silver	4.07 mg/kg	0.500	mg/kg	4.84	<0.500 mg/kg	84.0	75-125	2.71	20
Arsenic	73.7 mg/kg	1.00	mg/kg	96.8	4.26 mg/kg	71.7	75-125	0.388	20 M
Selenium	69.4 mg/kg	2.50	mg/kg	96.8	<2.50 mg/kg	71.7	75-125	0.207	20 M
Iron	16700 mg/kg	2.50	mg/kg	96.8	16800 mg/kg	-141	75-125	0.129	20 M, E
Cadmium	77.7 mg/kg	0.200	mg/kg	96.8	1.60 mg/kg	78.6	75-125	0.929	20
Nickel	85.4 mg/kg	0.500	mg/kg	96.8	9.34 mg/kg	78.5	75-125	0.378	20
Lead	85.9 mg/kg	0.500	mg/kg	96.8	11.0 mg/kg	77.5	75-125	0.634	20
Zinc	142 mg/kg	0.500	mg/kg	96.8	67.2 mg/kg	76.9	75-125	2.88	20



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0299 - SW3050B

Matrix Spike Dup (BAI0299-MSD2)		Source: 17I0322-01		Prepared: 09/14/2017 Analyzed: 09/18/2017					
Potassium	4620 mg/kg	25.0	mg/kg	242	4340 mg/kg	116	75-125	4.60	20
Sodium	293 mg/kg	25.0	mg/kg	242	38.7 mg/kg	105	75-125	1.45	20
Aluminum	27900 mg/kg	2.50	mg/kg	96.8	25400 mg/kg	2610	75-125	0.322	20 M, E
Iron	18600 mg/kg	2.50	mg/kg	96.8	16800 mg/kg	1840	75-125	1.50	20 M, E
Calcium	883 mg/kg	5.00	mg/kg	96.8	738 mg/kg	150	75-125	2.00	20 M, E
Magnesium	3200 mg/kg	2.50	mg/kg	96.8	2680 mg/kg	542	75-125	5.37	20 M, E

Batch BAI0393 - SW7471A

Blank (BAI0393-BLK1)		Prepared: 09/18/2017 Analyzed: 09/19/2017					
Mercury	<0.008 mg/kg	0.008	mg/kg				
LCS (BAI0393-BS1)		Prepared: 09/18/2017 Analyzed: 09/19/2017					
Mercury	0.095 mg/kg	0.008	mg/kg	0.0988 mg/kg	96.6	80-120	
LCS Dup (BAI0393-BSD1)		Prepared: 09/18/2017 Analyzed: 09/19/2017					
Mercury	0.099 mg/kg	0.008	mg/kg	0.0962 mg/kg	103	80-120	4.03
Matrix Spike (BAI0393-MS1)		Source: 17I0322-04		Prepared: 09/18/2017 Analyzed: 09/19/2017			
Mercury	0.121 mg/kg	0.008	mg/kg	0.0879 0.038 mg/kg	94.0	80-120	
Matrix Spike (BAI0393-MS2)		Source: 17I0322-10		Prepared: 09/18/2017 Analyzed: 09/19/2017			
Mercury	0.137 mg/kg	0.008	mg/kg	0.0942 0.039 mg/kg	103	80-120	
Matrix Spike Dup (BAI0393-MSD1)		Source: 17I0322-04		Prepared: 09/18/2017 Analyzed: 09/19/2017			
Mercury	0.122 mg/kg	0.008	mg/kg	0.0928 0.038 mg/kg	90.5	80-120	1.10



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Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0393 - SW7471A

Matrix Spike Dup (BAI0393-MSD2)	Source: 17I0322-10	Prepared: 09/18/2017	Analyzed: 09/19/2017
Mercury	0.150 mg/kg	0.008 mg/kg	0.0954 0.039 mg/kg 116 80-120 9.51 20



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TCLP Metals by 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0347 - SW1311 Metals

Blank (BAI0347-BLK1)				Prepared: 09/14/2017 Analyzed: 09/15/2017			
Extraction Fluid, Metals	2 #	0	#				
Blank (BAI0347-BLK2)				Prepared: 09/14/2017 Analyzed: 09/15/2017			
Extraction Fluid, Metals	1 #	0	#				

Batch BAI0349 - SW3010A

Blank (BAI0349-BLK1)				Prepared & Analyzed: 09/15/2017			
Arsenic	<0.100 mg/L	0.100	mg/L				
Barium	<5.00 mg/L	5.00	mg/L				
Cadmium	<0.0400 mg/L	0.0400	mg/L				
Chromium	<0.100 mg/L	0.100	mg/L				
Lead	<0.100 mg/L	0.100	mg/L				
Selenium	<0.250 mg/L	0.250	mg/L				
Silver	<0.100 mg/L	0.100	mg/L				

LCS (BAI0349-BS1)				Prepared & Analyzed: 09/15/2017			
Arsenic	2.64 mg/L	0.100	mg/L	2.50	mg/L	106	80-120
Barium	<5.00 mg/L	5.00	mg/L	2.50	mg/L	108	80-120
Cadmium	2.59 mg/L	0.0400	mg/L	2.50	mg/L	103	80-120
Chromium	2.59 mg/L	0.100	mg/L	2.50	mg/L	104	80-120
Lead	2.68 mg/L	0.100	mg/L	2.50	mg/L	107	80-120
Selenium	2.57 mg/L	0.250	mg/L	2.50	mg/L	103	80-120
Silver	0.534 mg/L	0.100	mg/L	0.500	mg/L	107	80-120

LCS Dup (BAI0349-BSD1)				Prepared & Analyzed: 09/15/2017			
Arsenic	2.69 mg/L	0.100	mg/L	2.50	mg/L	108	80-120
Barium	<5.00 mg/L	5.00	mg/L	2.50	mg/L	111	80-120
Cadmium	2.69 mg/L	0.0400	mg/L	2.50	mg/L	108	80-120
Chromium	2.70 mg/L	0.100	mg/L	2.50	mg/L	108	80-120
Lead	2.73 mg/L	0.100	mg/L	2.50	mg/L	109	80-120
Selenium	2.67 mg/L	0.250	mg/L	2.50	mg/L	107	80-120
Silver	0.537 mg/L	0.100	mg/L	0.500	mg/L	107	80-120



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TCLP Metals by 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0349 - SW3010A

<u>LCS Dup (BAI0349-BSD1)</u>	Prepared & Analyzed: 09/15/2017								
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<u>Matrix Spike (BAI0349-MS1)</u>	Source: 17I0320-13				Prepared & Analyzed: 09/15/2017				
Arsenic	2.70 mg/L	0.100	mg/L	2.50	<0.100 mg/L	108	75-125		
Barium	<5.00 mg/L	5.00	mg/L	2.50	<5.00 mg/L	127	75-125		M
Cadmium	2.57 mg/L	0.0400	mg/L	2.50	<0.0400 mg/L	102	75-125		
Chromium	2.56 mg/L	0.100	mg/L	2.50	<0.100 mg/L	102	75-125		
Lead	8.08 mg/L	0.100	mg/L	2.50	5.40 mg/L	107	75-125		
Selenium	2.80 mg/L	0.250	mg/L	2.50	<0.250 mg/L	112	75-125		
Silver	0.553 mg/L	0.100	mg/L	0.500	<0.100 mg/L	111	75-125		

<u>Matrix Spike Dup (BAI0349-MSD1)</u>	Source: 17I0320-13				Prepared & Analyzed: 09/15/2017				
Arsenic	2.68 mg/L	0.100	mg/L	2.50	<0.100 mg/L	107	75-125	1.03	20
Barium	<5.00 mg/L	5.00	mg/L	2.50	<5.00 mg/L	126	75-125	0.722	20
Cadmium	2.55 mg/L	0.0400	mg/L	2.50	<0.0400 mg/L	101	75-125	0.423	20
Chromium	2.56 mg/L	0.100	mg/L	2.50	<0.100 mg/L	103	75-125	0.123	20
Lead	7.92 mg/L	0.100	mg/L	2.50	5.40 mg/L	101	75-125	2.00	20
Selenium	2.72 mg/L	0.250	mg/L	2.50	<0.250 mg/L	109	75-125	3.05	20
Silver	0.548 mg/L	0.100	mg/L	0.500	<0.100 mg/L	110	75-125	0.861	20

Batch BAI0359 - SW7470A

<u>Blank (BAI0359-BLK1)</u>	Prepared: 09/15/2017 Analyzed: 09/18/2017								
Mercury	<0.008 mg/L	0.008	mg/L						

<u>LCS (BAI0359-BS1)</u>	Prepared: 09/15/2017 Analyzed: 09/18/2017								
Mercury	0.050 mg/L	0.008	mg/L	0.0500	mg/L	99.6	80-120		



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

TCLP Metals by 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0359 - SW7470A

<u>LCS Dup (BAI0359-BSD1)</u>		Prepared: 09/15/2017 Analyzed: 09/18/2017							
Mercury	0.048 mg/L	0.008	mg/L	0.0500 mg/L	96.2	80-120	3.51	20	
<u>Matrix Spike (BAI0359-MS1)</u>		Source: 17I0320-13 Prepared: 09/15/2017 Analyzed: 09/18/2017							
Mercury	0.048 mg/L	0.008	mg/L	0.0500 <0.008 mg/L	96.4	80-120			
<u>Matrix Spike Dup (BAI0359-MSD1)</u>		Source: 17I0320-13 Prepared: 09/15/2017 Analyzed: 09/18/2017							
Mercury	0.051 mg/L	0.008	mg/L	0.0500 <0.008 mg/L	101	80-120	4.99	20	



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TCLP Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0331 - SW5030B

Blank (BAI0331-BLK2)

	Prepared & Analyzed: 09/14/2017								
1,1-Dichloroethylene	<0.02 mg/L	0.02	mg/L						
1,2-Dichloroethane	<0.02 mg/L	0.02	mg/L						
1,4-Dichlorobenzene	<0.02 mg/L	0.02	mg/L						
2-Butanone (MEK)	<0.20 mg/L	0.20	mg/L						
Benzene	<0.02 mg/L	0.02	mg/L						
Carbon tetrachloride	<0.02 mg/L	0.02	mg/L						
Chlorobenzene	<0.02 mg/L	0.02	mg/L						
Chloroform	<0.02 mg/L	0.02	mg/L						
Tetrachloroethylene (PCE)	<0.02 mg/L	0.02	mg/L						
Trichloroethylene	<0.02 mg/L	0.02	mg/L						
Vinyl chloride	<0.02 mg/L	0.02	mg/L						
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	1.12		mg/L	1.00		112	70-120		
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	0.967		mg/L	1.00		96.7	75-120		
<i>Surr: Dibromofluoromethane (Surr)</i>	1.08		mg/L	1.00		108	80-119		
<i>Surr: Toluene-d8 (Surr)</i>	0.999		mg/L	1.00		99.9	85-120		

LCS (BAI0331-BS2)

	Prepared & Analyzed: 09/14/2017				
1,1-Dichloroethylene	46.8 ug/L	20	ug/L	50.0 ug/L	93.6 70-130
1,2-Dichloroethane	44.8 ug/L	20	ug/L	50.0 ug/L	89.5 70-130
1,4-Dichlorobenzene	51.2 ug/L	20	ug/L	50.0 ug/L	102 75-125
2-Butanone (MEK)	< 200 ug/L	200	ug/L	50.0 ug/L	93.9 30-150
Benzene	47.2 ug/L	20	ug/L	50.0 ug/L	94.4 80-120
Carbon tetrachloride	53.5 ug/L	20	ug/L	50.0 ug/L	107 65-140
Chlorobenzene	49.2 ug/L	20	ug/L	50.0 ug/L	98.5 80-120
Chloroform	47.0 ug/L	20	ug/L	50.0 ug/L	94.0 65-135
Tetrachloroethylene (PCE)	75.3 ug/L	20	ug/L	50.0 ug/L	151 45-150
Trichloroethylene	46.1 ug/L	20	ug/L	50.0 ug/L	92.2 70-125
Vinyl chloride	49.1 ug/L	20	ug/L	50.0 ug/L	98.2 50-145
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	1.11		mg/L	1.00 mg/L	111 70-120
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	0.942		mg/L	1.00 mg/L	94.2 75-120
<i>Surr: Dibromofluoromethane (Surr)</i>	1.07		mg/L	1.00 mg/L	107 80-119



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TCLP Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0331 - SW5030B

Prepared & Analyzed: 09/14/2017						
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LCS (BAI0331-BS2)						
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Surr: Toluene-d8 (Surr)	1.01	mg/L	1.00	mg/L	101	85-120
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Duplicate (BAI0331-DUP1)						
Source: 17I0398-03			Prepared & Analyzed: 09/14/2017			

1,1-Dichloroethylene	<0.02 mg/L	0.02	mg/L	<0.02 mg/L	NA	30
1,2-Dichloroethane	<0.02 mg/L	0.02	mg/L	<0.02 mg/L	NA	30
1,4-Dichlorobenzene	<0.02 mg/L	0.02	mg/L	<0.02 mg/L	NA	30
2-Butanone (MEK)	<0.20 mg/L	0.20	mg/L	<0.20 mg/L	NA	30
Benzene	<0.02 mg/L	0.02	mg/L	<0.02 mg/L	NA	30
Carbon tetrachloride	<0.02 mg/L	0.02	mg/L	<0.02 mg/L	NA	30
Chlorobenzene	<0.02 mg/L	0.02	mg/L	<0.02 mg/L	NA	30
Chloroform	<0.02 mg/L	0.02	mg/L	<0.02 mg/L	NA	30
Tetrachloroethylene (PCE)	<0.02 mg/L	0.02	mg/L	<0.02 mg/L	NA	30
Trichloroethylene	<0.02 mg/L	0.02	mg/L	<0.02 mg/L	NA	30
Vinyl chloride	<0.02 mg/L	0.02	mg/L	<0.02 mg/L	NA	30

Surr: 1,2-Dichloroethane-d4 (Surr)	0.0543	mg/L	0.0500	mg/L	109	70-120
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Surr: 4-Bromofluorobenzene (Surr)	0.0477	mg/L	0.0500	mg/L	95.3	75-120
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Surr: Dibromofluoromethane (Surr)	0.0536	mg/L	0.0500	mg/L	107	80-119
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Surr: Toluene-d8 (Surr)	0.0502	mg/L	0.0500	mg/L	100	85-120
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Matrix Spike (BAI0331-MS1)						
Source: 17I0375-13			Prepared & Analyzed: 09/14/2017			

1,1-Dichloroethylene	45.9 ug/L	20	ug/L	50.0 < 20 ug/L	91.8	70-130
1,2-Dichloroethane	42.6 ug/L	20	ug/L	50.0 < 20 ug/L	85.2	70-130
1,4-Dichlorobenzene	50.7 ug/L	20	ug/L	50.0 < 20 ug/L	101	75-125
2-Butanone (MEK)	< 200 ug/L	200	ug/L	50.0 < 200 ug/L	92.6	30-150
Benzene	45.5 ug/L	20	ug/L	50.0 < 20 ug/L	90.8	80-120
Carbon tetrachloride	51.2 ug/L	20	ug/L	50.0 < 20 ug/L	102	65-140
Chlorobenzene	47.3 ug/L	20	ug/L	50.0 < 20 ug/L	94.5	80-120
Chloroform	45.2 ug/L	20	ug/L	50.0 < 20 ug/L	90.4	65-135
Tetrachloroethylene (PCE)	71.0 ug/L	20	ug/L	50.0 < 20 ug/L	142	45-150
Trichloroethylene	44.1 ug/L	20	ug/L	50.0 < 20 ug/L	88.2	70-125
Vinyl chloride	46.7 ug/L	20	ug/L	50.0 < 20 ug/L	93.2	50-145



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

TCLP Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0331 - SW5030B

Matrix Spike (BAI0331-MS1)	Source: 17I0375-13	Prepared & Analyzed: 09/14/2017				
Surr: 1,2-Dichloroethane-d4 (Surr)	0.0527	mg/L	0.0500	mg/L	105	70-120
Surr: 4-Bromofluorobenzene (Surr)	0.0462	mg/L	0.0500	mg/L	92.4	75-120
Surr: Dibromofluoromethane (Surr)	0.0533	mg/L	0.0500	mg/L	107	80-119
Surr: Toluene-d8 (Surr)	0.0486	mg/L	0.0500	mg/L	97.2	85-120

Batch BAI0343 - SW1311 ZHE

Blank (BAI0343-BLK1)	Prepared: 09/13/2017 Analyzed: 09/14/2017				
Extraction Fluid, ZHE	1 #	0	#		



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Volatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0276 - SW5030B

Blank (BAI0276-BLK1)							Prepared & Analyzed: 09/13/2017			
TPH-Volatiles (GRO)	<0.10 mg/kg wet	0.10	mg/kg wet							
Surr: 2,5-Dibromotoluene (FID)	92.7		ug/L	100			92.7	80-120		
LCS (BAI0276-BS1)							Prepared & Analyzed: 09/13/2017			
TPH-Volatiles (GRO)	0.99 mg/kg wet	0.10	mg/kg wet	1.00	mg/kg wet	98.8	70-130			
Surr: 2,5-Dibromotoluene (FID)	92.7		ug/L	100	ug/L	92.7	80-120			
Matrix Spike (BAI0276-MS1)							Source: 17I0299-04 Prepared & Analyzed: 09/13/2017			
TPH-Volatiles (GRO)	0.84 mg/kg wet	0.10	mg/kg wet	1.00	<0.10 mg/kg wet	84.2	70-130			
Surr: 2,5-Dibromotoluene (FID)	92.9		ug/L	100	ug/L	92.9	80-120			
Matrix Spike Dup (BAI0276-MSD1)							Source: 17I0299-04 Prepared & Analyzed: 09/13/2017			
TPH-Volatiles (GRO)	0.76 mg/kg wet	0.10	mg/kg wet	1.00	<0.10 mg/kg wet	75.7	70-130	10.7	20	
Surr: 2,5-Dibromotoluene (FID)	112		ug/L	100	ug/L	112	80-120			

Batch BAI0278 - SW5030B

Blank (BAI0278-BLK1)							Prepared & Analyzed: 09/13/2017			
TPH-Volatiles (GRO)	<0.10 mg/kg wet	0.10	mg/kg wet							
Surr: 2,5-Dibromotoluene (FID)	88.7		ug/L	100			88.7	80-120		
LCS (BAI0278-BS1)							Prepared & Analyzed: 09/13/2017			
TPH-Volatiles (GRO)	0.84 mg/kg wet	0.10	mg/kg wet	1.00	mg/kg wet	84.4	70-130			
Surr: 2,5-Dibromotoluene (FID)	89.1		ug/L	100	ug/L	89.1	80-120			
Matrix Spike (BAI0278-MS1)							Source: 17I0320-03 Prepared & Analyzed: 09/13/2017			
TPH-Volatiles (GRO)	0.77 mg/kg wet	0.10	mg/kg wet	1.00	<0.10 mg/kg wet	77.4	70-130			
Surr: 2,5-Dibromotoluene (FID)	93.2		ug/L	100	ug/L	93.2	80-120			



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Volatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAI0278 - SW5030B

Matrix Spike Dup (BAI0278-MSD1)		Source: 17I0320-03		Prepared & Analyzed: 09/13/2017						
TPH-Volatiles (GRO)	0.44 mg/kg wet	0.10	mg/kg wet	1.00	<0.10 mg/kg wet	44.5	70-130	54.1	20	M, P
Surr: 2,5-Dibromotoluene (FID)	90.9		ug/L	100	ug/L	90.9	80-120			



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0280 - SW5030B

Blank (BAI0280-BLK1) Prepared & Analyzed: 09/12/2017

1,1,1,2-Tetrachloroethane	<5.00 ug/kg wet	5.00	ug/kg wet						
1,1,1-Trichloroethane	<5.00 ug/kg wet	5.00	ug/kg wet						
1,1,2,2-Tetrachloroethane	<5.00 ug/kg wet	5.00	ug/kg wet						
1,1,2-Trichloroethane	<5.00 ug/kg wet	5.00	ug/kg wet						
1,1-Dichloroethane	<5.00 ug/kg wet	5.00	ug/kg wet						
1,1-Dichloroethylene	<5.00 ug/kg wet	5.00	ug/kg wet						
1,1-Dichloropropene	<5.00 ug/kg wet	5.00	ug/kg wet						
1,2,3-Trichlorobenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
1,2,3-Trichloropropane	<5.00 ug/kg wet	5.00	ug/kg wet						
1,2,4-Trichlorobenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
1,2,4-Trimethylbenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
1,2-Dibromo-3-chloropropane (DBCP)	<5.00 ug/kg wet	5.00	ug/kg wet						
1,2-Dibromoethane (EDB)	<5.00 ug/kg wet	5.00	ug/kg wet						
1,2-Dichlorobenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
1,2-Dichloroethane	<5.00 ug/kg wet	5.00	ug/kg wet						
1,2-Dichloropropane	<5.00 ug/kg wet	5.00	ug/kg wet						
1,3,5-Trimethylbenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
1,3-Dichlorobenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
1,3-Dichloropropane	<5.00 ug/kg wet	5.00	ug/kg wet						
1,4-Dichlorobenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
2,2-Dichloropropane	<5.00 ug/kg wet	5.00	ug/kg wet						
2-Butanone (MEK)	<5.00 ug/kg wet	5.00	ug/kg wet						
2-Chlorotoluene	<5.00 ug/kg wet	5.00	ug/kg wet						
2-Hexanone (MBK)	<5.00 ug/kg wet	5.00	ug/kg wet						
4-Chlorotoluene	<5.00 ug/kg wet	5.00	ug/kg wet						
4-Isopropyltoluene	<5.00 ug/kg wet	5.00	ug/kg wet						
4-Methyl-2-pentanone (MIBK)	<5.00 ug/kg wet	5.00	ug/kg wet						
Acetone	<10.0 ug/kg wet	10.0	ug/kg wet						
Benzene	<5.00 ug/kg wet	5.00	ug/kg wet						
Bromobenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
Bromochloromethane	<5.00 ug/kg wet	5.00	ug/kg wet						



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0280 - SW5030B

Blank (BAI0280-BLK1) Prepared & Analyzed: 09/12/2017

Bromodichloromethane	<5.00 ug/kg wet	5.00	ug/kg wet						
Bromoform	<5.00 ug/kg wet	5.00	ug/kg wet						
Bromomethane	<5.00 ug/kg wet	5.00	ug/kg wet						
Carbon disulfide	<5.00 ug/kg wet	5.00	ug/kg wet						
Carbon tetrachloride	<5.00 ug/kg wet	5.00	ug/kg wet						
Chlorobenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
Chloroethane	<5.00 ug/kg wet	5.00	ug/kg wet						
Chloroform	<5.00 ug/kg wet	5.00	ug/kg wet						
Chloromethane	<5.00 ug/kg wet	5.00	ug/kg wet						
cis-1,2-Dichloroethylene	<5.00 ug/kg wet	5.00	ug/kg wet						
cis-1,3-Dichloropropene	<5.00 ug/kg wet	5.00	ug/kg wet						
Dibromochloromethane	<5.00 ug/kg wet	5.00	ug/kg wet						
Dibromomethane	<5.00 ug/kg wet	5.00	ug/kg wet						
Dichlorodifluoromethane	<5.00 ug/kg wet	5.00	ug/kg wet						
Di-isopropyl ether (DIPE)	<5.00 ug/kg wet	5.00	ug/kg wet						
Ethylbenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
Hexachlorobutadiene	<5.00 ug/kg wet	5.00	ug/kg wet						
Iodomethane	<5.00 ug/kg wet	5.00	ug/kg wet						
Isopropylbenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
m+p-Xylenes	<5.00 ug/kg wet	5.00	ug/kg wet						
Methylene chloride	<5.00 ug/kg wet	5.00	ug/kg wet						
Methyl-t-butyl ether (MTBE)	<5.00 ug/kg wet	5.00	ug/kg wet						
Naphthalene	<5.00 ug/kg wet	5.00	ug/kg wet						
n-Butylbenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
n-Propylbenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
o-Xylene	<5.00 ug/kg wet	5.00	ug/kg wet						
sec-Butylbenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
Styrene	<5.00 ug/kg wet	5.00	ug/kg wet						
tert-Butylbenzene	<5.00 ug/kg wet	5.00	ug/kg wet						
Tetrachloroethylene (PCE)	<5.00 ug/kg wet	5.00	ug/kg wet						
Toluene	<5.00 ug/kg wet	5.00	ug/kg wet						



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAI0280 - SW5030B

Blank (BAI0280-BLK1)

	Prepared & Analyzed: 09/12/2017					
trans-1,2-Dichloroethylene	<5.00 ug/kg wet	5.00	ug/kg wet			
trans-1,3-Dichloropropene	<5.00 ug/kg wet	5.00	ug/kg wet			
Trichloroethylene	<5.00 ug/kg wet	5.00	ug/kg wet			
Trichlorofluoromethane	<5.00 ug/kg wet	5.00	ug/kg wet			
Vinyl acetate	<10.0 ug/kg wet	10.0	ug/kg wet			
Vinyl chloride	<5.00 ug/kg wet	5.00	ug/kg wet			
Xylenes, Total	<15.0 ug/kg wet	15.0	ug/kg wet			
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	51.0		ug/kg wet	50.0	102	80-120
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	48.4		ug/kg wet	50.0	96.8	85-120
<i>Surr: Dibromofluoromethane (Surr)</i>	49.3		ug/kg wet	50.0	98.5	80-119
<i>Surr: Toluene-d8 (Surr)</i>	50.2		ug/kg wet	50.0	100	85-115

LCS (BAI0280-BS1)

	Prepared & Analyzed: 09/12/2017					
1,1,1,2-Tetrachloroethane	52.4 ug/L	5	ug/L	50.0 ug/L	105	75-125
1,1,1-Trichloroethane	50.1 ug/L	5	ug/L	50.0 ug/L	100	70-135
1,1,2,2-Tetrachloroethane	49.4 ug/L	5	ug/L	50.0 ug/L	98.7	55-130
1,1,2-Trichloroethane	53.7 ug/L	5	ug/L	50.0 ug/L	107	60-125
1,1-Dichloroethane	52.9 ug/L	5	ug/L	50.0 ug/L	106	75-125
1,1-Dichloroethylene	50.0 ug/L	5	ug/L	50.0 ug/L	100	65-135
1,1-Dichloropropene	50.6 ug/L	5	ug/L	50.0 ug/L	101	70-135
1,2,3-Trichlorobenzene	52.1 ug/L	5	ug/L	50.0 ug/L	104	60-135
1,2,3-Trichloropropane	49.1 ug/L	5	ug/L	50.0 ug/L	98.2	65-130
1,2,4-Trichlorobenzene	52.3 ug/L	5	ug/L	50.0 ug/L	105	65-130
1,2,4-Trimethylbenzene	49.8 ug/L	5	ug/L	50.0 ug/L	99.7	65-135
1,2-Dibromo-3-chloropropane (DBCP)	46.6 ug/L	5	ug/L	50.0 ug/L	93.2	40-135
1,2-Dibromoethane (EDB)	49.5 ug/L	5	ug/L	50.0 ug/L	99.0	70-125
1,2-Dichlorobenzene	50.5 ug/L	5	ug/L	50.0 ug/L	101	75-120
1,2-Dichloroethane	46.5 ug/L	5	ug/L	50.0 ug/L	93.1	70-135
1,2-Dichloropropane	52.4 ug/L	5	ug/L	50.0 ug/L	105	70-120
1,3,5-Trimethylbenzene	50.5 ug/L	5	ug/L	50.0 ug/L	101	65-135
1,3-Dichlorobenzene	51.9 ug/L	5	ug/L	50.0 ug/L	104	70-125



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0280 - SW5030B

LCS (BAI0280-BS1)	Prepared & Analyzed: 09/12/2017						
1,3-Dichloropropane	51.2 ug/L	5	ug/L	50.0 ug/L	102	75-125	
1,4-Dichlorobenzene	50.6 ug/L	5	ug/L	50.0 ug/L	101	70-125	
2,2-Dichloropropane	52.6 ug/L	5	ug/L	50.0 ug/L	105	65-135	
2-Butanone (MEK)	46.4 ug/L	5	ug/L	50.0 ug/L	92.8	30-160	
2-Chlorotoluene	52.9 ug/L	5	ug/L	50.0 ug/L	106	70-130	
2-Hexanone (MBK)	46.8 ug/L	5	ug/L	50.0 ug/L	93.6	45-145	
4-Chlorotoluene	51.1 ug/L	5	ug/L	50.0 ug/L	102	75-125	
4-Isopropyltoluene	50.9 ug/L	5	ug/L	50.0 ug/L	102	75-135	
4-Methyl-2-pentanone (MIBK)	44.5 ug/L	5	ug/L	50.0 ug/L	88.9	45-145	
Acetone	42.1 ug/L	10	ug/L	50.0 ug/L	84.2	20-160	
Benzene	52.4 ug/L	5	ug/L	50.0 ug/L	105	75-125	
Bromobenzene	50.5 ug/L	5	ug/L	50.0 ug/L	101	65-120	
Bromochloromethane	49.5 ug/L	5	ug/L	50.0 ug/L	98.9	70-125	
Bromodichloromethane	54.0 ug/L	5	ug/L	50.0 ug/L	108	70-130	
Bromoform	54.5 ug/L	5	ug/L	50.0 ug/L	109	55-135	
Bromomethane	50.3 ug/L	5	ug/L	50.0 ug/L	101	30-160	
Carbon disulfide	37.8 ug/L	5	ug/L	50.0 ug/L	75.5	45-160	
Carbon tetrachloride	54.3 ug/L	5	ug/L	50.0 ug/L	109	65-135	
Chlorobenzene	50.2 ug/L	5	ug/L	50.0 ug/L	100	75-125	
Chloroethane	46.4 ug/L	5	ug/L	50.0 ug/L	92.8	40-155	
Chloroform	47.9 ug/L	5	ug/L	50.0 ug/L	95.9	70-125	
Chloromethane	41.4 ug/L	5	ug/L	50.0 ug/L	82.8	50-130	
cis-1,2-Dichloroethylene	48.0 ug/L	5	ug/L	50.0 ug/L	95.9	65-125	
cis-1,3-Dichloropropene	53.4 ug/L	5	ug/L	50.0 ug/L	107	70-125	
Dibromochloromethane	54.1 ug/L	5	ug/L	50.0 ug/L	108	65-130	
Dibromomethane	51.5 ug/L	5	ug/L	50.0 ug/L	103	75-130	
Dichlorodifluoromethane	40.4 ug/L	5	ug/L	50.0 ug/L	80.8	35-135	
Ethylbenzene	50.0 ug/L	5	ug/L	50.0 ug/L	100	75-125	
Hexachlorobutadiene	52.8 ug/L	5	ug/L	50.0 ug/L	106	55-140	
Isopropylbenzene	52.6 ug/L	5	ug/L	50.0 ug/L	105	75-130	
m+p-Xylenes	104 ug/L	5	ug/L	100 ug/L	104	80-125	



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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAI0280 - SW5030B

Prepared & Analyzed: 09/12/2017						
LCS (BAI0280-BS1)						
Methylene chloride	48.6 ug/L	5	ug/L	50.0 ug/L	97.3	55-140
Methyl-t-butyl ether (MTBE)	53.1 ug/L	5	ug/L	50.0 ug/L	106	65-125
Naphthalene	50.5 ug/L	5	ug/L	50.0 ug/L	101	40-125
n-Butylbenzene	52.9 ug/L	5	ug/L	50.0 ug/L	106	65-140
n-Propylbenzene	52.4 ug/L	5	ug/L	50.0 ug/L	105	65-135
o-Xylene	50.8 ug/L	5	ug/L	50.0 ug/L	102	75-125
sec-Butylbenzene	51.2 ug/L	5	ug/L	50.0 ug/L	102	65-130
Styrene	53.4 ug/L	5	ug/L	50.0 ug/L	107	75-125
tert-Butylbenzene	53.5 ug/L	5	ug/L	50.0 ug/L	107	65-130
Tetrachloroethylene (PCE)	73.4 ug/L	5	ug/L	50.0 ug/L	147	65-140
Toluene	52.4 ug/L	5	ug/L	50.0 ug/L	105	70-125
trans-1,2-Dichloroethylene	48.6 ug/L	5	ug/L	50.0 ug/L	97.2	65-135
trans-1,3-Dichloropropene	52.7 ug/L	5	ug/L	50.0 ug/L	105	65-125
Trichloroethylene	53.4 ug/L	5	ug/L	50.0 ug/L	107	75-125
Trichlorofluoromethane	44.3 ug/L	5	ug/L	50.0 ug/L	88.5	25-185
Vinyl chloride	41.1 ug/L	5	ug/L	50.0 ug/L	82.3	60-130
<i>Surr: 1,2-Dichloroethane-d4 (Surr)</i>	47.3		ug/kg wet	50.0 ug/kg wet	94.6	80-120
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	49.2		ug/kg wet	50.0 ug/kg wet	98.5	85-120
<i>Surr: Dibromofluoromethane (Surr)</i>	46.0		ug/kg wet	50.0 ug/kg wet	91.9	80-119
<i>Surr: Toluene-d8 (Surr)</i>	50.0		ug/kg wet	50.0 ug/kg wet	100	85-115



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0317 - SW3550C

Blank (BAI0317-BLK1)

Prepared: 09/14/2017 Analyzed: 09/18/2017

2,3,7,8-TCDD (SIM)	Not Detected ug/kg	500	ug/kg						
1,2,4,5-Tetrachlorobenzene	<83.3 ug/kg	83.3	ug/kg						
1,2,4-Trichlorobenzene	<83.3 ug/kg	83.3	ug/kg						
1,2-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg						
1,2-Diphenylhydrazine	<83.3 ug/kg	83.3	ug/kg						
1,3-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg						
1,4-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg						
1-Chloronaphthalene	<83.3 ug/kg	83.3	ug/kg						
1-Naphthylamine	<83.3 ug/kg	83.3	ug/kg						
2,3,4,6-Tetrachlorophenol	<83.3 ug/kg	83.3	ug/kg						
2,4,5-Trichlorophenol	<83.3 ug/kg	83.3	ug/kg						
2,4,6-Trichlorophenol	<83.3 ug/kg	83.3	ug/kg						
2,4-Dichlorophenol	<83.3 ug/kg	83.3	ug/kg						
2,4-Dimethylphenol	<83.3 ug/kg	83.3	ug/kg						
2,4-Dinitrophenol	<83.3 ug/kg	83.3	ug/kg						
2,4-Dinitrotoluene	<83.3 ug/kg	83.3	ug/kg						
2,6-Dichlorophenol	<83.3 ug/kg	83.3	ug/kg						
2,6-Dinitrotoluene	<83.3 ug/kg	83.3	ug/kg						
2-Chloronaphthalene	<83.3 ug/kg	83.3	ug/kg						
2-Chlorophenol	<83.3 ug/kg	83.3	ug/kg						
2-Methylnaphthalene	<83.3 ug/kg	83.3	ug/kg						
2-Naphthylamine	<83.3 ug/kg	83.3	ug/kg						
2-Nitroaniline	<83.3 ug/kg	83.3	ug/kg						
2-Nitrophenol	<83.3 ug/kg	83.3	ug/kg						
3,3'-Dichlorobenzidine	<83.3 ug/kg	83.3	ug/kg						
3-Methylcholanthrene	<83.3 ug/kg	83.3	ug/kg						
3-Nitroaniline	<83.3 ug/kg	83.3	ug/kg						
4,6-Dinitro-2-methylphenol	<83.3 ug/kg	83.3	ug/kg						
4-Aminobiphenyl	<83.3 ug/kg	83.3	ug/kg						
4-Bromophenyl phenyl ether	<83.3 ug/kg	83.3	ug/kg						
4-Chloroaniline	<83.3 ug/kg	83.3	ug/kg						



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0317 - SW3550C

Blank (BAI0317-BLK1) Prepared: 09/14/2017 Analyzed: 09/15/2017

4-Chlorophenyl phenyl ether	<83.3 ug/kg	83.3	ug/kg						
4-Nitroaniline	<83.3 ug/kg	83.3	ug/kg						
4-Nitrophenol	<83.3 ug/kg	83.3	ug/kg						
7,12-Dimethylbenz (a) anthracene	<83.3 ug/kg	83.3	ug/kg						
Acenaphthene	<83.3 ug/kg	83.3	ug/kg						
Acenaphthylene	<83.3 ug/kg	83.3	ug/kg						
Acetophenone	<83.3 ug/kg	83.3	ug/kg						
Aniline	<83.3 ug/kg	83.3	ug/kg						
Anthracene	<83.3 ug/kg	83.3	ug/kg						
Benzidine	<83.3 ug/kg	83.3	ug/kg						
Benzo (a) anthracene	<83.3 ug/kg	83.3	ug/kg						
Benzo (a) pyrene	<83.3 ug/kg	83.3	ug/kg						
Benzo (b) fluoranthene	<83.3 ug/kg	83.3	ug/kg						
Benzo (g,h,i) perlylene	<83.3 ug/kg	83.3	ug/kg						
Benzo (k) fluoranthene	<83.3 ug/kg	83.3	ug/kg						
Benzoic acid	<83.3 ug/kg	83.3	ug/kg						
Benzyl alcohol	<83.3 ug/kg	83.3	ug/kg						
bis (2-Chloroethoxy) methane	<83.3 ug/kg	83.3	ug/kg						
bis (2-Chloroethyl) ether	<83.3 ug/kg	83.3	ug/kg						
2,2'-Oxybis (1-chloropropane)	<83.3 ug/kg	83.3	ug/kg						
bis (2-Ethylhexyl) phthalate	<83.3 ug/kg	83.3	ug/kg						
Butyl benzyl phthalate	<83.3 ug/kg	83.3	ug/kg						
Chrysene	<83.3 ug/kg	83.3	ug/kg						
Dibenz (a,h) anthracene	<83.3 ug/kg	83.3	ug/kg						
Dibenz (a,j) acridine	<83.3 ug/kg	83.3	ug/kg						
Dibenzofuran	<83.3 ug/kg	83.3	ug/kg						
Diethyl phthalate	<83.3 ug/kg	83.3	ug/kg						
Dimethyl phthalate	<83.3 ug/kg	83.3	ug/kg						
Di-n-butyl phthalate	<83.3 ug/kg	83.3	ug/kg						
Di-n-octyl phthalate	<83.3 ug/kg	83.3	ug/kg						
Diphenylamine	<83.3 ug/kg	83.3	ug/kg						



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0317 - SW3550C

Blank (BAI0317-BLK1)

Prepared: 09/14/2017 Analyzed: 09/15/2017

Ethyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg						
Fluoranthene	<83.3 ug/kg	83.3	ug/kg						
Fluorene	<83.3 ug/kg	83.3	ug/kg						
Hexachlorobenzene	<83.3 ug/kg	83.3	ug/kg						
Hexachlorobutadiene	<83.3 ug/kg	83.3	ug/kg						
Hexachlorocyclopentadiene	<83.3 ug/kg	83.3	ug/kg						
Hexachloroethane	<83.3 ug/kg	83.3	ug/kg						
Indeno (1,2,3-cd) pyrene	<83.3 ug/kg	83.3	ug/kg						
Isophorone	<83.3 ug/kg	83.3	ug/kg						
m+p-Cresols	<83.3 ug/kg	83.3	ug/kg						
Methyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg						
Naphthalene	<83.3 ug/kg	83.3	ug/kg						
Nitrobenzene	<83.3 ug/kg	83.3	ug/kg						
n-Nitrosodimethylamine	<83.3 ug/kg	83.3	ug/kg						
n-Nitrosodi-n-butylamine	<83.3 ug/kg	83.3	ug/kg						
n-Nitrosodi-n-propylamine	<83.3 ug/kg	83.3	ug/kg						
n-Nitrosodiphenylamine	<83.3 ug/kg	83.3	ug/kg						
n-Nitrosopiperidine	<83.3 ug/kg	83.3	ug/kg						
o+m+p-Cresols	<83.3 ug/kg	83.3	ug/kg						
o-Cresol	<83.3 ug/kg	83.3	ug/kg						
p-(Dimethylamino) azobenzene	<83.3 ug/kg	83.3	ug/kg						
p-Chloro-m-cresol	<83.3 ug/kg	83.3	ug/kg						
Pentachloronitrobenzene (quintozene)	<83.3 ug/kg	83.3	ug/kg						
Pentachlorophenol	<83.3 ug/kg	83.3	ug/kg						
Phenacetin	<83.3 ug/kg	83.3	ug/kg						
Phenanthrene	<83.3 ug/kg	83.3	ug/kg						
Phenol	<83.3 ug/kg	83.3	ug/kg						
Pronamide	<83.3 ug/kg	83.3	ug/kg						
Pyrene	<83.3 ug/kg	83.3	ug/kg						
Pyridine	<83.3 ug/kg	83.3	ug/kg						

Surr: 2,4,6-Tribromophenol (Surr)

1940

ug/kg

6290

30.9

35-125

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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAI0317 - SW3550C

Blank (BAI0317-BLK1)		Prepared: 09/14/2017 Analyzed: 09/15/2017						
Surr: 2-Fluorobiphenyl (Surr)	1110	ug/kg	3140		35.3	45-105		S
Surr: 2-Fluorophenol (Surr)	2220	ug/kg	6290		35.3	35-105		
Surr: Nitrobenzene-d5 (Surr)	1110	ug/kg	3140		35.3	35-100		
Surr: Phenol-d5 (Surr)	2250	ug/kg	6290		35.8	40-100		S
Surr: p-Terphenyl-d14 (Surr)	1400	ug/kg	3140		44.4	30-125		

LCS (BAI0317-BS1)		Prepared: 09/14/2017 Analyzed: 09/15/2017						
1,2,4-Trichlorobenzene	2120 ug/kg	83.3	ug/kg	3260	ug/kg	65.1	21.8-66.7	
1,2-Dichlorobenzene	2050 ug/kg	83.3	ug/kg	3260	ug/kg	63.1	22-60	L
1,3-Dichlorobenzene	2000 ug/kg	83.3	ug/kg	3260	ug/kg	61.5	22-60	L
1,4-Dichlorobenzene	2000 ug/kg	83.3	ug/kg	3260	ug/kg	61.3	13-68	
2,4,6-Trichlorophenol	2660 ug/kg	83.3	ug/kg	3260	ug/kg	81.6	50-115	
2,4-Dichlorophenol	2230 ug/kg	83.3	ug/kg	3260	ug/kg	68.4	50-105	
2,4-Dimethylphenol	2410 ug/kg	83.3	ug/kg	3260	ug/kg	74.1	30-110	
2,4-Dinitrophenol	2990 ug/kg	83.3	ug/kg	3260	ug/kg	91.8	15-140	
2,4-Dinitrotoluene	2530 ug/kg	83.3	ug/kg	3260	ug/kg	77.7	21-99	
2,6-Dinitrotoluene	2330 ug/kg	83.3	ug/kg	3260	ug/kg	71.5	15-140	
2-Chloronaphthalene	2250 ug/kg	83.3	ug/kg	3260	ug/kg	68.9	45-105	
2-Chlorophenol	2080 ug/kg	83.3	ug/kg	3260	ug/kg	63.9	15-74	
2-Nitrophenol	2180 ug/kg	83.3	ug/kg	3260	ug/kg	67.0	40-115	
3,3'-Dichlorobenzidine	2260 ug/kg	83.3	ug/kg	3260	ug/kg	69.4	20-110	
4,6-Dinitro-2-methylphenol	2940 ug/kg	83.3	ug/kg	3260	ug/kg	90.1	40-130	
4-Bromophenyl phenyl ether	2360 ug/kg	83.3	ug/kg	3260	ug/kg	72.3	15-110	
4-Chlorophenyl phenyl ether	2350 ug/kg	83.3	ug/kg	3260	ug/kg	72.2	15-110	
4-Nitrophenol	2370 ug/kg	83.3	ug/kg	3260	ug/kg	72.7	0-125	
Acenaphthene	2290 ug/kg	83.3	ug/kg	3260	ug/kg	70.4	27.7-85.5	
Acenaphthylene	2400 ug/kg	83.3	ug/kg	3260	ug/kg	73.8	50-105	
Acetophenone	1750 ug/kg	83.3	ug/kg	3260	ug/kg	53.6	0-200	
Anthracene	2280 ug/kg	83.3	ug/kg	3260	ug/kg	70.1	55-110	
Benzidine	186 ug/kg	83.3	ug/kg	3260	ug/kg	5.70	0-130	
Benzo (a) anthracene	2380 ug/kg	83.3	ug/kg	3260	ug/kg	73.1	55-110	



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0317 - SW3550C

LCS (BAI0317-BS1) Prepared: 09/14/2017 Analyzed: 09/15/2017

Benzo (a) pyrene	2430 ug/kg	83.3	ug/kg	3260	ug/kg	74.6	55-110
Benzo (b) fluoranthene	2480 ug/kg	83.3	ug/kg	3260	ug/kg	76.1	45-120
Benzo (g,h,i) perylene	2220 ug/kg	83.3	ug/kg	3260	ug/kg	68.0	40-125
Benzo (k) fluoranthene	2640 ug/kg	83.3	ug/kg	3260	ug/kg	81.0	45-125
bis (2-Chloroethoxy) methane	2070 ug/kg	83.3	ug/kg	3260	ug/kg	63.5	40-125
bis (2-Chloroethyl) ether	2120 ug/kg	83.3	ug/kg	3260	ug/kg	65.2	40-125
2,2'-Oxybis (1-chloropropane)	2020 ug/kg	83.3	ug/kg	3260	ug/kg	62.1	40-125
bis (2-Ethylhexyl) phthalate	2200 ug/kg	83.3	ug/kg	3260	ug/kg	67.7	40-125
Butyl benzyl phthalate	2180 ug/kg	83.3	ug/kg	3260	ug/kg	66.8	45-115
Chrysene	2450 ug/kg	83.3	ug/kg	3260	ug/kg	75.3	55-110
Dibenz (a,h) anthracene	2450 ug/kg	83.3	ug/kg	3260	ug/kg	75.3	40-125
Diethyl phthalate	2290 ug/kg	83.3	ug/kg	3260	ug/kg	70.3	40-120
Dimethyl phthalate	2230 ug/kg	83.3	ug/kg	3260	ug/kg	68.5	25-125
Di-n-butyl phthalate	2490 ug/kg	83.3	ug/kg	3260	ug/kg	76.4	55-115
Di-n-octyl phthalate	1970 ug/kg	83.3	ug/kg	3260	ug/kg	60.5	35-135
Fluoranthene	2700 ug/kg	83.3	ug/kg	3260	ug/kg	82.8	55-115
Fluorene	2290 ug/kg	83.3	ug/kg	3260	ug/kg	70.3	50-110
Hexachlorobenzene	2350 ug/kg	83.3	ug/kg	3260	ug/kg	72.3	25-125
Hexachlorobutadiene	2490 ug/kg	83.3	ug/kg	3260	ug/kg	76.6	25-125
Hexachlorocyclopentadiene	1640 ug/kg	83.3	ug/kg	3260	ug/kg	50.3	25-125
Hexachloroethane	2050 ug/kg	83.3	ug/kg	3260	ug/kg	63.0	25-125
Indeno (1,2,3-cd) pyrene	2340 ug/kg	83.3	ug/kg	3260	ug/kg	71.9	45-125
Isophorone	2270 ug/kg	83.3	ug/kg	3260	ug/kg	69.7	10-110
Naphthalene	2190 ug/kg	83.3	ug/kg	3260	ug/kg	67.3	40-100
Nitrobenzene	2110 ug/kg	83.3	ug/kg	3260	ug/kg	64.9	40-100
n-Nitrosodimethylamine	1750 ug/kg	83.3	ug/kg	3260	ug/kg	53.7	25-110
n-Nitrosodi-n-propylamine	2290 ug/kg	83.3	ug/kg	3260	ug/kg	70.2	12-97
n-Nitrosodiphenylamine	2010 ug/kg	83.3	ug/kg	3260	ug/kg	61.7	12-97
p-Chloro-m-cresol	2220 ug/kg	83.3	ug/kg	3260	ug/kg	68.2	10-91
Pentachlorophenol	2550 ug/kg	83.3	ug/kg	3260	ug/kg	78.3	30-109
Phenanthrene	2600 ug/kg	83.3	ug/kg	3260	ug/kg	79.9	50-115



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Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0317 - SW3550C

LCS (BAI0317-BS1)							Prepared: 09/14/2017 Analyzed: 09/15/2017		
Phenol	2130 ug/kg	83.3	ug/kg	3290 ug/kg	64.8	0-115			
Pyrene	2020 ug/kg	83.3	ug/kg	3260 ug/kg	62.1	27-110			
Pyridine	1410 ug/kg	83.3	ug/kg	3260 ug/kg	43.3	0-200			
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	2170		ug/kg	6510 ug/kg	33.3	35-125			S
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	1010		ug/kg	3260 ug/kg	31.1	45-105			S
<i>Surr: 2-Fluorophenol (Surr)</i>	2160		ug/kg	6510 ug/kg	33.2	35-105			S
<i>Surr: Nitrobenzene-d5 (Surr)</i>	1040		ug/kg	3260 ug/kg	32.0	35-100			S
<i>Surr: Phenol-d5 (Surr)</i>	2120		ug/kg	6510 ug/kg	32.5	40-100			S
<i>Surr: p-Terphenyl-d14 (Surr)</i>	1130		ug/kg	3260 ug/kg	34.5	30-125			
Matrix Spike (BAI0317-MS1)							Source: 17I0322-07 Prepared: 09/14/2017 Analyzed: 09/19/2017		
1,2,4,5-Tetrachlorobenzene	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200			
1,2,4-Trichlorobenzene	2230 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	68.2	21.8-66.7			M
1,2-Dichlorobenzene	2120 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	65.0	22-60			M
1,2-Diphenylhydrazine	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200			
1,3-Dichlorobenzene	2050 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	62.7	22-60			M
1,4-Dichlorobenzene	2070 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	63.4	22-60			M
1-Chloronaphthalene	2330 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200			
1-Naphthylamine	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200			
2,3,4,6-Tetrachlorophenol	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200			
2,4,5-Trichlorophenol	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		50-110			
2,4,6-Trichlorophenol	2950 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	90.3	50-115			
2,4-Dichlorophenol	2350 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	71.9	50-105			
2,4-Dimethylphenol	2600 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	79.6	30-110			
2,4-Dinitrophenol	2670 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	81.8	15-140			
2,4-Dinitrotoluene	2630 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	80.6	17-111			
2,6-Dichlorophenol	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200			
2,6-Dinitrotoluene	2510 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	77.0	15-140			
2-Chloronaphthalene	2400 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	73.4	45-105			
2-Chlorophenol	2220 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	68.0	19-64			
2-Nitrophenol	2280 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	69.9	40-115			M



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201 Church Street
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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0317 - SW3550C

Matrix Spike (BAI0317-MS1)	Source: 17I0322-07			Prepared: 09/14/2017 Analyzed: 09/19/2017		
3,3'-Dichlorobenzidine	2030 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	62.3	20-110
3-Methylcholanthrene	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200
3-Nitroaniline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200
4,6-Dinitro-2-methylphenol	2790 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	85.4	40-130
4-Aminobiphenyl	152 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200
4-Bromophenyl phenyl ether	2330 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	71.2	15-110
4-Chlorophenyl phenyl ether	2530 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	77.4	15-110
4-Nitrophenol	2820 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	86.1	0-125
Acenaphthene	2490 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	76.1	24-90
Acenaphthylene	2620 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	80.1	50-105
Acetophenone	1830 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	56.0	0-200
Aniline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200
Anthracene	2180 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	66.9	55-110
Benzidine	210 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	6.44	0-130
Benzo (a) anthracene	2520 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	77.0	55-110
Benzo (a) pyrene	2530 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	77.4	55-110
Benzo (b) fluoranthene	2540 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	77.6	45-120
Benzo (g,h,i) perylene	2570 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	78.7	40-125
Benzo (k) fluoranthene	2840 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	86.8	45-125
Benzoic acid	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-125
Benzyl alcohol	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200
bis (2-Chloroethoxy) methane	2170 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	66.5	40-125
bis (2-Chloroethyl) ether	2210 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	67.6	40-125
2,2'-Oxybis (1-chloropropane)	2100 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	64.2	40-125
bis (2-Ethylhexyl) phthalate	2590 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	79.1	40-125
Butyl benzyl phthalate	2450 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	75.1	45-115
Chrysene	2500 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	76.4	55-110
Dibenz (a,h) anthracene	2830 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	86.5	40-125
Diethyl phthalate	2380 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	73.0	40-120
Dimethyl phthalate	2350 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	72.0	25-125
Di-n-butyl phthalate	2540 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	77.7	55-115



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201 Church Street
Blacksburg VA, 24060

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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0317 - SW3550C

Matrix Spike (BAI0317-MS1)	Source: 17I0322-07		Prepared: 09/14/2017 Analyzed: 09/19/2017						
Di-n-octyl phthalate	2480 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	75.8	35-135			
Fluoranthene	2810 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	85.9	55-115			
Fluorene	2440 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	74.8	50-110			
Hexachlorobenzene	2330 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	71.2	25-125			
Hexachlorobutadiene	2680 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	82.0	25-125			
Hexachlorocyclopentadiene	1270 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	39.0	25-125			
Hexachloroethane	2150 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	65.8	25-125			
Indeno (1,2,3-cd) pyrene	2700 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	82.6	45-125			
Isophorone	2350 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	72.0	10-110			
Naphthalene	2190 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	67.0	40-100			
Nitrobenzene	2240 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	68.6	40-100			
n-Nitrosodimethylamine	1740 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	53.1	25-110			
n-Nitrosodi-n-propylamine	2400 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	73.6	12-97			
n-Nitrosodiphenylamine	2100 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	64.2	12-97			
p-Chloro-m-cresol	2350 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	71.8	10-91			
Pentachlorophenol	2430 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	74.4	27-109			
Phenanthrene	2550 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	77.9	50-115			
Phenol	2240 ug/kg	83.3	ug/kg	3300 <83.3 ug/kg	67.9	0-115			
Pyrene	2440 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	74.6	23-110			
Pyridine	1490 ug/kg	83.3	ug/kg	3270 <83.3 ug/kg	45.7	0-200			
Surr: 2,4,6-Tribromophenol (Surr)	2270		ug/kg	6540 ug/kg	34.7	35-125			S
Surr: 2-Fluorobiphenyl (Surr)	1080		ug/kg	3270 ug/kg	33.1	45-105			S
Surr: 2-Fluorophenol (Surr)	1970		ug/kg	6540 ug/kg	30.1	35-105			S
Surr: Nitrobenzene-d5 (Surr)	1110		ug/kg	3270 ug/kg	33.8	35-100			S
Surr: Phenol-d5 (Surr)	2270		ug/kg	6540 ug/kg	34.7	40-100			S
Surr: p-Terphenyl-d14 (Surr)	1350		ug/kg	3270 ug/kg	41.2	30-125			

Matrix Spike Dup (BAI0317-MSD1)	Source: 17I0322-07		Prepared: 09/14/2017 Analyzed: 09/19/2017						
1,2,4-Trichlorobenzene	2270 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	68.5	21.8-66.7	1.81	20	M
1,2-Dichlorobenzene	2240 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	67.5	22-60	5.17	20	M
1,3-Dichlorobenzene	2110 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	63.8	22-60	3.07	20	M



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Final Report

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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0317 - SW3550C

Matrix Spike Dup (BAI0317-MSD1)	Source: 17I0322-07			Prepared: 09/14/2017 Analyzed: 09/19/2017						
1,4-Dichlorobenzene	2130 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	64.3	22-60	2.74	20	M	
1-Chloronaphthalene	2460 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200	5.19	20		
2,4,6-Trichlorophenol	3130 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	94.5	50-115	5.93	20		
2,4-Dichlorophenol	2450 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	73.9	50-105	4.09	20		
2,4-Dimethylphenol	2620 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	79.2	30-110	0.787	20		
2,4-Dinitrophenol	2860 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	86.4	15-140	6.87	20		
2,4-Dinitrotoluene	2740 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	82.8	17-111	3.98	20		
2,6-Dinitrotoluene	2580 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	78.0	15-140	2.71	20		
2-Chloronaphthalene	2530 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	76.4	45-105	5.25	20		
2-Chlorophenol	2310 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	69.8	19-64	3.96	20	M	
2-Nitrophenol	2400 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	72.6	40-115	5.09	20		
3,3'-Dichlorobenzidine	2140 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	64.5	20-110	4.86	20		
4,6-Dinitro-2-methylphenol	2980 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	89.9	40-130	6.40	20		
4-Aminobiphenyl	152 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200	0.198	20		
4-Bromophenyl phenyl ether	2440 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	73.8	15-110	4.90	20		
4-Chloroaniline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		15-110		20		
4-Chlorophenyl phenyl ether	2610 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	78.9	15-110	3.21	20		
4-Nitroaniline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
4-Nitrophenol	2870 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	86.6	0-125	1.89	20		
7,12-Dimethylbenz (a) anthracene	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
Acenaphthene	2570 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	77.6	24-90	3.27	20		
Acenaphthylene	2710 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	81.8	50-105	3.43	20		
Acetophenone	1870 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	56.6	0-200	2.29	20		
Aniline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
Anthracene	2260 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	68.4	55-110	3.58	20		
Benzidine	214 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	6.46	0-130	1.63	20		
Benzo (a) anthracene	2520 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	76.0	55-110	0.0872	20		
Benzo (a) pyrene	2540 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	76.6	55-110	0.199	20		
Benzo (b) fluoranthene	2870 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	86.5	45-120	12.2	20		
Benzo (g,h,i) perylene	2370 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	71.5	40-125	8.31	20		
Benzo (k) fluoranthene	2570 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	77.8	45-125	9.64	20		



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0317 - SW3550C

Matrix Spike Dup (BAI0317-MSD1)	Source: 17I0322-07			Prepared: 09/14/2017 Analyzed: 09/19/2017				
Benzoic acid	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg	0-125	20		
Benzyl alcohol	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg	0-200	20		
bis (2-Chloroethoxy) methane	2260 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	68.3	40-125	3.90	20
bis (2-Chloroethyl) ether	2280 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	69.0	40-125	3.32	20
2,2'-Oxybis (1-chloropropane)	2200 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	66.5	40-125	4.85	20
bis (2-Ethylhexyl) phthalate	2540 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	76.6	40-125	1.91	20
Butyl benzyl phthalate	2480 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	75.0	45-115	1.14	20
Chrysene	2480 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	74.8	55-110	0.747	20
Dibenz (a,h) anthracene	2650 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	79.9	40-125	6.70	20
Dibenz (a,j) acridine	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg	0-200	20		
Dibenzo furan	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg	0-200	20		
Diethyl phthalate	2460 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	74.3	40-120	3.19	20
Dimethyl phthalate	2420 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	73.2	25-125	2.90	20
Di-n-butyl phthalate	2500 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	75.4	55-115	1.68	20
Di-n-octyl phthalate	2530 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	76.5	35-135	2.24	20
Diphenylamine	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg	0-200	20		
Ethyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg	0-200	20		
Fluoranthene	2640 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	79.8	55-115	6.06	20
Fluorene	2550 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	76.9	50-110	4.06	20
Hexachlorobenzene	2430 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	73.3	25-125	4.24	20
Hexachlorobutadiene	2730 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	82.3	25-125	1.67	20
Hexachlorocyclopentadiene	1300 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	39.3	25-125	2.24	20
Hexachloroethane	2170 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	65.7	25-125	1.03	20
Indeno (1,2,3-cd) pyrene	2530 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	76.4	45-125	6.48	20
Isophorone	2430 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	73.3	10-110	3.05	20
m+p-Cresols	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg	40-105	20		
Methyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg	0-200	20		
Naphthalene	2340 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	70.8	40-100	6.83	20
Nitrobenzene	2280 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	68.8	40-100	1.61	20
n-Nitrosodimethylamine	1610 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	48.7	25-110	7.33	20
n-Nitrosodi-n-butylamine	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg	0-200	20		



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0317 - SW3550C

Matrix Spike Dup (BAI0317-MSD1)	Source: 17I0322-07			Prepared: 09/14/2017 Analyzed: 09/19/2017					
n-Nitrosodi-n-propylamine	2460 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	74.2	12-97	2.13	20	
n-Nitrosodiphenylamine	2170 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	65.4	12-97	3.24	20	
n-Nitrosopiperidine	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20	
o+m+p-Cresols	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20	
o-Cresol	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		40-110		20	
p-(Dimethylamino) azobenzene	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20	
p-Chloro-m-cresol	2400 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	72.6	10-91	2.40	20	
Pentachloronitrobenzene (quintozone)	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20	
Pentachlorophenol	2500 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	75.4	27-109	2.58	20	
Phenacetin	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20	
Phenanthrene	2690 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	81.1	50-115	5.38	20	
Phenol	2330 ug/kg	83.3	ug/kg	3340 <83.3 ug/kg	69.7	0-115	3.89	20	
Pronamide	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20	
Pyrene	2500 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	75.4	23-110	2.44	20	
Pyridine	1550 ug/kg	83.3	ug/kg	3310 <83.3 ug/kg	47.0	0-200	3.95	20	
Surr: 2,4,6-Tribromophenol (Surr)	2340		ug/kg	6620 ug/kg	35.4	35-125			
Surr: 2-Fluorobiphenyl (Surr)	1120		ug/kg	3310 ug/kg	33.8	45-105			S
Surr: 2-Fluorophenol (Surr)	2290		ug/kg	6620 ug/kg	34.6	35-105			S
Surr: Nitrobenzene-d5 (Surr)	1110		ug/kg	3310 ug/kg	33.4	35-100			S
Surr: Phenol-d5 (Surr)	2300		ug/kg	6620 ug/kg	34.7	40-100			S
Surr: p-Terphenyl-d14 (Surr)	1330		ug/kg	3310 ug/kg	40.1	30-125			

Batch BAI0547 - SW3550C

Blank (BAI0547-BLK1)	Prepared: 09/21/2017 Analyzed: 09/22/2017					
1,2,4,5-Tetrachlorobenzene	<83.3 ug/kg	83.3	ug/kg			
1,2,4-Trichlorobenzene	<83.3 ug/kg	83.3	ug/kg			
1,2-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg			
1,2-Diphenylhydrazine	<83.3 ug/kg	83.3	ug/kg			
1,3-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg			
1,4-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg			



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0547 - SW3550C

Blank (BAI0547-BLK1)

Prepared: 09/21/2017 Analyzed: 09/22/2017

1-Chloronaphthalene	<83.3 ug/kg	83.3	ug/kg						
1-Naphthylamine	<83.3 ug/kg	83.3	ug/kg						
2,3,4,6-Tetrachlorophenol	<83.3 ug/kg	83.3	ug/kg						
2,4,5-Trichlorophenol	<83.3 ug/kg	83.3	ug/kg						
2,4,6-Trichlorophenol	<83.3 ug/kg	83.3	ug/kg						
2,4-Dichlorophenol	<83.3 ug/kg	83.3	ug/kg						
2,4-Dimethylphenol	<83.3 ug/kg	83.3	ug/kg						
2,4-Dinitrophenol	<83.3 ug/kg	83.3	ug/kg						
2,4-Dinitrotoluene	<83.3 ug/kg	83.3	ug/kg						
2,6-Dichlorophenol	<83.3 ug/kg	83.3	ug/kg						
2,6-Dinitrotoluene	<83.3 ug/kg	83.3	ug/kg						
2-Chloronaphthalene	<83.3 ug/kg	83.3	ug/kg						
2-Chlorophenol	<83.3 ug/kg	83.3	ug/kg						
2-Methylnaphthalene	<83.3 ug/kg	83.3	ug/kg						
2-Naphthylamine	<83.3 ug/kg	83.3	ug/kg						
2-Nitroaniline	<83.3 ug/kg	83.3	ug/kg						
2-Nitrophenol	<83.3 ug/kg	83.3	ug/kg						
3,3'-Dichlorobenzidine	<83.3 ug/kg	83.3	ug/kg						
3-Methylcholanthrene	<83.3 ug/kg	83.3	ug/kg						
3-Nitroaniline	<83.3 ug/kg	83.3	ug/kg						
4,6-Dinitro-2-methylphenol	<83.3 ug/kg	83.3	ug/kg						
4-Aminobiphenyl	<83.3 ug/kg	83.3	ug/kg						
4-Bromophenyl phenyl ether	<83.3 ug/kg	83.3	ug/kg						
4-Chloroaniline	<83.3 ug/kg	83.3	ug/kg						
4-Chlorophenyl phenyl ether	<83.3 ug/kg	83.3	ug/kg						
4-Nitroaniline	<83.3 ug/kg	83.3	ug/kg						
4-Nitrophenol	<83.3 ug/kg	83.3	ug/kg						
7,12-Dimethylbenz (a) anthracene	<83.3 ug/kg	83.3	ug/kg						
Acenaphthene	<83.3 ug/kg	83.3	ug/kg						
Acenaphthylene	<83.3 ug/kg	83.3	ug/kg						
Acetophenone	<83.3 ug/kg	83.3	ug/kg						



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0547 - SW3550C

Blank (BAI0547-BLK1) Prepared: 09/21/2017 Analyzed: 09/22/2017

Aniline	<83.3 ug/kg	83.3	ug/kg						
Anthracene	<83.3 ug/kg	83.3	ug/kg						
Benzidine	<83.3 ug/kg	83.3	ug/kg						
Benzo (a) anthracene	<83.3 ug/kg	83.3	ug/kg						
Benzo (a) pyrene	<83.3 ug/kg	83.3	ug/kg						
Benzo (b) fluoranthene	<83.3 ug/kg	83.3	ug/kg						
Benzo (g,h,i) perylene	<83.3 ug/kg	83.3	ug/kg						
Benzo (k) fluoranthene	<83.3 ug/kg	83.3	ug/kg						
Benzoic acid	<83.3 ug/kg	83.3	ug/kg						
Benzyl alcohol	<83.3 ug/kg	83.3	ug/kg						
bis (2-Chloroethoxy) methane	<83.3 ug/kg	83.3	ug/kg						
bis (2-Chloroethyl) ether	<83.3 ug/kg	83.3	ug/kg						
2,2'-Oxybis (1-chloropropane)	<83.3 ug/kg	83.3	ug/kg						
bis (2-Ethylhexyl) phthalate	<83.3 ug/kg	83.3	ug/kg						
Butyl benzyl phthalate	<83.3 ug/kg	83.3	ug/kg						
Chrysene	<83.3 ug/kg	83.3	ug/kg						
Dibenz (a,h) anthracene	<83.3 ug/kg	83.3	ug/kg						
Dibenz (a,j) acridine	<83.3 ug/kg	83.3	ug/kg						
Dibenzo furan	<83.3 ug/kg	83.3	ug/kg						
Diethyl phthalate	<83.3 ug/kg	83.3	ug/kg						
Dimethyl phthalate	<83.3 ug/kg	83.3	ug/kg						
Di-n-butyl phthalate	<83.3 ug/kg	83.3	ug/kg						
Di-n-octyl phthalate	<83.3 ug/kg	83.3	ug/kg						
Diphenylamine	<83.3 ug/kg	83.3	ug/kg						
Ethyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg						
Fluoranthene	<83.3 ug/kg	83.3	ug/kg						
Fluorene	<83.3 ug/kg	83.3	ug/kg						
Hexachlorobenzene	<83.3 ug/kg	83.3	ug/kg						
Hexachlorobutadiene	<83.3 ug/kg	83.3	ug/kg						
Hexachlorocyclopentadiene	<83.3 ug/kg	83.3	ug/kg						
Hexachloroethane	<83.3 ug/kg	83.3	ug/kg						



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0547 - SW3550C

Blank (BAI0547-BLK1)

Prepared: 09/21/2017 Analyzed: 09/22/2017

Indeno (1,2,3-cd) pyrene	<83.3 ug/kg	83.3	ug/kg						
Isophorone	<83.3 ug/kg	83.3	ug/kg						
m+p-Cresols	<83.3 ug/kg	83.3	ug/kg						
Methyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg						
Naphthalene	<83.3 ug/kg	83.3	ug/kg						
Nitrobenzene	<83.3 ug/kg	83.3	ug/kg						
n-Nitrosodimethylamine	<83.3 ug/kg	83.3	ug/kg						
n-Nitrosodi-n-butylamine	<83.3 ug/kg	83.3	ug/kg						
n-Nitrosodi-n-propylamine	<83.3 ug/kg	83.3	ug/kg						
n-Nitrosodiphenylamine	<83.3 ug/kg	83.3	ug/kg						
n-Nitrosopiperidine	<83.3 ug/kg	83.3	ug/kg						
o+m+p-Cresols	<83.3 ug/kg	83.3	ug/kg						
o-Cresol	<83.3 ug/kg	83.3	ug/kg						
p-(Dimethylamino) azobenzene	<83.3 ug/kg	83.3	ug/kg						
p-Chloro-m-cresol	<83.3 ug/kg	83.3	ug/kg						
Pentachloronitrobenzene (quintozone)	<83.3 ug/kg	83.3	ug/kg						
Pentachlorophenol	<83.3 ug/kg	83.3	ug/kg						
Phenacetin	<83.3 ug/kg	83.3	ug/kg						
Phenanthrene	<83.3 ug/kg	83.3	ug/kg						
Phenol	<83.3 ug/kg	83.3	ug/kg						
Pronamide	<83.3 ug/kg	83.3	ug/kg						
Pyrene	<83.3 ug/kg	83.3	ug/kg						
Pyridine	<83.3 ug/kg	83.3	ug/kg						
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	1980	ug/kg	3290		60.1	35-125			
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	1060	ug/kg	1640		64.5	45-105			
<i>Surr: 2-Fluorophenol (Surr)</i>	2380	ug/kg	3290		72.4	35-105			
<i>Surr: Nitrobenzene-d5 (Surr)</i>	1030	ug/kg	1640		62.8	35-100			
<i>Surr: Phenol-d5 (Surr)</i>	2130	ug/kg	3290		64.8	40-100			
<i>Surr: p-Terphenyl-d14 (Surr)</i>	1260	ug/kg	1640		76.4	30-125			



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0547 - SW3550C

LCS (BAI0547-BS1) Prepared: 09/21/2017 Analyzed: 09/22/2017

1,1-Biphenyl	<83.3 ug/kg	83.3	ug/kg		ug/kg		0-200		
1,2,4,5-Tetrachlorobenzene	<83.3 ug/kg	83.3	ug/kg		ug/kg		0-200		
1,2,4-Trichlorobenzene	2270 ug/kg	83.3	ug/kg	3190	ug/kg	71.0	21.8-66.7		L
1,2-Dichlorobenzene	2390 ug/kg	83.3	ug/kg	3190	ug/kg	74.9	22-60		L
1,3-Dichlorobenzene	2180 ug/kg	83.3	ug/kg	3190	ug/kg	68.2	22-60		L
1,4-Dichlorobenzene	2210 ug/kg	83.3	ug/kg	3190	ug/kg	69.3	13-68		L
2,4,6-Trichlorophenol	2300 ug/kg	83.3	ug/kg	3190	ug/kg	72.1	50-115		
2,4-Dichlorophenol	2450 ug/kg	83.3	ug/kg	3190	ug/kg	76.7	50-105		
2,4-Dimethylphenol	2360 ug/kg	83.3	ug/kg	3190	ug/kg	73.9	30-110		
2,4-Dinitrophenol	2280 ug/kg	83.3	ug/kg	3190	ug/kg	71.4	15-140		
2,4-Dinitrotoluene	2480 ug/kg	83.3	ug/kg	3190	ug/kg	77.6	21-99		
2,6-Dinitrotoluene	2420 ug/kg	83.3	ug/kg	3190	ug/kg	75.9	15-140		
2-Chloronaphthalene	2290 ug/kg	83.3	ug/kg	3190	ug/kg	71.6	45-105		
2-Chlorophenol	2200 ug/kg	83.3	ug/kg	3190	ug/kg	68.9	15-74		
2-Nitrophenol	2530 ug/kg	83.3	ug/kg	3190	ug/kg	79.2	40-115		
3,3'-Dichlorobenzidine	2130 ug/kg	83.3	ug/kg	3190	ug/kg	66.7	20-110		
4,6-Dinitro-2-methylphenol	2440 ug/kg	83.3	ug/kg	3190	ug/kg	76.3	40-130		
4-Bromophenyl phenyl ether	2630 ug/kg	83.3	ug/kg	3190	ug/kg	82.3	15-110		
4-Chlorophenyl phenyl ether	2370 ug/kg	83.3	ug/kg	3190	ug/kg	74.3	15-110		
4-Nitrophenol	2130 ug/kg	83.3	ug/kg	3190	ug/kg	66.5	0-125		
Acenaphthene	2280 ug/kg	83.3	ug/kg	3190	ug/kg	71.5	27.7-85.5		
Acenaphthylene	2440 ug/kg	83.3	ug/kg	3190	ug/kg	76.3	50-105		
Acetochlor	<83.3 ug/kg	83.3	ug/kg		ug/kg		0-200		
Acetophenone	1910 ug/kg	83.3	ug/kg	3190	ug/kg	59.8	0-200		
Anthracene	2410 ug/kg	83.3	ug/kg	3190	ug/kg	75.4	55-110		
Benzo (a) anthracene	2450 ug/kg	83.3	ug/kg	3190	ug/kg	76.8	55-110		
Benzo (a) pyrene	2420 ug/kg	83.3	ug/kg	3190	ug/kg	75.8	55-110		
Benzo (b) fluoranthene	2710 ug/kg	83.3	ug/kg	3190	ug/kg	84.9	45-120		
Benzo (g,h,i) perylene	1880 ug/kg	83.3	ug/kg	3190	ug/kg	58.9	40-125		
Benzo (k) fluoranthene	2990 ug/kg	83.3	ug/kg	3190	ug/kg	93.5	45-125		
bis (2-Chloroethoxy) methane	2410 ug/kg	83.3	ug/kg	3190	ug/kg	75.4	40-125		



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Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAI0547 - SW3550C

LCS (BAI0547-BS1)							Prepared: 09/21/2017 Analyzed: 09/22/2017
bis (2-Chloroethyl) ether	2330 ug/kg	83.3	ug/kg	3190	ug/kg	72.9	40-125
2,2'-Oxybis (1-chloropropane)	2270 ug/kg	83.3	ug/kg	3190	ug/kg	71.2	40-125
bis (2-Ethylhexyl) phthalate	2260 ug/kg	83.3	ug/kg	3190	ug/kg	70.6	40-125
Butyl benzyl phthalate	2070 ug/kg	83.3	ug/kg	3190	ug/kg	64.8	45-115
Chrysene	2370 ug/kg	83.3	ug/kg	3190	ug/kg	74.3	55-110
Dibenz (a,h) anthracene	1990 ug/kg	83.3	ug/kg	3190	ug/kg	62.4	40-125
Diethyl phthalate	2230 ug/kg	83.3	ug/kg	3190	ug/kg	69.9	40-120
Dimethyl phthalate	2210 ug/kg	83.3	ug/kg	3190	ug/kg	69.0	25-125
Di-n-butyl phthalate	2260 ug/kg	83.3	ug/kg	3190	ug/kg	70.7	55-115
Di-n-octyl phthalate	2580 ug/kg	83.3	ug/kg	3190	ug/kg	80.8	35-135
Fluoranthene	2290 ug/kg	83.3	ug/kg	3190	ug/kg	71.6	55-115
Fluorene	2340 ug/kg	83.3	ug/kg	3190	ug/kg	73.4	50-110
Hexachlorobenzene	2640 ug/kg	83.3	ug/kg	3190	ug/kg	82.6	25-125
Hexachlorobutadiene	2610 ug/kg	83.3	ug/kg	3190	ug/kg	81.6	25-125
Hexachlorocyclopentadiene	1610 ug/kg	83.3	ug/kg	3190	ug/kg	50.4	25-125
Hexachloroethane	2170 ug/kg	83.3	ug/kg	3190	ug/kg	68.0	25-125
Indeno (1,2,3-cd) pyrene	1970 ug/kg	83.3	ug/kg	3190	ug/kg	61.8	45-125
Isophorone	2390 ug/kg	83.3	ug/kg	3190	ug/kg	74.8	10-110
Naphthalene	2280 ug/kg	83.3	ug/kg	3190	ug/kg	71.3	40-100
Nitrobenzene	2260 ug/kg	83.3	ug/kg	3190	ug/kg	70.7	40-100
n-Nitrosodimethylamine	2040 ug/kg	83.3	ug/kg	3190	ug/kg	64.0	25-110
n-Nitrosodi-n-propylamine	2280 ug/kg	83.3	ug/kg	3190	ug/kg	71.5	12-97
n-Nitrosodiphenylamine	1990 ug/kg	83.3	ug/kg	3190	ug/kg	62.3	12-97
p-Chloro-m-cresol	2480 ug/kg	83.3	ug/kg	3190	ug/kg	77.6	10-91
Pentachlorophenol	2210 ug/kg	83.3	ug/kg	3190	ug/kg	69.0	30-109
Phenanthrene	2450 ug/kg	83.3	ug/kg	3190	ug/kg	76.6	50-115
Phenol	2220 ug/kg	83.3	ug/kg	3230	ug/kg	68.8	0-115
Pyrene	2350 ug/kg	83.3	ug/kg	3190	ug/kg	73.4	27-110
Pyridine	1670 ug/kg	83.3	ug/kg	3190	ug/kg	52.3	0-200
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	2650		ug/kg	3190	ug/kg	83.0	35-125
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	1110		ug/kg	1600	ug/kg	69.8	45-105



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Final Report

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201 Church Street
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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0547 - SW3550C

LCS (BAI0547-BS1)		Prepared: 09/21/2017 Analyzed: 09/22/2017					
Surr: 2-Fluorophenol (Surr)	2380	ug/kg	3190	ug/kg	74.6	35-105	
Surr: Nitrobenzene-d5 (Surr)	1120	ug/kg	1600	ug/kg	69.9	35-100	
Surr: Phenol-d5 (Surr)	2310	ug/kg	3190	ug/kg	72.2	40-100	
Surr: p-Terphenyl-d14 (Surr)	1120	ug/kg	1600	ug/kg	70.1	30-125	
Matrix Spike (BAI0547-MS1)		Source: 17I0322-10 Prepared: 09/21/2017 Analyzed: 09/22/2017					
1,2,4-Trichlorobenzene	1940 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	58.3	21.8-66.7	
1,2-Dichlorobenzene	1980 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	59.6	22-60	
1,3-Dichlorobenzene	1800 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	54.1	22-60	
1,4-Dichlorobenzene	1850 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	55.6	22-60	
2,4,6-Trichlorophenol	2200 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	66.2	50-115	
2,4-Dichlorophenol	2220 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	66.7	50-105	
2,4-Dimethylphenol	2130 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	64.0	30-110	
2,4-Dinitrophenol	2030 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	61.1	15-140	
2,4-Dinitrotoluene	2380 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	71.5	17-111	
2,6-Dinitrotoluene	2740 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	82.5	15-140	
2-Chloronaphthalene	1990 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	59.9	45-105	
2-Chlorophenol	1890 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	56.7	19-64	
2-Nitrophenol	2270 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	68.3	40-115	
3,3'-Dichlorobenzidine	2470 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	74.3	20-110	
4,6-Dinitro-2-methylphenol	2440 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	73.5	40-130	
4-Bromophenyl phenyl ether	1800 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	54.2	15-110	
4-Chlorophenyl phenyl ether	2210 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	66.7	15-110	
4-Nitroaniline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200	
4-Nitrophenol	2020 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	60.7	0-125	
Acenaphthene	1990 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	59.8	24-90	
Acenaphthylene	2650 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	79.8	50-105	
Acetophenone	1690 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	51.0	0-200	
Anthracene	2250 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	67.7	55-110	
Benzo (a) anthracene	2370 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	71.4	55-110	
Benzo (a) pyrene	2320 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	69.8	55-110	



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0547 - SW3550C

Matrix Spike (BAI0547-MS1)	Source: 17I0322-10			Prepared: 09/21/2017 Analyzed: 09/22/2017			
Benzo (b) fluoranthene	2310 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	69.5	45-120	
Benzo (g,h,i) perylene	1520 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	45.9	40-125	
Benzo (k) fluoranthene	2040 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	61.5	45-125	
bis (2-Chloroethoxy) methane	2130 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	64.1	40-125	
bis (2-Chloroethyl) ether	1970 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	59.2	40-125	
2,2'-Oxybis (1-chloropropane)	2010 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	60.4	40-125	
bis (2-Ethylhexyl) phthalate	2170 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	65.2	40-125	
Butyl benzyl phthalate	2110 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	63.6	45-115	
Chrysene	2260 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	68.1	55-110	
Dibenz (a,h) anthracene	1850 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	55.8	40-125	
Diethyl phthalate	2000 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	60.1	40-120	
Dimethyl phthalate	2530 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	76.1	25-125	
Di-n-butyl phthalate	2650 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	79.6	55-115	
Di-n-octyl phthalate	2190 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	66.0	35-135	
Fluoranthene	2300 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	69.2	55-115	
Fluorene	2130 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	64.2	50-110	
Hexachlorobenzene	1810 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	54.5	25-125	
Hexachlorobutadiene	2410 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	72.6	25-125	
Hexachlorocyclopentadiene	1580 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	47.7	25-125	
Hexachloroethane	1830 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	55.1	25-125	
Indeno (1,2,3-cd) pyrene	1840 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	55.4	45-125	
Isophorone	2180 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	65.6	10-110	
Naphthalene	1980 ug/kg	83.3	ug/kg	3320 156 ug/kg	54.9	40-100	
Nitrobenzene	1940 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	58.3	40-100	
n-Nitrosodimethylamine	1850 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	55.7	25-110	
n-Nitrosodi-n-propylamine	2030 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	61.2	12-97	
n-Nitrosodiphenylamine	1940 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	58.2	12-97	
p-Chloro-m-cresol	2330 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	70.2	10-91	
Pentachlorophenol	2250 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	67.7	27-109	
Phenanthrene	2340 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	70.6	50-115	
Phenol	1950 ug/kg	83.3	ug/kg	3360 <83.3 ug/kg	58.1	0-115	



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0547 - SW3550C

Matrix Spike (BAI0547-MS1)	Source: 17I0322-10		Prepared: 09/21/2017 Analyzed: 09/22/2017						
Pyrene	2160 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	64.9	23-110		
Pyridine	1620 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	48.7	0-200		
Surr: 2,4,6-Tribromophenol (Surr)	2340		ug/kg	3320	ug/kg	70.4	35-125		
Surr: 2-Fluorobiphenyl (Surr)	979		ug/kg	1660	ug/kg	58.9	45-105		
Surr: 2-Fluorophenol (Surr)	1940		ug/kg	3320	ug/kg	58.4	35-105		
Surr: Nitrobenzene-d5 (Surr)	950		ug/kg	1660	ug/kg	57.2	35-100		
Surr: Phenol-d5 (Surr)	1990		ug/kg	3320	ug/kg	60.0	40-100		
Surr: p-Terphenyl-d14 (Surr)	1090		ug/kg	1660	ug/kg	65.8	30-125		
Matrix Spike Dup (BAI0547-MSD1)	Source: 17I0322-10		Prepared: 09/21/2017 Analyzed: 09/22/2017						
1,1-Biphenyl	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
1,2,4,5-Tetrachlorobenzene	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
1,2,4-Trichlorobenzene	2300 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	69.4	21.8-66.7	17.4	20 M
1,2-Dichlorobenzene	2190 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	65.9	22-60	9.95	20 M
1,2-Dinitrobenzene	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
1,2-Diphenylhydrazine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
1,3,5-Trinitrobenzene	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
1,3-Dichlorobenzene	2130 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	64.1	22-60	16.8	20 M
1,3-Dinitrobenzene	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
1,4-Dichlorobenzene	2160 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	65.0	22-60	15.6	20 M
1,4-Dinitrobenzene	<2.50 ug/kg	2.50	ug/kg		<2.50 ug/kg	0-200		20	
1,4-Dioxane	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
1,4-Naphthoquinone	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
1-Chloronaphthalene	2860 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200	37.3	20 P	
1-Methylnaphthalene	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
1-Naphthylamine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
2,3,4,6-Tetrachlorophenol	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
2,3,5,6-Tetrachlorophenol	<2.50 ug/kg	2.50	ug/kg		<2.50 ug/kg	0-200		20	
2,3,7,8-TCDD (SIM)	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
2,3-Dichloroaniline	<83.3 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	0-200		20	
2,4,5-Trichlorophenol	2980 ug/kg	83.3	ug/kg		<83.3 ug/kg	50-110	31.6	20 P	



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0547 - SW3550C

Matrix Spike Dup (BAI0547-MSD1)	Source: 17I0322-10			Prepared: 09/21/2017 Analyzed: 09/22/2017						
2,4,6-Trichlorophenol	3040 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	91.6	50-115	32.2	20	P	
2,4-Dichlorophenol	2580 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	77.5	50-105	15.0	20		
2,4-Dimethylphenol	2330 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	70.2	30-110	9.18	20		
2,4-Dinitrophenol	2300 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	69.3	15-140	12.6	20		
2,4-Dinitrotoluene	2560 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	77.0	17-111	7.30	20		
2,6-Dichlorophenol	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
2,6-Dinitrotoluene	2410 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	72.7	15-140	12.7	20		
2-Acetylaminofluorene	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
2-Choronaphthalene	2910 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	87.6	45-105	37.5	20	P	
2-Chlorophenol	2250 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	67.8	19-64	17.8	20	M	
2-Methylnaphthalene	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		45-105		20		
2-Naphthylamine	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
2-Nitroaniline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
2-Nitrophenol	2120 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	63.8	40-115	6.83	20		
2-Picoline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
3,3'-Dichlorobenzidine	2380 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	71.7	20-110	3.59	20		
3,3'-Dimethylbenzidine	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
3-Methylcholanthrene	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
3-Nitroaniline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
4,4'-DDE	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
4,6-Dinitro-2-methylphenol	3110 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	93.5	40-130	23.9	20	P	
4-Aminobiphenyl	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
4-Bromophenyl phenyl ether	2900 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	87.4	15-110	46.9	20	P	
4-Chloroaniline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		15-110		20		
4-Chlorophenyl phenyl ether	3140 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	94.4	15-110	34.4	20	P	
4-Nitroaniline	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
4-Nitrophenol	2440 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	73.4	0-125	19.0	20		
4-Nitroquinoline-1-oxide	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
5-Nitro-o-toluidine	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
7,12-Dimethylbenz (a) anthracene	<83.3 ug/kg	83.3	ug/kg	<83.3 ug/kg		0-200		20		
Acenaphthene	2380 ug/kg	83.3	ug/kg	3320 <83.3 ug/kg	71.7	24-90	18.0	20		



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0547 - SW3550C

Matrix Spike Dup (BAI0547-MSD1)	Source: 17I0322-10			Prepared: 09/21/2017 Analyzed: 09/22/2017						
Acenaphthylene	2640 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	79.6	50-105	0.276	20	
Acetochlor	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Acetophenone	1760 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	53.1	0-200	4.02	20	
Alachlor	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Aldrin	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
alpha,alpha-Dimethyl phenethylamine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Aniline	1700 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Anthracene	2980 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	89.7	55-110	28.0	20	P
Aramite	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Atrazine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Benzaldehyde	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Benzidine	<83.3 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg		0-130		20	
Benzo (a) anthracene	2470 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	74.3	55-110	3.93	20	
Benzo (a) pyrene	2520 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	75.8	55-110	8.30	20	
Benzo (b) fluoranthene	3100 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	93.2	45-120	29.1	20	P
Benzo (g,h,i) perylene	1910 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	57.5	40-125	22.5	20	P
Benzo (k) fluoranthene	2600 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	78.3	45-125	24.1	20	P
Benzoic acid	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-125		20	
Benzyl alcohol	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
bis (2-Chloroethoxy) methane	1950 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	58.8	40-125	8.68	20	
bis (2-Chloroethyl) ether	2380 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	71.8	40-125	19.2	20	
2,2'-Oxybis (1-chloropropane)	2000 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	60.2	40-125	0.199	20	
bis (2-Ethylhexyl) adipate	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
bis (2-Ethylhexyl) phthalate	2180 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	65.6	40-125	0.673	20	
Butachlor	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Butyl benzyl phthalate	1620 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	48.9	45-115	26.2	20	P
Caprolactam	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Catechol	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Chlorobenzilate	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Chrysene	2520 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	75.7	55-110	10.6	20	
Diallate	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	



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Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0547 - SW3550C

Matrix Spike Dup (BAI0547-MSD1)	Source: 17I0322-10			Prepared: 09/21/2017 Analyzed: 09/22/2017						
Dibenz (a,h) anthracene	2040 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	61.3	40-125	9.48	20	
Dibenz (a,j) acridine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Dibenzofuran	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Dieldrin	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Diethyl phthalate	3020 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	90.9	40-120	40.7	20	P
Dimethoate	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Dimethyl phthalate	2290 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	68.9	25-125	9.93	20	
Dimethylphenethylamine	<2.50 ug/kg	2.50	ug/kg		<2.50 ug/kg		0-200		20	
Di-n-butyl phthalate	<83.3 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg		55-115		20	
Di-n-octyl phthalate	2540 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	76.6	35-135	14.9	20	
Dinoseb	<2.50 ug/kg	2.50	ug/kg		<2.50 ug/kg		0-200		20	
Diphenyl ether	<2.50 ug/kg	2.50	ug/kg		<2.50 ug/kg		0-200		20	
Diphenylamine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Disulfoton	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Endrin	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
EPTC	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Ethyl methacrylate	<2.50 ug/kg	2.50	ug/kg		<2.50 ug/kg		0-200		20	
Ethyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Ethyl parathion	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Famphur	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Fluoranthene	3380 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	102	55-115	37.9	20	P
Fluorene	3110 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	93.5	50-110	37.2	20	P
gamma-BHC (Lindane)	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Heptachlor	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Heptachlor epoxide	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Hexachlorobenzene	2730 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	82.1	25-125	40.4	20	P
Hexachlorobutadiene	2480 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	74.5	25-125	2.60	20	
Hexachlorocyclopentadiene	1270 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	38.3	25-125	21.8	20	P
Hexachloroethane	2100 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	63.1	25-125	13.4	20	
Hexachlorophene	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Hexachloropropene	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0547 - SW3550C

Matrix Spike Dup (BAI0547-MSD1)	Source: 17I0322-10			Prepared: 09/21/2017 Analyzed: 09/22/2017						
Indeno (1,2,3-cd) pyrene	2020 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	60.7	45-125	9.17	20	
Isodrin	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Isophorone	2140 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	64.3	10-110	2.03	20	
Isosafrole	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Kepone	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Library Search	<0.00 ug/kg	0.00	ug/kg		<0.00 ug/kg		0-200		20	
m+p-Cresols	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		40-105		20	
Methapyrilene	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Methoxychlor	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Methyl methacrylate	<2.50 ug/kg	2.50	ug/kg		<2.50 ug/kg		0-200		20	
Methyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Methyl parathion	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Metolachlor	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Metribuzin	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Molinate	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Naphthalene	2370 ug/kg	83.3	ug/kg	3320	156 ug/kg	66.7	40-100	17.9	20	
n-Decane	<83.3 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg		0-200		20	
Nicotine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
Nitrobenzene	2180 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	65.7	40-100	11.9	20	
n-Nitrosodiethylamine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
n-Nitrosodimethylamine	2310 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	69.6	25-110	22.2	20	P
n-Nitrosodi-n-butylamine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
n-Nitrosodi-n-propylamine	2100 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	63.2	12-97	3.23	20	
n-Nitrosodiphenylamine	2610 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	78.5	12-97	29.6	20	P
n-Nitrosomethylamine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		25-110		20	
n-Nitrosomorpholine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
n-Nitrosopiperidine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
n-Nitrosopyrrolidine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
n-Octadecane	<83.3 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg		0-200		20	
Nonylphenol	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	
o,o,o-Triethyl phosphorothioate	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg		0-200		20	



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Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0547 - SW3550C

Matrix Spike Dup (BAI0547-MSD1)	Source: 17I0322-10			Prepared: 09/21/2017 Analyzed: 09/22/2017					
o,o-Diethyl o-2-pyrazinyl phosphorothioate	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
o+m+p-Cresols	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
o-Cresol	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	40-110		20	
o-Toluidine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
p-(Dimethylamino) azobenzene	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
p-Chloro-m-cresol	2640 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	79.5	10-91	12.4	20
Pentachlorobenzene	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Pentachloroethane	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Pentachloronitrobenzene (quintozone)	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Pentachlorophenol	2600 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	78.2	27-109	14.4	20
Phenacetin	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Phenanthrene	2630 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	79.3	50-115	11.7	20
Phenol	2300 ug/kg	83.3	ug/kg	3360	<83.3 ug/kg	68.5	0-115	16.3	20
Phorate	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
p-Phenylenediamine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Pronamide	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Propachlor	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Pyrene	1770 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	53.4	23-110	19.5	20
Pyridine	2200 ug/kg	83.3	ug/kg	3320	<83.3 ug/kg	66.3	0-200	30.4	20
Safrole	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Simazine	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Sulfotep	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Terbacil	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
Malathion	<83.3 ug/kg	83.3	ug/kg		<83.3 ug/kg	0-200		20	
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	3400		ug/kg	3320	ug/kg	102	35-125		
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	1400		ug/kg	1660	ug/kg	84.0	45-105		
<i>Surr: 2-Fluorophenol (Surr)</i>	2380		ug/kg	3320	ug/kg	71.8	35-105		
<i>Surr: Nitrobenzene-d5 (Surr)</i>	1040		ug/kg	1660	ug/kg	62.9	35-100		
<i>Surr: Phenol-d5 (Surr)</i>	2290		ug/kg	3320	ug/kg	69.0	40-100		
<i>Surr: p-Terphenyl-d14 (Surr)</i>	948		ug/kg	1660	ug/kg	57.1	30-125		



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Semivolatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0261 - SW8100

Blank (BAI0261-BLK1)							Prepared: 09/12/2017 Analyzed: 09/13/2017		
TPH-Semi-Volatiles (DRO)	<10.0 mg/kg wet	10.0	mg/kg wet						
Surr: Pentacosane (Surr)	3.07		mg/kg wet	4.79		64.2	40-160		
LCS (BAI0261-BS1)							Prepared: 09/12/2017 Analyzed: 09/13/2017		
TPH-Semi-Volatiles (DRO)	64.7 mg/kg wet	10.0	mg/kg wet	99.4	mg/kg wet	65.1	40-160		
Surr: Pentacosane (Surr)	2.76		mg/kg wet	4.97	mg/kg wet	55.6	40-160		
Matrix Spike (BAI0261-MS1)							Source: 17I0063-09 Prepared: 09/12/2017 Analyzed: 09/13/2017		
TPH-Semi-Volatiles (DRO)	85.7 mg/kg wet	10.0	mg/kg wet	96.9	<10.0 mg/kg wet	88.5	40-160		
Surr: Pentacosane (Surr)	3.82		mg/kg wet	4.84	mg/kg wet	78.8	40-160		
Matrix Spike Dup (BAI0261-MSD1)							Source: 17I0063-09 Prepared: 09/12/2017 Analyzed: 09/13/2017		
TPH-Semi-Volatiles (DRO)	73.0 mg/kg wet	10.0	mg/kg wet	98.4	<10.0 mg/kg wet	74.1	40-160	16.1	20
Surr: Pentacosane (Surr)	2.97		mg/kg wet	4.92	mg/kg wet	60.4	40-160		

Batch BAI0285 - SW8100

Blank (BAI0285-BLK1)							Prepared: 09/13/2017 Analyzed: 09/14/2017		
TPH-Semi-Volatiles (DRO)	<10.0 mg/kg wet	10.0	mg/kg wet						
Surr: Pentacosane (Surr)	2.80		mg/kg wet	4.92		56.8	40-160		
LCS (BAI0285-BS1)							Prepared: 09/13/2017 Analyzed: 09/14/2017		
TPH-Semi-Volatiles (DRO)	66.6 mg/kg wet	10.0	mg/kg wet	98.6	mg/kg wet	67.6	40-160		
Surr: Pentacosane (Surr)	3.41		mg/kg wet	4.93	mg/kg wet	69.1	40-160		
Duplicate (BAI0285-DUP1)							Source: 17I0301-01 Prepared: 09/13/2017 Analyzed: 09/15/2017		
TPH-Semi-Volatiles (DRO)	<10.0 mg/kg wet	10.0	mg/kg wet	<10.0 mg/kg wet			NA	20	
Surr: Pentacosane (Surr)	3.24		mg/kg wet	4.99	mg/kg wet	65.0	40-160		



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Semivolatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	RPD Limit	Qual
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Batch BAI0285 - SW8100

<u>Matrix Spike (BAI0285-MS1)</u>		Source: 17I0300-04		Prepared: 09/13/2017 Analyzed: 09/15/2017					
TPH-Semi-Volatiles (DRO)	50.7 mg/kg wet	10.0	mg/kg wet	99.8	<10.0 mg/kg wet	50.8	40-160		
Surr: Pentacosane (Surr)	2.95		mg/kg wet	4.99	mg/kg wet	59.0	40-160		

Batch BAI0465 - SW8100

<u>Blank (BAI0465-BLK1)</u>		Prepared: 09/19/2017 Analyzed: 09/20/2017				
TPH-Semi-Volatiles (DRO)	<10.0 mg/kg wet	10.0	mg/kg wet			
Surr: Pentacosane (Surr)	3.03		mg/kg wet	4.92	61.6	40-160

<u>LCS (BAI0465-BS1)</u>		Prepared: 09/19/2017 Analyzed: 09/20/2017				
TPH-Semi-Volatiles (DRO)	73.3 mg/kg wet	10.0	mg/kg wet	99.6	mg/kg wet	73.6
Surr: Pentacosane (Surr)	2.92		mg/kg wet	4.98	mg/kg wet	58.7

<u>Matrix Spike (BAI0465-MS1)</u>		Prepared: 09/19/2017 Analyzed: 09/20/2017				
TPH-Semi-Volatiles (DRO)	68.5 mg/kg wet	10.0	mg/kg wet	98.6	<10.0 mg/kg wet	69.4
Surr: Pentacosane (Surr)	2.80		mg/kg wet	4.93	mg/kg wet	56.8

<u>Matrix Spike Dup (BAI0465-MSD1)</u>		Prepared: 09/19/2017 Analyzed: 09/20/2017				
TPH-Semi-Volatiles (DRO)	73.5 mg/kg wet	10.0	mg/kg wet	99.8	<10.0 mg/kg wet	73.7
Surr: Pentacosane (Surr)	3.46		mg/kg wet	4.99	mg/kg wet	69.4

Batch BAI0549 - SW8100

<u>Blank (BAI0549-BLK1)</u>		Prepared: 09/21/2017 Analyzed: 09/22/2017				
TPH-Semi-Volatiles (DRO)	<10.0 mg/kg wet	10.0	mg/kg wet			
Surr: Pentacosane (Surr)	3.66		mg/kg wet	4.98	73.4	40-160



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Semivolatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0549 - SW8100

<u>LCS (BAI0549-BS1)</u>								Prepared: 09/21/2017 Analyzed: 09/22/2017		
TPH-Semi-Volatiles (DRO)	61.1 mg/kg wet	10.0	mg/kg wet	99.4	mg/kg wet	61.4	40-160			
<i>Surr: Pentacosane (Surr)</i>	3.04		mg/kg wet	4.97	mg/kg wet	61.1	40-160			
<u>Matrix Spike (BAI0549-MS1)</u>								Source: 17I0320-12 Prepared: 09/21/2017 Analyzed: 09/22/2017		
TPH-Semi-Volatiles (DRO)	120 mg/kg wet	10.0	mg/kg wet	100	68.0 mg/kg wet	52.5	40-160			
<i>Surr: Pentacosane (Surr)</i>	4.06		mg/kg wet	5.00	mg/kg wet	81.2	40-160			
<u>Matrix Spike Dup (BAI0549-MSD1)</u>								Source: 17I0320-12 Prepared: 09/21/2017 Analyzed: 09/22/2017		
TPH-Semi-Volatiles (DRO)	133 mg/kg wet	10.0	mg/kg wet	99.4	68.0 mg/kg wet	65.8	40-160	10.1	20	
<i>Surr: Pentacosane (Surr)</i>	5.39		mg/kg wet	4.97	mg/kg wet	109	40-160			



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TCLP Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0484 - SW3510C

Blank (BAI0484-BLK1)							Prepared & Analyzed: 09/20/2017		
2,4,5-Trichlorophenol	<0.02 mg/L	0.02	mg/L						
2,4,6-Trichlorophenol	<0.02 mg/L	0.02	mg/L						
2,4-Dinitrotoluene	<0.02 mg/L	0.02	mg/L						
Hexachlorobenzene	<0.02 mg/L	0.02	mg/L						
Hexachlorobutadiene	<0.02 mg/L	0.02	mg/L						
Hexachloroethane	<0.02 mg/L	0.02	mg/L						
m+p-Cresols	<0.02 mg/L	0.02	mg/L						
Nitrobenzene	<0.02 mg/L	0.02	mg/L						
o+m+p-Cresols	<0.02 mg/L	0.02	mg/L						
o-Cresol	<0.02 mg/L	0.02	mg/L						
Pentachlorophenol	<0.02 mg/L	0.02	mg/L						
Pyridine	<0.02 mg/L	0.02	mg/L						
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	1.07		mg/L	1.00		107	20-86		S
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	0.310		mg/L	0.500		62.0	23-87		
<i>Surr: 2-Fluorophenol (Surr)</i>	0.575		mg/L	1.00		57.5	10-52		S
<i>Surr: Nitrobenzene-d5 (Surr)</i>	0.366		mg/L	0.500		73.3	10-98.5		
<i>Surr: Phenol-d5 (Surr)</i>	0.297		mg/L	1.00		29.7	5-33		
<i>Surr: p-Terphenyl-d14 (Surr)</i>	0.458		mg/L	0.500		91.7	27-133		

LCS (BAI0484-BS1)							Prepared & Analyzed: 09/20/2017		
1,2,4-Trichlorobenzene	0.66 mg/L	0.01	mg/L	1.00	mg/L	65.6	21.8-66.7		
1,2-Dichlorobenzene	0.66 mg/L	0.01	mg/L	1.00	mg/L	65.8	22-60		L
1,3-Dichlorobenzene	0.60 mg/L	0.01	mg/L	1.00	mg/L	59.8	22-60		
1,4-Dichlorobenzene	0.60 mg/L	0.01	mg/L	1.00	mg/L	60.5	13-68		
2,4,6-Trichlorophenol	0.83 mg/L	0.02	mg/L	1.00	mg/L	83.5	50-115		
2,4-Dichlorophenol	0.83 mg/L	0.01	mg/L	1.00	mg/L	83.2	50-105		
2,4-Dimethylphenol	0.79 mg/L	0.0005	mg/L	1.00	mg/L	78.6	30-110		
2,4-Dinitrophenol	0.86 mg/L	0.05	mg/L	1.00	mg/L	85.9	15-140		
2,4-Dinitrotoluene	0.87 mg/L	0.02	mg/L	1.00	mg/L	87.2	21-99		
2,6-Dinitrotoluene	0.85 mg/L	0.01	mg/L	1.00	mg/L	84.9	15-140		
2-Chloronaphthalene	0.77 mg/L	0.01	mg/L	1.00	mg/L	76.8	45-105		



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/5/2017 13:11
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

TCLP Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0484 - SW3510C

LCS (BAI0484-BS1)	Prepared & Analyzed: 09/20/2017						
2-Chlorophenol	0.69 mg/L	0.01	mg/L	1.00	mg/L	68.8	15-74
2-Nitrophenol	0.81 mg/L	0.01	mg/L	1.00	mg/L	81.4	40-115
4,6-Dinitro-2-methylphenol	0.84 mg/L	0.05	mg/L	1.00	mg/L	84.4	40-130
4-Bromophenyl phenyl ether	0.89 mg/L	0.01	mg/L	1.00	mg/L	89.3	15-110
4-Chlorophenyl phenyl ether	0.82 mg/L	0.01	mg/L	1.00	mg/L	81.8	15-110
4-Nitrophenol	0.39 mg/L	0.05	mg/L	1.00	mg/L	39.4	0-125
Acenaphthene	0.79 mg/L	0.01	mg/L	1.00	mg/L	78.9	27.7-85.5
Acenaphthylene	0.84 mg/L	0.01	mg/L	1.00	mg/L	84.4	50-105
Anthracene	0.86 mg/L	0.01	mg/L	1.00	mg/L	85.8	55-110
Benzo (a) anthracene	0.85 mg/L	0.00005	mg/L	1.00	mg/L	84.6	55-110
Benzo (a) pyrene	0.82 mg/L	0.01	mg/L	1.00	mg/L	82.2	55-110
Benzo (b) fluoranthene	0.95 mg/L	0.01	mg/L	1.00	mg/L	95.2	45-120
Benzo (g,h,i) perylene	0.75 mg/L	0.01	mg/L	1.00	mg/L	75.2	40-125
Benzo (k) fluoranthene	0.88 mg/L	0.01	mg/L	1.00	mg/L	87.8	45-125
bis (2-Chloroethoxy) methane	0.81 mg/L	0.01	mg/L	1.00	mg/L	81.0	40-125
bis (2-Chloroethyl) ether	0.72 mg/L	0.01	mg/L	1.00	mg/L	72.3	40-125
2,2'-Oxybis (1-chloropropane)	0.69 mg/L	0.01	mg/L	1.00	mg/L	69.2	40-125
bis (2-Ethylhexyl) phthalate	0.73 mg/L	0.01	mg/L	1.00	mg/L	73.2	40-125
Butyl benzyl phthalate	0.73 mg/L	0.01	mg/L	1.00	mg/L	72.6	45-115
Carbazole	1.24 mg/L	0.002	mg/L	1.00	mg/L	124	0-200
Chrysene	0.85 mg/L	0.01	mg/L	1.00	mg/L	85.0	55-110
Dibenz (a,h) anthracene	0.81 mg/L	0.01	mg/L	1.00	mg/L	80.9	40-125
Diethyl phthalate	0.77 mg/L	0.01	mg/L	1.00	mg/L	77.2	40-120
Dimethyl phthalate	0.77 mg/L	0.01	mg/L	1.00	mg/L	77.1	25-125
Di-n-butyl phthalate	1.11 mg/L	0.01	mg/L	1.00	mg/L	111	55-115
Di-n-octyl phthalate	0.80 mg/L	0.01	mg/L	1.00	mg/L	80.4	35-135
Fluoranthene	0.95 mg/L	0.01	mg/L	1.00	mg/L	95.0	55-115
Fluorene	0.81 mg/L	0.01	mg/L	1.00	mg/L	81.0	50-110
Hexachlorobenzene	0.87 mg/L	0.02	mg/L	1.00	mg/L	87.4	25-125
Hexachlorobutadiene	0.73 mg/L	0.02	mg/L	1.00	mg/L	72.6	25-125
Hexachlorocyclopentadiene	0.48 mg/L	0.01	mg/L	1.00	mg/L	48.0	25-125



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/5/2017 13:11
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

TCLP Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0484 - SW3510C

LCS (BAI0484-BS1)								Prepared & Analyzed: 09/20/2017		
Hexachloroethane	0.59 mg/L	0.02	mg/L	1.00	mg/L	59.3	25-125			
Indeno (1,2,3-cd) pyrene	0.80 mg/L	0.01	mg/L	1.00	mg/L	79.7	45-125			
Isophorone	0.80 mg/L	0.01	mg/L	1.00	mg/L	80.1	10-110			
Naphthalene	0.70 mg/L	0.01	mg/L	1.00	mg/L	69.9	40-100			
Nitrobenzene	0.70 mg/L	0.02	mg/L	1.00	mg/L	70.3	40-100			
n-Nitrosodimethylamine	0.35 mg/L	0.01	mg/L	1.00	mg/L	35.4	25-110			
n-Nitrosodi-n-propylamine	0.74 mg/L	0.01	mg/L	1.00	mg/L	74.2	12-97			
n-Nitrosodiphenylamine	0.69 mg/L	0.01	mg/L	1.00	mg/L	69.3	12-97			
p-Chloro-m-cresol	0.85 mg/L	0.01	mg/L	1.00	mg/L	85.1	10-91			
Pentachlorophenol	0.85 mg/L	0.02	mg/L	1.00	mg/L	85.4	30-109			
Phenanthrene	0.87 mg/L	0.01	mg/L	1.00	mg/L	87.0	50-115			
Phenol	0.32 mg/L	0.02	mg/L	1.01	mg/L	31.2	0-115			
Pyrene	0.75 mg/L	0.01	mg/L	1.00	mg/L	74.6	27-110			
Pyridine	0.34 mg/L	0.02	mg/L	1.00	mg/L	34.2	0-200			
Surr: 2,4,6-Tribromophenol (Surr)	0.945		mg/L	1.00	mg/L	94.5	20-86			S
Surr: 2-Fluorobiphenyl (Surr)	0.342		mg/L	0.500	mg/L	68.5	23-87			
Surr: 2-Fluorophenol (Surr)	0.385		mg/L	1.00	mg/L	38.5	10-52			
Surr: Nitrobenzene-d5 (Surr)	0.343		mg/L	0.500	mg/L	68.6	10-98.5			
Surr: Phenol-d5 (Surr)	0.304		mg/L	1.00	mg/L	30.4	5-33			
Surr: p-Terphenyl-d14 (Surr)	0.405		mg/L	0.500	mg/L	81.0	27-133			

Matrix Spike (BAI0484-MS1)								Source: 17I0320-13 Prepared & Analyzed: 09/20/2017		
1,2,4-Trichlorobenzene	0.41 mg/L	0.01	mg/L	1.00	<0.01 mg/L	40.7	21.8-66.7			
1,2-Dichlorobenzene	0.41 mg/L	0.01	mg/L	1.00	<0.01 mg/L	41.3	22-60			
1,3-Dichlorobenzene	0.37 mg/L	0.01	mg/L	1.00	<0.01 mg/L	37.4	22-60			
1,4-Dichlorobenzene	0.38 mg/L	0.01	mg/L	1.00	<0.01 mg/L	38.2	22-60			
2,4,6-Trichlorophenol	0.62 mg/L	0.02	mg/L	1.00	<0.02 mg/L	62.4	50-115			
2,4-Dichlorophenol	0.58 mg/L	0.01	mg/L	1.00	<0.01 mg/L	57.7	50-105			
2,4-Dimethylphenol	0.53 mg/L	0.0005	mg/L	1.00	<0.0005 mg/L	53.5	30-110			
2,4-Dinitrophenol	0.88 mg/L	0.05	mg/L	1.00	<0.05 mg/L	87.7	15-140			
2,4-Dinitrotoluene	0.86 mg/L	0.02	mg/L	1.00	<0.02 mg/L	85.7	17-111			



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

TCLP Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0484 - SW3510C

Matrix Spike (BAI0484-MS1)	Source: 17I0320-13		Prepared & Analyzed: 09/20/2017					
2,6-Dinitrotoluene	0.78 mg/L	0.01	mg/L	1.00	<0.01 mg/L	77.8	15-140	
2-Chloronaphthalene	0.51 mg/L	0.01	mg/L	1.00	<0.01 mg/L	51.0	45-105	
2-Chlorophenol	0.48 mg/L	0.01	mg/L	1.00	<0.01 mg/L	48.3	19-64	
2-Nitrophenol	0.57 mg/L	0.01	mg/L	1.00	<0.01 mg/L	56.9	40-115	
4,6-Dinitro-2-methylphenol	0.87 mg/L	0.05	mg/L	1.00	<0.05 mg/L	87.1	40-130	
4-Bromophenyl phenyl ether	0.81 mg/L	0.01	mg/L	1.00	<0.01 mg/L	81.1	15-110	
4-Chlorophenyl phenyl ether	0.68 mg/L	0.01	mg/L	1.00	<0.01 mg/L	68.4	15-110	
4-Nitrophenol	0.39 mg/L	0.05	mg/L	1.00	<0.05 mg/L	39.4	0-125	
Acenaphthene	0.59 mg/L	0.01	mg/L	1.00	<0.01 mg/L	58.9	24-90	
Acenaphthylene	0.61 mg/L	0.01	mg/L	1.00	<0.01 mg/L	61.1	50-105	
Anthracene	0.83 mg/L	0.01	mg/L	1.00	<0.01 mg/L	83.2	55-110	
Benzo (a) anthracene	0.84 mg/L	0.00005	mg/L	1.00	<0.00005 mg/L	83.8	55-110	
Benzo (a) pyrene	0.83 mg/L	0.01	mg/L	1.00	<0.01 mg/L	83.4	55-110	
Benzo (b) fluoranthene	0.94 mg/L	0.01	mg/L	1.00	<0.01 mg/L	93.8	45-120	
Benzo (g,h,i) perylene	0.65 mg/L	0.01	mg/L	1.00	<0.01 mg/L	64.7	40-125	
Benzo (k) fluoranthene	0.92 mg/L	0.01	mg/L	1.00	<0.01 mg/L	92.5	45-125	
Benzoic acid	<0.05 mg/L	0.05	mg/L		<0.05 mg/L		0-125	
bis (2-Chloroethoxy) methane	0.55 mg/L	0.01	mg/L	1.00	<0.01 mg/L	55.0	40-125	
bis (2-Chloroethyl) ether	0.52 mg/L	0.01	mg/L	1.00	<0.01 mg/L	52.1	40-125	
2,2'-Oxybis (1-chloropropane)	0.48 mg/L	0.01	mg/L	1.00	<0.01 mg/L	48.2	40-125	
bis (2-Ethylhexyl) phthalate	0.72 mg/L	0.01	mg/L	1.00	<0.01 mg/L	71.6	40-125	
Butyl benzyl phthalate	0.71 mg/L	0.01	mg/L	1.00	<0.01 mg/L	71.3	45-115	
Carbazole	1.22 mg/L	0.002	mg/L	1.00	<0.002 mg/L	122	0-200	
Chrysene	0.87 mg/L	0.01	mg/L	1.00	<0.01 mg/L	86.9	55-110	
Dibenz (a,h) anthracene	0.69 mg/L	0.01	mg/L	1.00	<0.01 mg/L	68.8	40-125	
Diethyl phthalate	0.75 mg/L	0.01	mg/L	1.00	<0.01 mg/L	74.5	40-120	
Dimethyl phthalate	0.69 mg/L	0.01	mg/L	1.00	<0.01 mg/L	68.5	25-125	
Di-n-butyl phthalate	1.08 mg/L	0.01	mg/L	1.00	<0.01 mg/L	108	55-115	
Di-n-octyl phthalate	0.81 mg/L	0.01	mg/L	1.00	<0.01 mg/L	80.9	35-135	
Fluoranthene	0.95 mg/L	0.01	mg/L	1.00	<0.01 mg/L	94.8	55-115	
Fluorene	0.69 mg/L	0.01	mg/L	1.00	<0.01 mg/L	68.7	50-110	



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA) Date Issued: 10/5/2017 13:11
201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

TCLP Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0484 - SW3510C

Matrix Spike (BAI0484-MS1)	Source: 17I0320-13		Prepared & Analyzed: 09/20/2017						
Hexachlorobenzene	0.84 mg/L	0.02	mg/L	1.00	<0.02 mg/L	83.7	25-125		
Hexachlorobutadiene	0.43 mg/L	0.02	mg/L	1.00	<0.02 mg/L	43.1	25-125		
Hexachlorocyclopentadiene	0.25 mg/L	0.01	mg/L	1.00	<0.01 mg/L	24.7	25-125		M
Hexachloroethane	0.35 mg/L	0.02	mg/L	1.00	<0.02 mg/L	35.3	25-125		
Indeno (1,2,3-cd) pyrene	0.68 mg/L	0.01	mg/L	1.00	<0.01 mg/L	68.0	45-125		
Isophorone	0.56 mg/L	0.01	mg/L	1.00	<0.01 mg/L	55.8	10-110		
Naphthalene	0.44 mg/L	0.01	mg/L	1.00	<0.01 mg/L	43.9	40-100		
Nitrobenzene	0.51 mg/L	0.02	mg/L	1.00	<0.02 mg/L	50.8	40-100		
n-Nitrosodimethylamine	0.28 mg/L	0.01	mg/L	1.00	<0.01 mg/L	28.4	25-110		
n-Nitrosodi-n-propylamine	0.52 mg/L	0.01	mg/L	1.00	<0.01 mg/L	51.5	12-97		
n-Nitrosodiphenylamine	0.66 mg/L	0.01	mg/L	1.00	<0.01 mg/L	66.0	12-97		
p-Chloro-m-cresol	0.65 mg/L	0.01	mg/L	1.00	<0.01 mg/L	65.4	10-91		
Pentachlorophenol	0.88 mg/L	0.02	mg/L	1.00	<0.02 mg/L	88.1	27-109		
Phenanthrene	0.82 mg/L	0.01	mg/L	1.00	<0.01 mg/L	82.2	50-115		
Phenol	0.22 mg/L	0.02	mg/L	1.01	<0.02 mg/L	21.9	0-115		
Pyrene	0.72 mg/L	0.01	mg/L	1.00	<0.01 mg/L	72.2	23-110		
Pyridine	0.29 mg/L	0.02	mg/L	1.00	<0.02 mg/L	29.2	0-200		
Surr: 2,4,6-Tribromophenol (Surr)	0.919		mg/L	1.00	mg/L	91.9	20-86		S
Surr: 2-Fluorobiphenyl (Surr)	0.252		mg/L	0.500	mg/L	50.3	23-87		
Surr: 2-Fluorophenol (Surr)	0.342		mg/L	1.00	mg/L	34.2	10-52		
Surr: Nitrobenzene-d5 (Surr)	0.259		mg/L	0.500	mg/L	51.8	10-98.5		
Surr: Phenol-d5 (Surr)	0.220		mg/L	1.00	mg/L	22.0	5-33		
Surr: p-Terphenyl-d14 (Surr)	0.409		mg/L	0.500	mg/L	81.9	27-133		

Matrix Spike Dup (BAI0484-MSD1)	Source: 17I0320-13		Prepared & Analyzed: 09/20/2017						
1,2,4-Trichlorobenzene	0.51 mg/L	0.01	mg/L	1.00	<0.01 mg/L	51.5	21.8-66.7	23.3	20 P
1,2-Dichlorobenzene	0.46 mg/L	0.01	mg/L	1.00	<0.01 mg/L	45.7	22-60	10.0	20
1,3-Dichlorobenzene	0.42 mg/L	0.01	mg/L	1.00	<0.01 mg/L	41.6	22-60	10.5	20
1,4-Dichlorobenzene	0.46 mg/L	0.01	mg/L	1.00	<0.01 mg/L	45.5	22-60	17.4	20
2,4,6-Trichlorophenol	0.63 mg/L	0.02	mg/L	1.00	<0.02 mg/L	63.3	50-115	1.32	20
2,4-Dichlorophenol	0.69 mg/L	0.01	mg/L	1.00	<0.01 mg/L	68.8	50-105	17.5	20



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Certificate of Analysis

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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

TCLP Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0484 - SW3510C

Matrix Spike Dup (BAI0484-MSD1)	Source: 17I0320-13			Prepared & Analyzed: 09/20/2017						
2,4-Dimethylphenol	0.61 mg/L	0.0005	mg/L	1.00	<0.0005 mg/L	61.2	30-110	13.5	20	
2,4-Dinitrophenol	0.79 mg/L	0.05	mg/L	1.00	<0.05 mg/L	78.8	15-140	10.7	20	
2,4-Dinitrotoluene	0.72 mg/L	0.02	mg/L	1.00	<0.02 mg/L	71.9	17-111	17.5	20	
2,6-Dinitrotoluene	0.68 mg/L	0.01	mg/L	1.00	<0.01 mg/L	68.3	15-140	13.0	20	
2-Chloronaphthalene	0.53 mg/L	0.01	mg/L	1.00	<0.01 mg/L	52.7	45-105	3.37	20	
2-Chlorophenol	0.54 mg/L	0.01	mg/L	1.00	<0.01 mg/L	54.4	19-64	12.0	20	
2-Nitrophenol	0.70 mg/L	0.01	mg/L	1.00	<0.01 mg/L	70.0	40-115	20.6	20	P
4,6-Dinitro-2-methylphenol	0.74 mg/L	0.05	mg/L	1.00	<0.05 mg/L	73.7	40-130	16.7	20	
4-Bromophenyl phenyl ether	0.74 mg/L	0.01	mg/L	1.00	<0.01 mg/L	73.9	15-110	9.34	20	
4-Chlorophenyl phenyl ether	0.70 mg/L	0.01	mg/L	1.00	<0.01 mg/L	70.4	15-110	2.90	20	
4-Nitrophenol	0.30 mg/L	0.05	mg/L	1.00	<0.05 mg/L	29.8	0-125	27.7	20	P
Acenaphthene	0.59 mg/L	0.01	mg/L	1.00	<0.01 mg/L	58.8	24-90	0.136	20	
Acenaphthylene	0.63 mg/L	0.01	mg/L	1.00	<0.01 mg/L	62.6	50-105	2.46	20	
Anthracene	0.78 mg/L	0.01	mg/L	1.00	<0.01 mg/L	78.0	55-110	6.49	20	
Benzo (a) anthracene	0.79 mg/L	0.00005	mg/L	1.00	<0.00005 mg/L	79.0	55-110	5.97	20	
Benzo (a) pyrene	0.68 mg/L	0.01	mg/L	1.00	<0.01 mg/L	67.6	55-110	20.9	20	P
Benzo (b) fluoranthene	0.95 mg/L	0.01	mg/L	1.00	<0.01 mg/L	94.9	45-120	1.22	20	
Benzo (g,h,i) perylene	0.61 mg/L	0.01	mg/L	1.00	<0.01 mg/L	60.8	40-125	6.25	20	
Benzo (k) fluoranthene	1.02 mg/L	0.01	mg/L	1.00	<0.01 mg/L	102	45-125	10.1	20	
Benzoic acid	<0.05 mg/L	0.05	mg/L		<0.05 mg/L		0-125	0.00	20	
bis (2-Chloroethoxy) methane	0.65 mg/L	0.01	mg/L	1.00	<0.01 mg/L	64.7	40-125	16.2	20	
bis (2-Chloroethyl) ether	0.59 mg/L	0.01	mg/L	1.00	<0.01 mg/L	58.7	40-125	11.9	20	
2,2'-Oxybis (1-chloropropane)	0.54 mg/L	0.01	mg/L	1.00	<0.01 mg/L	53.9	40-125	11.2	20	
bis (2-Ethylhexyl) phthalate	0.73 mg/L	0.01	mg/L	1.00	<0.01 mg/L	72.8	40-125	1.63	20	
Butyl benzyl phthalate	0.60 mg/L	0.01	mg/L	1.00	<0.01 mg/L	59.9	45-115	17.3	20	
Carbazole	1.06 mg/L	0.002	mg/L	1.00	<0.002 mg/L	106	0-200	14.5	20	
Chrysene	0.76 mg/L	0.01	mg/L	1.00	<0.01 mg/L	76.3	55-110	13.0	20	
Dibenz (a,h) anthracene	0.68 mg/L	0.01	mg/L	1.00	<0.01 mg/L	67.9	40-125	1.40	20	
Diethyl phthalate	0.77 mg/L	0.01	mg/L	1.00	<0.01 mg/L	77.1	40-120	3.47	20	
Dimethyl phthalate	0.65 mg/L	0.01	mg/L	1.00	<0.01 mg/L	65.2	25-125	5.03	20	
Di-n-butyl phthalate	1.04 mg/L	0.01	mg/L	1.00	<0.01 mg/L	104	55-115	3.56	20	



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

TCLP Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch BAI0484 - SW3510C

Matrix Spike Dup (BAI0484-MSD1)	Source: 17I0320-13		Prepared & Analyzed: 09/20/2017						
Di-n-octyl phthalate	0.95 mg/L	0.01	mg/L	1.00	<0.01 mg/L	95.0	35-135	16.0	20
Fluoranthene	0.85 mg/L	0.01	mg/L	1.00	<0.01 mg/L	85.3	55-115	10.6	20
Fluorene	0.72 mg/L	0.01	mg/L	1.00	<0.01 mg/L	72.0	50-110	4.72	20
Hexachlorobenzene	0.76 mg/L	0.02	mg/L	1.00	<0.02 mg/L	75.9	25-125	9.73	20
Hexachlorobutadiene	0.52 mg/L	0.02	mg/L	1.00	<0.02 mg/L	51.6	25-125	17.9	20
Hexachlorocyclopentadiene	0.31 mg/L	0.01	mg/L	1.00	<0.01 mg/L	31.2	25-125	23.3	20
Hexachloroethane	0.43 mg/L	0.02	mg/L	1.00	<0.02 mg/L	43.2	25-125	20.1	20
Indeno (1,2,3-cd) pyrene	0.67 mg/L	0.01	mg/L	1.00	<0.01 mg/L	67.3	45-125	1.11	20
Isophorone	0.70 mg/L	0.01	mg/L	1.00	<0.01 mg/L	70.0	10-110	22.6	20
Naphthalene	0.54 mg/L	0.01	mg/L	1.00	<0.01 mg/L	53.9	40-100	20.5	20
Nitrobenzene	0.60 mg/L	0.02	mg/L	1.00	<0.02 mg/L	59.9	40-100	16.3	20
n-Nitrosodimethylamine	0.43 mg/L	0.01	mg/L	1.00	<0.01 mg/L	43.4	25-110	41.7	20
n-Nitrosodi-n-propylamine	0.56 mg/L	0.01	mg/L	1.00	<0.01 mg/L	56.4	12-97	9.08	20
n-Nitrosodiphenylamine	0.61 mg/L	0.01	mg/L	1.00	<0.01 mg/L	61.1	12-97	7.73	20
p-Chloro-m-cresol	0.68 mg/L	0.01	mg/L	1.00	<0.01 mg/L	67.6	10-91	3.43	20
Pentachlorophenol	0.90 mg/L	0.02	mg/L	1.00	<0.02 mg/L	90.1	27-109	2.19	20
Phenanthrene	0.74 mg/L	0.01	mg/L	1.00	<0.01 mg/L	74.0	50-115	10.5	20
Phenol	0.24 mg/L	0.02	mg/L	1.01	<0.02 mg/L	24.0	0-115	8.76	20
Pyrene	0.62 mg/L	0.01	mg/L	1.00	<0.01 mg/L	61.8	23-110	15.6	20
Pyridine	0.48 mg/L	0.02	mg/L	1.00	<0.02 mg/L	48.1	0-200	48.8	20
<i>Surr: 2,4,6-Tribromophenol (Surr)</i>	0.748		mg/L	1.00	mg/L	74.8	20-86		
<i>Surr: 2-Fluorobiphenyl (Surr)</i>	0.257		mg/L	0.500	mg/L	51.5	23-87		
<i>Surr: 2-Fluorophenol (Surr)</i>	0.371		mg/L	1.00	mg/L	37.1	10-52		
<i>Surr: Nitrobenzene-d5 (Surr)</i>	0.290		mg/L	0.500	mg/L	58.0	10-98.5		
<i>Surr: Phenol-d5 (Surr)</i>	0.230		mg/L	1.00	mg/L	23.0	5-33		
<i>Surr: p-Terphenyl-d14 (Surr)</i>	0.402		mg/L	0.500	mg/L	80.4	27-133		



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Certificate of Analysis

Final Report

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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0510 - SW3550B

Blank (BAI0510-BLK1)		Prepared & Analyzed: 09/21/2017					
4,4'-DDD	<6.00 ug/kg	6.00	ug/kg				
4,4'-DDE	<4.00 ug/kg	4.00	ug/kg				
4,4'-DDT	<4.00 ug/kg	4.00	ug/kg				
Aldrin	<2.00 ug/kg	2.00	ug/kg				
alpha-BHC	<2.00 ug/kg	2.00	ug/kg				
beta-BHC	<2.00 ug/kg	2.00	ug/kg				
Chlordane	<42.0 ug/kg	42.0	ug/kg				
delta-BHC	<4.00 ug/kg	4.00	ug/kg				
Dieldrin	<4.00 ug/kg	4.00	ug/kg				
Endosulfan I	<4.00 ug/kg	4.00	ug/kg				
Endosulfan II	<6.00 ug/kg	6.00	ug/kg				
Endosulfan sulfate	<2.00 ug/kg	2.00	ug/kg				
Endrin	<4.00 ug/kg	4.00	ug/kg				
Endrin aldehyde	<8.00 ug/kg	8.00	ug/kg				
Endrin ketone	<2.00 ug/kg	2.00	ug/kg				
gamma-BHC (Lindane)	<2.00 ug/kg	2.00	ug/kg				
Heptachlor	<2.00 ug/kg	2.00	ug/kg				
Heptachlor epoxide	<40.0 ug/kg	40.0	ug/kg				
Methoxychlor	<40.0 ug/kg	40.0	ug/kg				
Mirex	<6.00 ug/kg	6.00	ug/kg				
Toxaphene	<42.0 ug/kg	42.0	ug/kg				
<i>Surr: TCMX</i>	28.1		ug/kg	33.0		85.0	30-105
<i>Surr: DCB</i>	23.1		ug/kg	33.0		70.0	30-105

LCS (BAI0510-BS1)		Prepared & Analyzed: 09/21/2017					
4,4'-DDD	13.0 ug/kg	6.00	ug/kg	16.2	ug/kg	80.0	23-134
4,4'-DDE	13.0 ug/kg	4.00	ug/kg	16.2	ug/kg	80.0	23-134
4,4'-DDT	13.0 ug/kg	4.00	ug/kg	16.2	ug/kg	80.0	23-134
Aldrin	13.0 ug/kg	2.00	ug/kg	16.2	ug/kg	80.0	23-134
alpha-BHC	13.0 ug/kg	2.00	ug/kg	16.2	ug/kg	80.0	23-134
beta-BHC	14.6 ug/kg	2.00	ug/kg	16.2	ug/kg	90.0	23-134



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Final Report

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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAI0510 - SW3550B

LCS (BAI0510-BS1)							Prepared & Analyzed: 09/21/2017			
Chlordane	<42.0 ug/kg	42.0	ug/kg		ug/kg			23-134		
delta-BHC	11.4 ug/kg	4.00	ug/kg	16.2	ug/kg	70.0	23-134			
Dieldrin	13.0 ug/kg	4.00	ug/kg	16.2	ug/kg	80.0	23-134			
Endosulfan I	13.0 ug/kg	4.00	ug/kg	16.2	ug/kg	80.0	23-134			
Endosulfan II	13.0 ug/kg	6.00	ug/kg	16.2	ug/kg	80.0	23-134			
Endosulfan sulfate	11.4 ug/kg	2.00	ug/kg	16.2	ug/kg	70.0	23-134			
Endrin	16.2 ug/kg	4.00	ug/kg	16.2	ug/kg	100	23-134			
Endrin aldehyde	9.74 ug/kg	8.00	ug/kg	16.2	ug/kg	60.0	23-134			
Endrin ketone	13.0 ug/kg	2.00	ug/kg		ug/kg		23-134			
gamma-BHC (Lindane)	13.0 ug/kg	2.00	ug/kg	16.2	ug/kg	80.0	23-134			
Heptachlor	13.0 ug/kg	2.00	ug/kg	16.2	ug/kg	80.0	23-134			
Heptachlor epoxide	<40.0 ug/kg	40.0	ug/kg	16.2	ug/kg	80.0	23-134			
Methoxychlor	<40.0 ug/kg	40.0	ug/kg	16.2	ug/kg	90.0	23-134			
Mirex	11.4 ug/kg	6.00	ug/kg	16.2	ug/kg	70.0	23-134			
Toxaphene	<42.0 ug/kg	42.0	ug/kg		ug/kg		23-134			
Surr: TCMX	27.6		ug/kg	32.5	ug/kg	85.0	30-105			
Surr: DCB	22.7		ug/kg	32.5	ug/kg	70.0	30-105			

LCS (BAI0510-BS2)							Prepared & Analyzed: 09/21/2017			
4,4'-DDD	<6.00 ug/kg	6.00	ug/kg		ug/kg			23-134		
4,4'-DDE	<4.00 ug/kg	4.00	ug/kg		ug/kg			23-134		
4,4'-DDT	<4.00 ug/kg	4.00	ug/kg		ug/kg			23-134		
Aldrin	<2.00 ug/kg	2.00	ug/kg		ug/kg			23-134		
alpha-BHC	<2.00 ug/kg	2.00	ug/kg		ug/kg			23-134		
beta-BHC	<2.00 ug/kg	2.00	ug/kg		ug/kg			23-134		
Chlordane	<42.0 ug/kg	42.0	ug/kg		ug/kg			23-134		
delta-BHC	<4.00 ug/kg	4.00	ug/kg		ug/kg			23-134		
Dieldrin	<4.00 ug/kg	4.00	ug/kg		ug/kg			23-134		
Endosulfan I	<4.00 ug/kg	4.00	ug/kg		ug/kg			23-134		
Endosulfan II	<6.00 ug/kg	6.00	ug/kg		ug/kg			23-134		
Endosulfan sulfate	<2.00 ug/kg	2.00	ug/kg		ug/kg			23-134		



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201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Qual
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Batch BAI0510 - SW3550B

LCS (BAI0510-BS2)							Prepared & Analyzed: 09/21/2017		
Endrin	<4.00 ug/kg	4.00	ug/kg		ug/kg		23-134		
Endrin aldehyde	<8.00 ug/kg	8.00	ug/kg		ug/kg		23-134		
Endrin ketone	<2.00 ug/kg	2.00	ug/kg		ug/kg		23-134		
gamma-BHC (Lindane)	<2.00 ug/kg	2.00	ug/kg		ug/kg		23-134		
Heptachlor	<2.00 ug/kg	2.00	ug/kg		ug/kg		23-134		
Heptachlor epoxide	<40.0 ug/kg	40.0	ug/kg		ug/kg		23-134		
Methoxychlor	<40.0 ug/kg	40.0	ug/kg		ug/kg		23-134		
Mirex	<6.00 ug/kg	6.00	ug/kg		ug/kg		23-134		
Toxaphene	190 ug/kg	42.0	ug/kg	399	ug/kg	47.6	23-134		
LCS (BAI0510-BS3)							Prepared & Analyzed: 09/21/2017		
4,4'-DDD	<6.00 ug/kg	6.00	ug/kg		ug/kg		23-134		
4,4'-DDE	<4.00 ug/kg	4.00	ug/kg		ug/kg		23-134		
4,4'-DDT	<4.00 ug/kg	4.00	ug/kg		ug/kg		23-134		
Aldrin	<2.00 ug/kg	2.00	ug/kg		ug/kg		23-134		
alpha-BHC	<2.00 ug/kg	2.00	ug/kg		ug/kg		23-134		
beta-BHC	<2.00 ug/kg	2.00	ug/kg		ug/kg		23-134		
Chlordane	254 ug/kg	42.0	ug/kg	392	ug/kg	64.8	23-134		
delta-BHC	<4.00 ug/kg	4.00	ug/kg		ug/kg		23-134		
Dieldrin	<4.00 ug/kg	4.00	ug/kg		ug/kg		23-134		
Endosulfan I	<4.00 ug/kg	4.00	ug/kg		ug/kg		23-134		
Endosulfan II	<6.00 ug/kg	6.00	ug/kg		ug/kg		23-134		
Endosulfan sulfate	<2.00 ug/kg	2.00	ug/kg		ug/kg		23-134		
Endrin	<4.00 ug/kg	4.00	ug/kg		ug/kg		23-134		
Endrin aldehyde	<8.00 ug/kg	8.00	ug/kg		ug/kg		23-134		
Endrin ketone	<2.00 ug/kg	2.00	ug/kg		ug/kg		23-134		
gamma-BHC (Lindane)	<2.00 ug/kg	2.00	ug/kg		ug/kg		23-134		
Heptachlor	<2.00 ug/kg	2.00	ug/kg		ug/kg		23-134		
Heptachlor epoxide	<40.0 ug/kg	40.0	ug/kg		ug/kg		23-134		
Methoxychlor	<40.0 ug/kg	40.0	ug/kg		ug/kg		23-134		
Mirex	<6.00 ug/kg	6.00	ug/kg		ug/kg		23-134		
Toxaphene	<42.0 ug/kg	42.0	ug/kg		ug/kg		23-134		



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0510 - SW3550B

Matrix Spike (BAI0510-MS1)	Source: 17I0299-02			Prepared & Analyzed: 09/21/2017				
4,4'-DDD	106 ug/kg	6.00	ug/kg	16.2 <6.00 ug/kg	650	23-134		M
4,4'-DDE	69.8 ug/kg	4.00	ug/kg	16.2 <4.00 ug/kg	430	23-134		M
4,4'-DDT	45.5 ug/kg	4.00	ug/kg	16.2 <4.00 ug/kg	280	23-134		M
Aldrin	13.0 ug/kg	2.00	ug/kg	16.2 <2.00 ug/kg	80.0	23-134		
alpha-BHC	26.0 ug/kg	2.00	ug/kg	16.2 <2.00 ug/kg	160	23-134		M
beta-BHC	86.0 ug/kg	2.00	ug/kg	16.2 <2.00 ug/kg	530	23-134		M
delta-BHC	14.6 ug/kg	4.00	ug/kg	16.2 <4.00 ug/kg	90.0	23-134		
Dieldrin	24.4 ug/kg	4.00	ug/kg	16.2 <4.00 ug/kg	150	23-134		M
Endosulfan I	40.6 ug/kg	4.00	ug/kg	16.2 <4.00 ug/kg	250	23-134		M
Endosulfan II	19.5 ug/kg	6.00	ug/kg	16.2 <6.00 ug/kg	120	23-134		
Endosulfan sulfate	101 ug/kg	2.00	ug/kg	16.2 <2.00 ug/kg	620	23-134		M
Endrin	35.7 ug/kg	4.00	ug/kg	16.2 <4.00 ug/kg	220	23-134		M
Endrin aldehyde	92.5 ug/kg	8.00	ug/kg	16.2 <8.00 ug/kg	570	23-134		M
Endrin ketone	95.8 ug/kg	2.00	ug/kg	<2.00 ug/kg		23-134		
gamma-BHC (Lindane)	19.5 ug/kg	2.00	ug/kg	16.2 <2.00 ug/kg	120	23-134		
Heptachlor	17.9 ug/kg	2.00	ug/kg	16.2 <2.00 ug/kg	110	23-134		
Heptachlor epoxide	<40.0 ug/kg	40.0	ug/kg	16.2 <40.0 ug/kg	80.0	23-134		
Methoxychlor	119 ug/kg	40.0	ug/kg	16.2 <40.0 ug/kg	730	23-134		M
Mirex	71.4 ug/kg	6.00	ug/kg	16.2 <6.00 ug/kg	440	23-134		M
<i>Surr: TCMX</i>	30.8		ug/kg	32.5 ug/kg	95.0	30-105		
<i>Surr: DCB</i>	45.5		ug/kg	32.5 ug/kg	140	30-105		S

Matrix Spike Dup (BAI0510-MSD1)	Source: 17I0299-02			Prepared & Analyzed: 09/21/2017				
4,4'-DDD	91.1 ug/kg	6.00	ug/kg	16.6 <6.00 ug/kg	550	23-134	14.7	20 M
4,4'-DDE	61.3 ug/kg	4.00	ug/kg	16.6 <4.00 ug/kg	370	23-134	13.0	20 M
4,4'-DDT	46.4 ug/kg	4.00	ug/kg	16.6 <4.00 ug/kg	280	23-134	1.97	20 M
Aldrin	16.6 ug/kg	2.00	ug/kg	16.6 <2.00 ug/kg	100	23-134	24.2	20 P
alpha-BHC	28.1 ug/kg	2.00	ug/kg	16.6 <2.00 ug/kg	170	23-134	8.03	20 C
beta-BHC	84.4 ug/kg	2.00	ug/kg	16.6 <2.00 ug/kg	510	23-134	1.88	20 C
delta-BHC	18.2 ug/kg	4.00	ug/kg	16.6 <4.00 ug/kg	110	23-134	21.9	20 P
Dieldrin	24.8 ug/kg	4.00	ug/kg	16.6 <4.00 ug/kg	150	23-134	1.97	20 M



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201 Church Street
Blacksburg VA, 24060

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0510 - SW3550B

Matrix Spike Dup (BAI0510-MSD1)	Source: 17I0299-02			Prepared & Analyzed: 09/21/2017					
Endosulfan I	43.0 ug/kg	4.00	ug/kg	16.6	<4.00 ug/kg	260	23-134	5.89	20 M
Endosulfan II	19.9 ug/kg	6.00	ug/kg	16.6	<6.00 ug/kg	120	23-134	1.97	20
Endosulfan sulfate	44.7 ug/kg	2.00	ug/kg	16.6	<2.00 ug/kg	270	23-134	77.0	20 M, P
Endrin	29.8 ug/kg	4.00	ug/kg	16.6	<4.00 ug/kg	180	23-134	18.1	20 M
Endrin aldehyde	97.7 ug/kg	8.00	ug/kg	16.6	<8.00 ug/kg	590	23-134	5.41	20 M
Endrin ketone	106 ug/kg	2.00	ug/kg		<2.00 ug/kg		23-134	10.1	20
gamma-BHC (Lindane)	19.9 ug/kg	2.00	ug/kg	16.6	<2.00 ug/kg	120	23-134	1.97	20
Heptachlor	19.9 ug/kg	2.00	ug/kg	16.6	<2.00 ug/kg	120	23-134	10.7	20
Heptachlor epoxide	<40.0 ug/kg	40.0	ug/kg	16.6	<40.0 ug/kg	100	23-134	24.2	20 P
Methoxychlor	101 ug/kg	40.0	ug/kg	16.6	<40.0 ug/kg	610	23-134	16.0	20 M
Mirex	74.5 ug/kg	6.00	ug/kg	16.6	<6.00 ug/kg	450	23-134	4.21	20 M
<i>Surr: TCMX</i>	31.5		ug/kg	33.1	ug/kg	95.0	30-105		
<i>Surr: DCB</i>	31.5		ug/kg	33.1	ug/kg	95.0	30-105		

Batch BAI0530 - SW3550B

Blank (BAI0530-BLK1)	Prepared & Analyzed: 09/21/2017					
PCB as Aroclor 1016	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1221	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1232	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1242	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1248	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1254	<0.100 mg/kg wet	0.100	mg/kg wet			
PCB as Aroclor 1260	<0.100 mg/kg wet	0.100	mg/kg wet			
<i>Surr: DCB</i>	0.0278		mg/kg wet	0.0327	85.0	30-105
<i>Surr: TCMX</i>	0.0294		mg/kg wet	0.0327	90.0	30-105



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Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0530 - SW3550B

LCS (BAI0530-BS1)

		Prepared & Analyzed: 09/21/2017					
PCB as Aroclor 1016	0.140 mg/kg wet	0.100	mg/kg wet	0.149	mg/kg wet	94.0	60-140
PCB as Aroclor 1260	0.122 mg/kg wet	0.100	mg/kg wet	0.149	mg/kg wet	82.0	60-140
<i>Surr: DCB</i>	0.0223		mg/kg wet	0.0298	mg/kg wet	75.0	30-105
<i>Surr: TCMX</i>	0.0223		mg/kg wet	0.0298	mg/kg wet	75.0	30-105

Matrix Spike (BAI0530-MS1)

		Source: 17I0322-05	Prepared & Analyzed: 09/22/2017					
PCB as Aroclor 1016	0.181 mg/kg dry	0.117	mg/kg dry	0.195	<0.117 mg/kg dry	93.0	60-140	
PCB as Aroclor 1260	0.154 mg/kg dry	0.117	mg/kg dry	0.195	<0.117 mg/kg dry	79.0	60-140	
<i>Surr: DCB</i>	0.0253		mg/kg dry	0.0390	mg/kg dry	65.0	30-105	
<i>Surr: TCMX</i>	0.0253		mg/kg dry	0.0390	mg/kg dry	65.0	30-105	

Matrix Spike Dup (BAI0530-MSD1)

		Source: 17I0322-05	Prepared & Analyzed: 09/22/2017					
PCB as Aroclor 1016	0.197 mg/kg dry	0.117	mg/kg dry	0.195	<0.117 mg/kg dry	101	60-140	8.25
PCB as Aroclor 1260	0.166 mg/kg dry	0.117	mg/kg dry	0.195	<0.117 mg/kg dry	85.0	60-140	7.32
<i>Surr: DCB</i>	0.0312		mg/kg dry	0.0390	mg/kg dry	80.0	30-105	
<i>Surr: TCMX</i>	0.0331		mg/kg dry	0.0390	mg/kg dry	85.0	30-105	

Batch BAI0569 - SW3550B

Blank (BAI0569-BLK1)

		Prepared & Analyzed: 09/22/2017					
PCB as Aroclor 1016	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1221	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1232	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1242	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1248	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1254	<0.100 mg/kg wet	0.100	mg/kg wet				
PCB as Aroclor 1260	<0.100 mg/kg wet	0.100	mg/kg wet				
<i>Surr: DCB</i>	0.0282		mg/kg wet	0.0332		85.0	30-105
<i>Surr: TCMX</i>	0.0266		mg/kg wet	0.0332		80.0	30-105



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Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0569 - SW3550B

LCS (BAI0569-BS1)								Prepared & Analyzed: 09/22/2017		
PCB as Aroclor 1016	0.211 mg/kg wet	0.100	mg/kg wet	0.154	mg/kg wet	137	60-140			
PCB as Aroclor 1260	0.228 mg/kg wet	0.100	mg/kg wet	0.154	mg/kg wet	148	60-140			L
<i>Surr: DCB</i>	0.0262		mg/kg wet	0.0309	mg/kg wet	85.0	30-105			
<i>Surr: TCMX</i>	0.0293		mg/kg wet	0.0309	mg/kg wet	95.0	30-105			
Matrix Spike (BAI0569-MS1)								Source: 17I0322-10 Prepared & Analyzed: 09/22/2017		
PCB as Aroclor 1016	0.255 mg/kg dry	0.112	mg/kg dry	0.186	<0.112 mg/kg dry	137	60-140			
PCB as Aroclor 1260	0.234 mg/kg dry	0.112	mg/kg dry	0.186	<0.112 mg/kg dry	126	60-140			
<i>Surr: DCB</i>	0.0260		mg/kg dry	0.0372	mg/kg dry	70.0	30-105			
<i>Surr: TCMX</i>	0.0279		mg/kg dry	0.0372	mg/kg dry	75.0	30-105			
Matrix Spike Dup (BAI0569-MSD1)								Source: 17I0322-10 Prepared & Analyzed: 09/22/2017		
PCB as Aroclor 1016	0.308 mg/kg dry	0.114	mg/kg dry	0.190	<0.114 mg/kg dry	162	60-140	19.0	20	M
PCB as Aroclor 1260	0.236 mg/kg dry	0.114	mg/kg dry	0.190	<0.114 mg/kg dry	124	60-140	0.706	20	
<i>Surr: DCB</i>	0.0266		mg/kg dry	0.0380	mg/kg dry	70.0	30-105			
<i>Surr: TCMX</i>	0.0285		mg/kg dry	0.0380	mg/kg dry	75.0	30-105			



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Organochlorine Herbicides by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	RPD Qual
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Batch BAI0384 - SW3510C

Blank (BAI0384-BLK1)							Prepared: 09/15/2017 Analyzed: 09/18/2017		
2,4,5-T	<5.00 ug/kg	5.00	ug/kg						
2,4,5-TP (Silvex)	<5.00 ug/kg	5.00	ug/kg						
2,4-D	<5.00 ug/kg	5.00	ug/kg						
Dinoseb	<5.00 ug/kg	5.00	ug/kg						
Pentachlorophenol	<5.00 ug/kg	5.00	ug/kg						
<i>Surr: DCAA (Surr)</i>	27.8		ug/kg	32.7		85.0	31-87		
LCS (BAI0384-BS1)							Prepared: 09/15/2017 Analyzed: 09/18/2017		
2,4,5-T	18.3 ug/kg	5.00	ug/kg	16.6	ug/kg	110	62-98		L
2,4,5-TP (Silvex)	16.6 ug/kg	5.00	ug/kg	16.6	ug/kg	100	55-106		
2,4-D	15.0 ug/kg	5.00	ug/kg	16.6	ug/kg	90.0	57-114		
Dinoseb	18.3 ug/kg	5.00	ug/kg	16.6	ug/kg	110	53-111		
Pentachlorophenol	15.0 ug/kg	5.00	ug/kg	16.6	ug/kg	90.0	50-96		
<i>Surr: DCAA (Surr)</i>	28.2		ug/kg	33.2	ug/kg	85.0	31-87		
Matrix Spike (BAI0384-MS1)							Source: 17I0299-05 Prepared: 09/15/2017 Analyzed: 09/18/2017		
2,4,5-TP (Silvex)	<19.7 ug/kg	19.7	ug/kg	16.4	<19.7 ug/kg	80.0	55-106		
2,4-D	<19.7 ug/kg	19.7	ug/kg	16.4	<19.7 ug/kg	80.0	57-114		
Dinoseb	39.3 ug/kg	19.7	ug/kg	16.4	<19.7 ug/kg	240	60-130		M2
Pentachlorophenol	<19.7 ug/kg	19.7	ug/kg	16.4	<19.7 ug/kg	-0.397	50-96		M2
<i>Surr: DCAA (Surr)</i>	32.8		ug/kg	32.8	ug/kg	100	31-87		DS
Matrix Spike (BAI0384-MS2)							Source: 17I0299-05RE1 Prepared: 09/15/2017 Analyzed: 09/19/2017		
2,4,5-T	<2500 ug/kg	2500	ug/kg	16.7	10800 ug/kg	-54600	50-130		M2
Matrix Spike Dup (BAI0384-MSD1)							Source: 17I0299-05 Prepared: 09/15/2017 Analyzed: 09/18/2017		
2,4,5-TP (Silvex)	<19.7 ug/kg	19.7	ug/kg	16.4	<19.7 ug/kg	40.0	55-106	66.4	20 M2, P
2,4-D	<19.7 ug/kg	19.7	ug/kg	16.4	<19.7 ug/kg	80.0	57-114	0.328	20
Dinoseb	39.5 ug/kg	19.7	ug/kg	16.4	<19.7 ug/kg	240	60-130	0.328	20 M2
Pentachlorophenol	<19.7 ug/kg	19.7	ug/kg	16.4	<19.7 ug/kg	-0.265	50-96	0.328	20 M2
<i>Surr: DCAA (Surr)</i>	32.9		ug/kg	32.9	ug/kg	100	31-87		DS



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Organochlorine Herbicides by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAI0384 - SW3510C

Matrix Spike Dup (BAI0384-MSD2)	Source: 17I0299-05RE1	Prepared: 09/15/2017	Analyzed: 09/19/2017
2,4,5-T	<2500 ug/kg	2500 ug/kg	16.7 10800 ug/kg -54600 50-130 0.00 20 M2



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TCLP Organochlorine Herbicides by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch BAI0413 - SW3510C

Blank (BAI0413-BLK1)							Prepared: 09/18/2017 Analyzed: 09/20/2017			
2,4,5-TP (Silvex)	<0.0005 mg/L	0.0005	mg/L							
2,4-D	<0.001 mg/L	0.001	mg/L							
Surr: DCAA (Surr)	0.00550		mg/L	0.0100		55.0	60-112			S
LCS (BAI0413-BS1)							Prepared: 09/18/2017 Analyzed: 09/20/2017			
2,4,5-TP (Silvex)	0.006 mg/L	0.0005	mg/L	0.00500	mg/L	110	52-129			
2,4-D	0.005 mg/L	0.001	mg/L	0.00500	mg/L	100	53-126			
Surr: DCAA (Surr)	0.00950		mg/L	0.0100	mg/L	95.0	60-112			
Matrix Spike (BAI0413-MS1)							Prepared: 09/18/2017 Analyzed: 09/20/2017			
2,4,5-TP (Silvex)	0.006 mg/L	0.0005	mg/L	0.00500	<0.0005 mg/L	110	52-129			
2,4-D	0.007 mg/L	0.001	mg/L	0.00500	<0.001 mg/L	140	53-126			M
Surr: DCAA (Surr)	0.00800		mg/L	0.0100	mg/L	80.0	60-112			
Matrix Spike Dup (BAI0413-MSD1)							Prepared: 09/18/2017 Analyzed: 09/20/2017			
2,4,5-TP (Silvex)	0.006 mg/L	0.0005	mg/L	0.00500	<0.0005 mg/L	110	52-129	0.00	20	
2,4-D	0.008 mg/L	0.001	mg/L	0.00500	<0.001 mg/L	150	53-126	6.90	20	M
Surr: DCAA (Surr)	0.00800		mg/L	0.0100	mg/L	80.0	60-112			



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TCLP Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0406 - SW3510C

Blank (BAI0406-BLK1)						
						Prepared & Analyzed: 09/18/2017
Chlordane	<0.030 mg/L	0.030	mg/L			
Endrin	<0.005 mg/L	0.005	mg/L			
gamma-BHC (Lindane)	<0.005 mg/L	0.005	mg/L			
Heptachlor	<0.005 mg/L	0.005	mg/L			
Heptachlor Epoxide	<0.005 mg/L	0.005	mg/L			
Methoxychlor	<0.005 mg/L	0.005	mg/L			
Toxaphene	<0.500 mg/L	0.500	mg/L			
Surr: TCMX	0.00120		mg/L	0.00200	60.0	18-112
Surr: DCB	0.000600		mg/L	0.00200	30.0	27-131
LCS (BAI0406-BS1)						
						Prepared & Analyzed: 09/18/2017
Endrin	<0.005 mg/L	0.005	mg/L	0.00100 mg/L	70.0	23-134
Heptachlor	<0.005 mg/L	0.005	mg/L	0.00100 mg/L	50.0	23-134
Heptachlor Epoxide	<0.005 mg/L	0.005	mg/L	0.00100 mg/L	60.0	23-134
Methoxychlor	<0.005 mg/L	0.005	mg/L	0.00100 mg/L	70.0	23-134
Surr: TCMX	0.00110		mg/L	0.00200 mg/L	55.0	18-112
Surr: DCB	0.000500		mg/L	0.00200 mg/L	25.0	27-131
LCS (BAI0406-BS2)						
						Prepared & Analyzed: 09/18/2017
Toxaphene	<0.500 mg/L	0.500	mg/L	0.0250 mg/L	54.8	23-134
Surr: TCMX	0.00100		mg/L	0.00200 mg/L	50.0	18-112
Surr: DCB	0.000400		mg/L	0.00200 mg/L	20.0	27-131
LCS (BAI0406-BS3)						
						Prepared & Analyzed: 09/18/2017
Chlordane	<0.030 mg/L	0.030	mg/L	0.0250 mg/L	59.6	23-134
Surr: TCMX	0.00120		mg/L	0.00200 mg/L	60.0	18-112
Surr: DCB	0.000400		mg/L	0.00200 mg/L	20.0	27-131



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TCLP Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qual
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Batch BAI0406 - SW3510C

Matrix Spike (BAI0406-MS1)		Source: 17I0320-13		Prepared & Analyzed: 09/18/2017					
Endrin	<0.005 mg/L	0.005	mg/L	0.00100<0.005 mg/L	60.0	23-134			
Heptachlor	<0.005 mg/L	0.005	mg/L	0.00100<0.005 mg/L	50.0	23-134			
Heptachlor Epoxide	<0.005 mg/L	0.005	mg/L	0.00100<0.005 mg/L	50.0	23-134			
Methoxychlor	<0.005 mg/L	0.005	mg/L	0.00100<0.005 mg/L	80.0	23-134			
<i>Surr: TCMX</i>	0.00100		mg/L	0.00200 mg/L	50.0	18-112			
<i>Surr: DCB</i>	0.00110		mg/L	0.00200 mg/L	55.0	27-131			
Matrix Spike Dup (BAI0406-MSD1)		Source: 17I0320-13		Prepared & Analyzed: 09/18/2017					
Endrin	<0.005 mg/L	0.005	mg/L	0.00100<0.005 mg/L	60.0	23-134	0.00	20	
Heptachlor	<0.005 mg/L	0.005	mg/L	0.00100<0.005 mg/L	50.0	23-134	0.00	20	
Heptachlor Epoxide	<0.005 mg/L	0.005	mg/L	0.00100<0.005 mg/L	50.0	23-134	0.00	20	
Methoxychlor	<0.005 mg/L	0.005	mg/L	0.00100<0.005 mg/L	80.0	23-134	0.00	20	
<i>Surr: TCMX</i>	0.00100		mg/L	0.00200 mg/L	50.0	18-112			
<i>Surr: DCB</i>	0.00120		mg/L	0.00200 mg/L	60.0	27-131			



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Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0388 - No Prep Wet Chem

<u>Blank (BAI0388-BLK1)</u>									
Chromium, Hexavalent	<0.19 mg/kg	0.19	mg/kg						
<u>LCS (BAI0388-BS1)</u>									
Chromium, Hexavalent	3.56 mg/kg	0.20	mg/kg	4.00	mg/kg	89.0	80-120		
<u>Matrix Spike (BAI0388-MS1)</u>		<u>Source: 17I0319-02</u>							
Chromium, Hexavalent	3.09 mg/kg	0.20	mg/kg	3.96	<0.20 mg/kg	78.0	80-120		M
<u>Matrix Spike Dup (BAI0388-MSD1)</u>		<u>Source: 17I0319-02</u>							
Chromium, Hexavalent	3.16 mg/kg	0.20	mg/kg	3.96	<0.20 mg/kg	80.0	80-120	2.39	20

Batch BAI0451 - No Prep Wet Chem

<u>Blank (BAI0451-BLK1)</u>									
Percent Solids	100 %	0.10	%						
<u>Duplicate (BAI0451-DUP1)</u>		<u>Source: 17I0319-03</u>							
Percent Solids	83.3 %	0.10	%		83.9 %			0.639	20

Batch BAI0452 - No Prep Wet Chem

<u>Blank (BAI0452-BLK1)</u>									
Percent Solids	100 %	0.10	%						



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Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Qual
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Batch BAI0452 - No Prep Wet Chem

Duplicate (BAI0452-DUP1)	Source: 17I0322-10			Prepared & Analyzed: 09/19/2017				
Percent Solids	87.4 %	0.10	%	87.6 %			0.200	20

Batch BAI0539 - No Prep Wet Chem

Blank (BAI0539-BLK1)	Prepared: 09/20/2017 Analyzed: 09/21/2017				
Chromium, Hexavalent	<0.20 mg/kg	0.20	mg/kg		

LCS (BAI0539-BS1)	Prepared: 09/20/2017 Analyzed: 09/21/2017				
Chromium, Hexavalent	3.66 mg/kg	0.20	mg/kg	3.98 mg/kg	92.0 80-120

Matrix Spike (BAI0539-MS1)	Source: 17I0319-03 Prepared: 09/20/2017 Analyzed: 09/21/2017				
Chromium, Hexavalent	0.83 mg/kg	0.20	mg/kg	3.94 <0.20 mg/kg	21.0 80-120 M

Matrix Spike Dup (BAI0539-MSD1)	Source: 17I0319-03 Prepared: 09/20/2017 Analyzed: 09/21/2017				
Chromium, Hexavalent	2.05 mg/kg	0.19	mg/kg	3.87 <0.19 mg/kg	53.0 80-120 85.0 20 M, P



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802
Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Certified Analyses included in this Report

Analyte	Certifications
<i>SW1311 in Non-Potable Water</i>	
Extraction Fluid, SV Organics	VELAP
<i>SW1311 in Solids</i>	
Extraction Fluid, Metals	VELAP
Extraction Fluid, ZHE	VELAP
<i>SW6010C in Non-Potable Water</i>	
Arsenic	VELAP,WVDEP
Barium	VELAP,WVDEP
Cadmium	VELAP,WVDEP
Chromium	VELAP,WVDEP
Lead	VELAP,WVDEP
Selenium	VELAP,WVDEP
Silver	VELAP,WVDEP
<i>SW6010C in Solids</i>	
Aluminum	VELAP
Antimony	VELAP
Arsenic	VELAP
Barium	VELAP,WVDEP
Beryllium	VELAP
Cadmium	VELAP,WVDEP
Calcium	VELAP
Chromium	VELAP
Cobalt	VELAP
Copper	VELAP
Iron	VELAP
Lead	VELAP,WVDEP
Magnesium	VELAP
Manganese	VELAP
Nickel	VELAP
Potassium	VELAP
Selenium	VELAP,WVDEP
Silver	VELAP,WVDEP
Sodium	VELAP
Thallium	VELAP
Vanadium	VELAP
Zinc	VELAP



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Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Certified Analyses included in this Report

Analyte	Certifications
SW7196A in Solids	
Chromium, Hexavalent	VELAP
SW7470A in Non-Potable Water	
Mercury	VELAP,WVDEP
SW7471B in Solids	
Mercury	VELAP,WVDEP
SW8015C in Solids	
TPH-Semi-Volatiles (DRO)	VELAP,NC,WVDEP
TPH-Volatiles (GRO)	VELAP,NC,WVDEP
SW8081B in Non-Potable Water	
Chlordane	VELAP
Endrin	VELAP
gamma-BHC (Lindane)	VELAP
Heptachlor	VELAP
Heptachlor Epoxide	VELAP
Methoxychlor	VELAP
Toxaphene	VELAP
SW8081B in Solids	
alpha-BHC	NC,VELAP
beta-BHC	NC,VELAP
Chlordane	NC,VELAP
delta-BHC	NC,VELAP
Dieldrin	NC,VELAP
Endosulfan I	NC,VELAP
Endosulfan II	NC,VELAP
Endosulfan sulfate	NC,VELAP
Endrin	NC,VELAP
Endrin aldehyde	NC,VELAP
Endrin ketone	NC,VELAP
gamma-BHC (Lindane)	NC,VELAP
Heptachlor	NC,VELAP
Heptachlor epoxide	NC,VELAP
Methoxychlor	NC,VELAP
Mirex	NC,VELAP
Toxaphene	NC,VELAP
SW8082A in Solids	



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Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Certified Analyses included in this Report

Analyte	Certifications
PCB as Aroclor 1016	VELAP,NC
PCB as Aroclor 1221	VELAP,NC
PCB as Aroclor 1232	VELAP,NC
PCB as Aroclor 1242	VELAP,NC
PCB as Aroclor 1248	VELAP,NC
PCB as Aroclor 1254	VELAP,NC
PCB as Aroclor 1260	VELAP,NC
<i>SW8151A in Non-Potable Water</i>	
2,4,5-TP (Silvex)	VELAP
2,4-D	VELAP
<i>SW8151A in Solids</i>	
2,4,5-T	NC,VELAP
2,4,5-TP (Silvex)	NC,VELAP
2,4-D	NC,VELAP
Dinoseb	NC,VELAP
Pentachlorophenol	NC,VELAP
<i>SW8260B in Non-Potable Water</i>	
1,1-Dichloroethylene	NC,VELAP
1,2-Dichloroethane	NC,VELAP
1,4-Dichlorobenzene	NC,VELAP
2-Butanone (MEK)	NC,VELAP
Benzene	NC,VELAP
Carbon tetrachloride	NC,VELAP
Chlorobenzene	NC,VELAP
Chloroform	NC,VELAP
Tetrachloroethylene (PCE)	NC,VELAP
Trichloroethylene	NC,VELAP
Vinyl chloride	NC,VELAP
<i>SW8260B in Solids</i>	
1,1,1,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,1-Trichloroethane	NC,VELAP,WVDEP
1,1,2,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,2-Trichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethylene	NC,VELAP,WVDEP
1,1-Dichloropropene	NC,VELAP,WVDEP
1,2,3-Trichlorobenzene	NC,VELAP,WVDEP



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Certified Analyses included in this Report

Analyte	Certifications
1,2,3-Trichloropropane	NC, VELAP, WVDEP
1,2,4-Trichlorobenzene	NC, VELAP, WVDEP
1,2,4-Trimethylbenzene	NC, VELAP, WVDEP
1,2-Dibromo-3-chloropropane (DBCP)	NC, VELAP, WVDEP
1,2-Dibromoethane (EDB)	NC, VELAP, WVDEP
1,2-Dichlorobenzene	NC, VELAP, WVDEP
1,2-Dichloroethane	NC, VELAP, WVDEP
1,2-Dichloropropane	NC, VELAP, WVDEP
1,3,5-Trimethylbenzene	NC, VELAP, WVDEP
1,3-Dichlorobenzene	NC, VELAP, WVDEP
1,3-Dichloropropane	NC, VELAP, WVDEP
1,4-Dichlorobenzene	NC, VELAP, WVDEP
2,2-Dichloropropane	NC, VELAP, WVDEP
2-Butanone (MEK)	NC, VELAP, WVDEP
2-Chlorotoluene	NC, VELAP, WVDEP
2-Hexanone (MBK)	NC, VELAP, WVDEP
4-Chlorotoluene	NC, VELAP, WVDEP
4-Isopropyltoluene	NC, VELAP, WVDEP
4-Methyl-2-pentanone (MIBK)	NC, VELAP, WVDEP
Acetone	NC, VELAP, WVDEP
Benzene	NC, VELAP, WVDEP
Bromobenzene	NC, VELAP, WVDEP
Bromochloromethane	NC, VELAP, WVDEP
Bromodichloromethane	NC, VELAP, WVDEP
Bromoform	NC, VELAP, WVDEP
Bromomethane	NC, VELAP, WVDEP
Carbon disulfide	NC, VELAP, WVDEP
Carbon tetrachloride	NC, VELAP, WVDEP
Chlorobenzene	NC, VELAP, WVDEP
Chloroethane	NC, VELAP, WVDEP
Chloroform	NC, VELAP, WVDEP
Chloromethane	NC, VELAP, WVDEP
cis-1,2-Dichloroethylene	NC, VELAP, WVDEP
cis-1,3-Dichloropropene	NC, VELAP, WVDEP
Dibromochloromethane	NC, VELAP, WVDEP
Dibromomethane	NC, VELAP, WVDEP
Dichlorodifluoromethane	NC, VELAP, WVDEP
Di-isopropyl ether (DIPE)	NC, VELAP, WVDEP



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Certificate of Analysis

Final Report

Client Name:	EEE Consulting (Blacksburg, VA) 201 Church Street Blacksburg VA, 24060	Date Issued:	10/5/2017 13:11
Submitted To:	Jeff Fisher	Project Number:	17-802
Client Site I.D.:	CVTC	Purchase Order:	17-802 Task 2.2

Certified Analyses included in this Report

Analyte	Certifications
Ethylbenzene	NC, VELAP, WVDEP
Hexachlorobutadiene	NC, VELAP, WVDEP
Iodomethane	NC, VELAP, WVDEP
Isopropylbenzene	NC, VELAP, WVDEP
m+p-Xylenes	NC, VELAP, WVDEP
Methylene chloride	NC, VELAP, WVDEP
Methyl-t-butyl ether (MTBE)	NC, VELAP, WVDEP
Naphthalene	NC, VELAP, WVDEP
n-Butylbenzene	NC, VELAP, WVDEP
n-Propylbenzene	NC, VELAP, WVDEP
o-Xylene	NC, VELAP, WVDEP
sec-Butylbenzene	NC, VELAP, WVDEP
Styrene	NC, VELAP, WVDEP
tert-Butylbenzene	NC, VELAP, WVDEP
Tetrachloroethylene (PCE)	NC, VELAP, WVDEP
Toluene	NC, VELAP, WVDEP
trans-1,2-Dichloroethylene	NC, VELAP, WVDEP
trans-1,3-Dichloropropene	NC, VELAP, WVDEP
Trichloroethylene	NC, VELAP, WVDEP
Trichlorofluoromethane	NC, VELAP, WVDEP
Vinyl acetate	NC, VELAP, WVDEP
Vinyl chloride	NC, VELAP, WVDEP
Xylenes, Total	NC, VELAP, WVDEP
Dibromofluoromethane (Surr)	VELAP
SW8270D in Non-Potable Water	
2,4,6-Trichlorophenol	VELAP
2,4-Dinitrotoluene	VELAP
Hexachlorobenzene	VELAP
Hexachlorobutadiene	VELAP
Hexachloroethane	VELAP
Nitrobenzene	VELAP
o-Cresol	VELAP
Pentachlorophenol	VELAP
SW8270D in Solids	
1,2,4,5-Tetrachlorobenzene	NC, VELAP, WVDEP
1,2,4-Trichlorobenzene	NC, VELAP, WVDEP
1,2-Dichlorobenzene	NC, VELAP, WVDEP



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Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Certified Analyses included in this Report

Analyte	Certifications
1,2-Diphenylhydrazine	NC, VELAP, WVDEP
1,3-Dichlorobenzene	NC, VELAP, WVDEP
1,4-Dichlorobenzene	NC, VELAP, WVDEP
1-Chloronaphthalene	NC, VELAP, WVDEP
1-Naphthylamine	NC, VELAP, WVDEP
2,3,4,6-Tetrachlorophenol	NC, VELAP, WVDEP
2,4,5-Trichlorophenol	NC, VELAP, WVDEP
2,4,6-Trichlorophenol	NC, VELAP, WVDEP
2,4-Dichlorophenol	NC, VELAP, WVDEP
2,4-Dimethylphenol	NC, VELAP, WVDEP
2,4-Dinitrophenol	NC, VELAP, WVDEP
2,4-Dinitrotoluene	NC, VELAP, WVDEP
2,6-Dichlorophenol	NC, VELAP, WVDEP
2,6-Dinitrotoluene	NC, VELAP, WVDEP
2-Chloronaphthalene	NC, VELAP, WVDEP
2-Chlorophenol	NC, VELAP, WVDEP
2-Methylnaphthalene	NC, VELAP, WVDEP
2-Naphthylamine	NC, VELAP, WVDEP
2-Nitroaniline	NC, VELAP, WVDEP
2-Nitrophenol	NC, VELAP, WVDEP
3-Methylcholanthrene	NC, VELAP, WVDEP
3-Nitroaniline	NC, VELAP, WVDEP
4,6-Dinitro-2-methylphenol	NC, VELAP, WVDEP
4-Aminobiphenyl	NC, VELAP, WVDEP
4-Bromophenyl phenyl ether	NC, VELAP, WVDEP
4-Chloroaniline	NC, VELAP, WVDEP
4-Chlorophenyl phenyl ether	NC, VELAP, WVDEP
4-Nitroaniline	NC, VELAP, WVDEP
4-Nitrophenol	NC, VELAP, WVDEP
7,12-Dimethylbenz (a) anthracene	NC, VELAP, WVDEP
Acenaphthene	NC, VELAP, WVDEP
Acenaphthylene	NC, VELAP, WVDEP
Acetophenone	NC, VELAP, WVDEP
Aniline	NC, VELAP, WVDEP
Anthracene	NC, VELAP, WVDEP
Benzidine	NC, VELAP, WVDEP
Benzo (a) anthracene	NC, VELAP, WVDEP
Benzo (a) pyrene	NC, VELAP, WVDEP



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Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Certified Analyses included in this Report

Analyte	Certifications
Benzo (b) fluoranthene	NC, VELAP, WVDEP
Benzo (g,h,i) perylene	NC, VELAP, WVDEP
Benzo (k) fluoranthene	NC, VELAP, WVDEP
Benzoic acid	NC, VELAP, WVDEP
Benzyl alcohol	NC, VELAP, WVDEP
bis (2-Chloroethoxy) methane	NC, VELAP, WVDEP
bis (2-Chloroethyl) ether	NC, VELAP, WVDEP
2,2'-Oxybis (1-chloropropane)	NC, VELAP, WVDEP
bis (2-Ethylhexyl) phthalate	NC, VELAP, WVDEP
Butyl benzyl phthalate	NC, VELAP, WVDEP
Chrysene	NC, VELAP, WVDEP
Dibenz (a,h) anthracene	NC, VELAP, WVDEP
Dibenz (a,j) acridine	NC, VELAP, WVDEP
Dibenzofuran	NC, VELAP, WVDEP
Diethyl phthalate	NC, VELAP, WVDEP
Dimethyl phthalate	NC, VELAP, WVDEP
Di-n-butyl phthalate	NC, VELAP, WVDEP
Di-n-octyl phthalate	NC, VELAP, WVDEP
Diphenylamine	NC, VELAP, WVDEP
Ethyl methanesulfonate	NC, VELAP, WVDEP
Fluoranthene	NC, VELAP, WVDEP
Fluorene	NC, VELAP, WVDEP
Hexachlorobenzene	NC, VELAP, WVDEP
Hexachlorobutadiene	NC, VELAP, WVDEP
Hexachlorocyclopentadiene	NC, VELAP, WVDEP
Hexachloroethane	NC, VELAP, WVDEP
Indeno (1,2,3-cd) pyrene	NC, VELAP, WVDEP
Isophorone	NC, VELAP, WVDEP
m+p-Cresols	NC, VELAP, WVDEP
Methyl methanesulfonate	NC, VELAP, WVDEP
Naphthalene	NC, VELAP, WVDEP
Nitrobenzene	NC, VELAP, WVDEP
n-Nitrosodimethylamine	NC, VELAP, WVDEP
n-Nitrosodi-n-butylamine	NC, VELAP, WVDEP
n-Nitrosodi-n-propylamine	NC, VELAP, WVDEP
n-Nitrosodiphenylamine	NC, VELAP, WVDEP
n-Nitrosopiperidine	NC, VELAP, WVDEP
o+m+p-Cresols	NC, VELAP, WVDEP



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Certificate of Analysis

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Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Certified Analyses included in this Report

Analyte	Certifications
o-Cresol	NC, VELAP, WVDEP
p-(Dimethylamino) azobenzene	NC, VELAP, WVDEP
p-Chloro-m-cresol	NC, VELAP, WVDEP
Pentachloronitrobenzene (quintozone)	NC, WVDEP
Pentachlorophenol	NC, VELAP, WVDEP
Phenacetin	NC, VELAP, WVDEP
Phenanthrene	NC, VELAP, WVDEP
Phenol	NC, VELAP, WVDEP
Pronamide	NC, VELAP, WVDEP
Pyrene	NC, VELAP, WVDEP
Pyridine	NC, VELAP, WVDEP

Code	Description	Lab Number	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2017
NC	North Carolina DENR	495	12/31/2017
PADEP	NELAC-Pennsylvania	001	10/31/2017
VELAP	NELAC-Virginia Certificate #9439	460021	06/14/2018
WVDEP	West Virginia DEP	350	11/30/2017



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Certificate of Analysis

Final Report

Client Name:	EEE Consulting (Blacksburg, VA) 201 Church Street Blacksburg VA, 24060	Date Issued:	10/5/2017 13:11
Submitted To:	Jeff Fisher	Project Number:	17-802
Client Site I.D.:	CVTC	Purchase Order:	17-802 Task 2.2

Summary of Data Qualifiers

B	Blank contamination. The recorded result is associated with a contaminated blank.
C	Continuing calibration verification response for this analyte is outside specifications.
DND	Not Detected
DS	Surrogate concentration reflects a dilution factor.
E	Estimated concentration, outside calibration range
L	LCS recovery is outside of established acceptance limits
M	Matrix spike recovery is outside established acceptance limits
M2	Sample was diluted due to matrix interference.
P	Duplicate analysis does not meet the acceptance criteria for precision
Present	Present
S	Surrogate recovery was outside acceptance criteria
RPD	Relative Percent Difference
Qual	Qualifiers
-RE	Denotes sample was re-analyzed
D.F.	Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.
TIC	Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library . A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.
PCBs, Total	Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.



1941 REYMET ROAD
RICHMOND, VIRGINIA 23237
(804) 358-8295 PHONE
(804)358-8297 FAX

Chain of Custody
Form #: D1331
Rev. 1.0
Effective: Feb 14, 2014

CHAIN OF CUSTODY

COMPANY NAME:	EEE Consulting	INVOICE TO:	Same	PROJECT NAME/Quote #:	CVTC
CONTACT:	Jeff Fisher	INVOICE CONTACT:		SITE NAME:	CVTC
ADDRESS:	201 Church Street, Blacksburg, VA 24060	INVOICE ADDRESS:		PROJECT NUMBER:	17-802
PHONE #:	1-540-953-0170	INVOICE PHONE #:		P.O. #:	17-802 Task 213
FAX #:		EMAIL:	jfisher@eee-consulting.com	Pretreatment Program:	

Is sample for compliance reporting? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Is sample from a chlorinated supply? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	PWS I.D. #:
SAMPLER NAME (PRINT): Jeff Fisher	SAMPLER SIGNATURE:	Turn Around Tir 10 Day(s)

CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE)						COMMENTS
											TAL Metals, Cr VI	PCB	SVOC 8270/ 2,3,7,8 TCDD SIM	VOC 8260	DRO	Herb 8151	
1) 39-1	X				9-11-17	1045			5	X	-	X	X	X	X		Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol
2) 39-2	X					1100			5	X		X	X	X	X		
3) 39-3	X					1108			5	X		X	X	X	X		
4) 39-4	X	X				1120			5	X		X	X	X	X		
5) 39-5	X	X				1135			5	X		X	X	X	X		
6) 39-6	X					1145			5	X		X	X	X	X		
7)																	
8)																	
9)																NO SEAL ON ICE	
10)																	
DISCHARGED:	DATE / TIME		RECEIVED:	DATE / TIME		C Data Packag	LAB USE ONLY			COOLER TEMP							
	9-11-17 12:00		Jeff Ellis III	9-11-17 12:00		Level I	<input type="checkbox"/>			2.0 °C							
DISCHARGED:	DATE / TIME		RECEIVED:	DATE / TIME		Level II	<input checked="" type="checkbox"/>										
	9-11-17 4:05		Jeff Ellis III	11 Sept 2017 16:05		Level III	<input type="checkbox"/>										
DISCHARGED:	DATE / TIME		RECEIVED:	DATE / TIME		Level IV	<input type="checkbox"/>										
EEE-Blacksburg CVTC													1710299				
Recd: 09/11/2017 Due: 09/25/2017																	



1941 REYMET ROAD
RICHMOND, VIRGINIA 23237
(804) 358-8295 PHONE
(804)358-8297 FAX

Chain of Custody
Form #: F1331
Rev. 2.0
Effective: Jun 28, 2016

CHAIN OF CUSTODY

PAGE 1 OF 2

COMPANY NAME: <i>EEE Consulting Inc.</i>	INVOICE TO: <i>Same</i>	PROJECT NAME/Quote #: <i>CVTC</i>
CONTACT: <i>Jeff Fisher</i>	INVOICE CONTACT:	SITE NAME: <i>CVTC</i>
ADDRESS: <i>201 Church St. 24060</i>	INVOICE ADDRESS:	PROJECT NUMBER: <i>17-802</i>
PHONE #: <i>540-953-0170</i>	INVOICE PHONE #:	P.O. #: <i>17-802</i>
FAX #:	EMAIL: <i>JFISHER@EEE-CONSULTING.COM</i>	Pretreatment Program:

Is sample for compliance reporting? YES <input checked="" type="checkbox"/> NO	Is sample from a chlorinated supply? YES <input type="checkbox"/> NO	PWS I.D. #:
SAMPLER NAME (PRINT): <i>Jeff Fisher</i>		SAMPLER SIGNATURE: <i>[Signature]</i>
Turn Around Time: Circle: <input checked="" type="radio"/> 10 5 Days or <input type="radio"/> Day(s)		

Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other

COMMENTS

Preservative Codes: N=Nitric Acid
C=Hydrochloric Acid S=Sulfuric Acid
H=Sodium Hydroxide A=Ascorbic Acid
Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol

CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE)							PLEASE NOTE PRESERVATIVE(S), INTERFERENCE CHECKS or PUMP RATE (L/min)
											TPH-DRO	TPH-620						
1) 31-1 0-5'	X				1205	1205			S	1	X							
2) 31-1 10-12'	X				9-7-17	1210			I	1	X							
3) 31-2 0-5'	X					1215				1	X							
4) 31-2 10-13'	X					1220				1	X							
5) 49-1 5-8'	X					1445				1		X						
6) 65-1 0-5	X					1505				1	X							
7) 65-1 10-15	X					1515				1	X							
8) 65-1 20-23	X					1520				1	X							
9) 65-2 0-5	X					1525				1	X							NO Seal
10) 65-2 10-15	X					1535				1	X							ON Jig
RELINQUISHED: <i>EDD</i>	DATE / TIME <i>9/11-17 1200</i>	RECEIVED: <i>Collie ELLIOTT</i>	DATE / TIME <i>9/11-17 12:00</i>	QC Data Package Level III <input type="checkbox"/>	LAB USE ONLY	COOLER TEMP <i>+5 °C</i>												
RELINQUISHED: <i>NO 800-111</i>	DATE / TIME <i>9-11-17 8:00</i>	RECEIVED: <i>JL 11 Sept 2017 10:00</i>	DATE / TIME <i></i>	Level IV <input type="checkbox"/>	EEE-Blacksburg CVTC	17I0300												
RELINQUISHED: <i></i>	DATE / TIME <i></i>	RECEIVED: <i></i>	DATE / TIME <i></i>		Recd: 09/11/2017 Due: 09/25/2017	v130325002 v160628.xls												



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CHAIN OF CUSTODY

COMPANY NAME: <i>EEE Consulting, Inc.</i>		INVOICE TO: <i>Same</i>			PROJECT NAME/Quote #: <i>CUTC</i>												
CONTACT: <i>Jeff Fisher</i>		INVOICE CONTACT:			SITE NAME: <i>CUTC</i>												
ADDRESS: <i>201 Church St. 24060</i>		INVOICE ADDRESS:			PROJECT NUMBER: <i>17-802</i>												
PHONE #: <i>540-953-0170</i>		INVOICE PHONE #:			P.O. #: <i>17-802</i>												
FAX #:	EMAIL: <i>JFISHER@EEE-CONSULTING.COM</i>			Pretreatment Program:													
Is sample for compliance reporting? YES NO		Is sample from a chlorinated supply? YES NO			PWS I.D. #:												
SAMPLER NAME (PRINT): <i>Jeff Fisher</i>		SAMPLER SIGNATURE: <i>[Signature]</i>			Turn Around Time: Circle: <u>10</u> 5 Days or <u> </u> Day(s)												
Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other								COMMENTS									
CLIENT SAMPLE I.D.	Grab Composite Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time Grab Date or Composite Stop Date Grab Time or Composite Stop Time Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE)				Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol							
						PLEASE NOTE PRESERVATIVE(S), INTERFERENCE CHECKS or PUMP RATE (L/min)											
						1) 65-2 20-22'	X		9-7-17		1540	5	1	X			
						2) 47-OP1 10-14'	X				1600	1	2	X	X		
						3) 47-OP2 10-15'	X				1610	2	2	X	X		
						4) 47-OP2 20-22	X				1615	2	2	X	X		
						5)											
						6)											
						7)											
						8)											
						9)											
						10)											
RELINQUISHED: <i>[Signature]</i>	DATE / TIME <i>9-11-17 1200</i>	RECEIVED: <i>CVTC-Blacksburg III</i>	DATE / TIME <i>9-11-17 1200</i>	QC Data Package	LAB USE ONLY		COOLER TEMP <i>1.0</i> °C	<i>No Seal ON ICE</i>									
RELINQUISHED: <i>[Signature]</i>	DATE / TIME <i>9-11-17 4:00</i>	RECEIVED: <i>JLL 11 Sept 2017 16:00</i>	DATE / TIME	Level III <input type="checkbox"/>													
RELINQUISHED: <i>[Signature]</i>	DATE / TIME	RECEIVED: <i>[Signature]</i>	DATE / TIME	Level IV <input type="checkbox"/>													
								EEE-Blacksburg 17I0300									
								CVTC									
								Recd: 09/11/2017 Due: 09/25/2017									



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COMPANY NAME: <u>EEE Consulting</u>	INVOICE TO: <u>Same</u>	PROJECT NAME/Quote #: <u>CVTC</u>
CONTACT: <u>Jeff Fisher</u>	INVOICE CONTACT:	SITE NAME: <u>CVTC</u>
ADDRESS: <u>201 Church St. 24060</u>	INVOICE ADDRESS:	PROJECT NUMBER: <u>17-802</u>
PHONE #: <u>540-953-0170</u>	INVOICE PHONE #:	P.O. #: <u>17-802</u> Task 2.11
FAX #:	EMAIL: <u>JFISHER@EEE-CONSULTING.com</u>	Pretreatment Program:

Is sample for compliance reporting? YES <u>NO</u>	Is sample from a chlorinated supply? YES <u>NO</u>	PWS I.D. #:
SAMPLER NAME (PRINT): <u>Jeff Fisher</u>		SAMPLER SIGNATURE: <u>[Signature]</u>
Turn Around Time: Circle: <u>10</u> 5 Days or <u> </u> Day(s)		

CLIENT SAMPLE I.D.	Grab Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE)							COMMENTS	
										<u>NH4-DRO</u>	<u>NH4-620</u>							
1) 36-1 0-5'	X			9-7-17	0950			S	2	X	X							Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H= Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol
2) 36-1 20-22	X				1005			1	2	X	X							PLEASE NOTE PRESERVATIVE(S), INTERFERENCE CHECKS or PUMP RATE (L/min)
3) 36-2 0-5	X				1025			1	2	X	X							
4) 36-2 20-21	X				1035			1	2	X	X							
5) 36-3 10-15	X				1045			1	2	X	X							
6) 36-3 30-33	X				1055			1	2	X	X							
7) 36-4 10-15	X				1105			1	2	X	X							
8) 36-4 25-30	X				1115			1	2	X	X							
9) 36-5 10-15	X				1130			1	2	X	X							
10) 36-5 15-18	X				1140			1	2	X	X							
RELINQUISHED:			DATE / TIME	RECEIVED:			DATE / TIME	QC Data Package	LAB USE ONLY		COOLER TEMP <u>1.0</u> °C							
<u> </u>			9-11-17 1200	<u>Jeff Fisher</u>			9/11/17 12:00	Level III <input type="checkbox"/>										
RELINQUISHED:			DATE / TIME	RECEIVED:			DATE / TIME	Level IV <input type="checkbox"/>										
<u> </u>			9-11-17 3:58	<u>Jeff</u>	<u>11 Sept 2017 15:58</u>													
RELINQUISHED:			DATE / TIME	RECEIVED:			DATE / TIME											

EEE-Blacksburg
CVTC
17I0301

Recd: 09/11/2017 Due: 09/25/2017

v130325002

_v160628.xls



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CHAIN OF CUSTODY

COMPANY NAME: EEE Consulting			INVOICE TO: Same			PROJECT NAME/Quote #: CVTC															
CONTACT: Jeff Fisher			INVOICE CONTACT:			SITE NAME: CVTC															
ADDRESS: 201 Church Street, Blacksburg, VA 24060			INVOICE ADDRESS:			PROJECT NUMBER: 17-802															
PHONE #: 1-540-953-0170			INVOICE PHONE #:			P.O. #: 17-802 Task 2.7															
FAX #:		EMAIL: jfisher@eee-consulting.com		Pretreatment Program:																	
Is sample for compliance reporting? YES <u>NO</u>			Is sample from a chlorinated supply? YES NO			PWS I.D. #:															
SAMPLER NAME (PRINT): <u>Jeff Fisher</u>			SAMPLER SIGNATURE: <u>[Signature]</u>			Turn Around Tir 10 Day(s)															
Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other _____									COMMENTS												
CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE)					Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol					
	X	X	X			7-8-17	1225		S	1	X	X	PCB	SVOC 8270/ 2,3,7,8 TCDD SIM	VOC 8260		DRO	Herb 8151	Pest 8081	TCLP Full	GRO
	1) <u>Finding 21-1</u>	X					1240			1	X	X	X								
	2) <u>Finding 21-2</u>	X					1250			1	X	X	X								
	3) <u>Finding 21-3</u>	X					1255			1	X	X	X								
	4) <u>Finding 21-4</u>	X					1305			1	X	X	X								
	5) <u>Finding 21-5</u>	X					1310			1	X	X	X								
	6) <u>Finding 21-6</u>	X																			
	7)																				
	8)																				
	9)																				
10)																					
DISMISSED:	DATE / TIME		RECEIVED:		DATE / TIME		IC Data Packag		LAB USE ONLY		COOLER TEMP		7.8 °C								
<u>J. Fisher</u>	9-11-17 1200		<u>J. Fisher</u>		9-11-17 1200		Level I <input type="checkbox"/>														
DISMISSED:	DATE / TIME		RECEIVED:		DATE / TIME		Level II <input checked="" type="checkbox"/>								EEE-Blacksburg						
<u>J. Fisher</u>	9-11-17 3:50pm		<u>J. Fisher</u>		9-11-17 15:50		Level III <input type="checkbox"/>								CVTC						
DISMISSED:	DATE / TIME		RECEIVED:		DATE / TIME		Level IV <input type="checkbox"/>								17I0317						
															Recd: 09/11/2017 Due: 09/25/2017						



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CHAIN OF CUSTODY

COMPANY NAME:	EEE Consulting	INVOICE TO:	Same	PROJECT NAME/Quote #:	CVTC
CONTACT:	Jeff Fisher	INVOICE CONTACT:		SITE NAME:	CVTC
ADDRESS:	201 Church Street, Blacksburg, VA 24060	INVOICE ADDRESS:		PROJECT NUMBER:	17-802
PHONE #:	1-540-953-0170	INVOICE PHONE #:		P.O. #:	17-802 Task 2.10
FAX #:		EMAIL:	jfisher@eee-consulting.com	Pretreatment Program:	

Is sample for compliance reporting? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Is sample from a chlorinated supply? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	PWS I.D. #:
SAMPLER NAME (PRINT): Jeff Fisher	SAMPLER SIGNATURE:	Turn Around Tir 10 Day(s)

CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered	Dissolved Metals	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	ANALYSIS / (PRESERVATIVE)						COMMENTS			
											TAL Metals, Cr VI	PCB	SVOC 8270/ 2,3,7,8 TCDD SIM	VOC 8260	DRO	Herb 8151		Pest 8081	TCLP Full	GRO
1) Finding 12-1	X				9-8-17	1435	1435	1435	1435	5	X	X	X	X						Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol
2) Finding 12-2	X					1440				1	X	X	X							
3) Finding 12-3	X					1445				1	X	X	X							
4) Finding 12-4	X					1450				1	X	X	X							
5) Finding 12-5	X					1455				1	X	X	X							
6) Finding 12-6	X					1500				1	X	X	X							
7)																				
8)																				
9)																				
10)																				
NO SEAL											ON SITE									
RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		C Data Packag	LAB USE ONLY	COOLER TEMP	7.8 °C					
	9-11-17 1200			9-11-17 1200			9-11-17 1200			9-11-17 1200		Level I	<input type="checkbox"/>							
RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		Level II	<input checked="" type="checkbox"/>							
	9-11-17 9:50			9-11-17 15:50			9-11-17 15:50			9-11-17 15:50		Level III	<input type="checkbox"/>							
RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		RECEIVED:	DATE / TIME		Level IV	<input type="checkbox"/>							
											EEE-Blacksburg CVTC				17I0319					
											Recd: 09/11/2017 Due: 09/25/2017									



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COMPANY NAME: EEE Consulting, Inc.	INVOICE TO: Same	PROJECT NAME/Quote #: CVTC
CONTACT: Jeff Fisher	INVOICE CONTACT:	SITE NAME: CVTC
ADDRESS: 201 Church St. 27060	INVOICE ADDRESS:	PROJECT NUMBER: 17-802
PHONE #: 540-953-0170	INVOICE PHONE #:	P.O. #: 17-802
FAX #:	EMAIL: JFISHER@EEE-CONSULTING.COM	Pretreatment Program:

Is sample for compliance reporting? YES NO	Is sample from a chlorinated supply? YES NO	PWS I.D. #:
SAMPLER NAME (PRINT): Jeff Fisher		SAMPLER SIGNATURE:
Turn Around Time: Circle: <u>10</u> 5 Days or ___ Day(s)		

CLIENT SAMPLE I.D.	Grab Composite Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE)						COMMENTS	
									TPH-DR	TPH-GRO	TPH-S	TPH-Z	TPH-A	TPH-W		
1) 47-1 0-5	X			9-8-17	0840		S	2	X	X						Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol
2) 47-1 10-15	X				0855			6	X	X	X					PLEASE NOTE PRESERVATIVE(S), INTERFERENCE CHECKS OR PUMP RATE (L/min)
3) 47-2 0-5	X				0910			2	X	X						
4) 47-2 16-17	X				0920			6	X	X	X					
5) 47-3 0-5	X				0930			2	X	X						
6) 47-3 23-24	X				1005			6	X	X	X					
7) 47-4 0-5	X				1025			1	X							
8) 47-4 22-23	X				1035			1	X							
9) 47-5 0-5	X				1040			1	X							
10) 47-5 20-23	X				1050			1	X							
RELINQUISHED:	DATE / TIME: 9-11-17 1200	RECEIVED:	DATE / TIME: 9-11-17 12:00	QC Data Package	LAB USE ONLY	COOLER TEMP	3.5 °C									
RELINQUISHED:	DATE / TIME: 9-11-17 3:55	RECEIVED:	DATE / TIME: 9-11-17 15:55	Level III <input type="checkbox"/>	Level IV <input type="checkbox"/>	EEE-Blacksburg	CVTC									
RELINQUISHED:	DATE / TIME:	RECEIVED:	DATE / TIME:			17I0320										

Recd: 09/11/2017 Due: 09/25/2017



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COMPANY NAME: EEE Consulting, Inc.	INVOICE TO: Same	PROJECT NAME/Quote #: CVTC
CONTACT: Jeff Fisher	INVOICE CONTACT:	SITE NAME: CVTC
ADDRESS: 201 Church St, 24060	INVOICE ADDRESS:	PROJECT NUMBER: 17-802
PHONE #: 540-953-0170	INVOICE PHONE #:	P.O. #: 17-802
FAX #:	EMAIL: JFISHER@EEE-CONSULTING.COM	Pretreatment Program:

Is sample for compliance reporting? YES NO Is sample from a chlorinated supply? YES NO PWS I.D. #:

SAMPLER NAME (PRINT): Jeff Fisher SAMPLER SIGNATURE: Turn Around Time: Circle: 10 5 Days or ___ Day(s)

CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE)							COMMENTS
											TCLP - Full							
1) 53-1 0-5	X				9-8-17	1055			1	X	100-PPV							
2) 53-1 13-14	X					1100			1	X								
3) 45-5A Spilled Material	X					1110			1	X								
4)																		
5)																		
6)																		
7)																		
8)																		
9)																	NO Seal	
10)																	ON ICE	

RELINQUISHED: 	DATE / TIME 9-11-17 1200	RECEIVED: 	DATE / TIME 9-11-17 12:00	QC Data Package Level III <input type="checkbox"/>	LAB USE ONLY	COOLER TEMP 35 °C
RELINQUISHED: 	DATE / TIME 9-11-17 3:55	RECEIVED: 	DATE / TIME 9-11-17 1555	Level IV <input type="checkbox"/>	Eee-Blacksburg CVTC	1710320
RELINQUISHED: 	DATE / TIME	RECEIVED: 	DATE / TIME		Recd: 09/11/2017 Due: 09/25/2017	



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CHAIN OF CUSTODY

COMPANY NAME: EEE Consulting		INVOICE TO: Same	PROJECT NAME/Quote #: CVTC
CONTACT: Jeff Fisher		INVOICE CONTACT:	SITE NAME: CVTC
ADDRESS: 201 Church Street, Blacksburg, VA 24060		INVOICE ADDRESS:	PROJECT NUMBER: 17-802
PHONE #: 1-540-953-0170		INVOICE PHONE #:	P.O. #: 17-802 Task 2.2
FAX #:	EMAIL: ifisher@eee-consulting.com	Pretreatment Program:	
Is sample for compliance reporting? YES NO		Is sample from a chlorinated supply? YES NO	PWS I.D. #:
SAMPLER NAME (PRINT): Jeff Fisher		SAMPLER SIGNATURE:	Turn Around Tir 10 Day(s)

CLIENT SAMPLE I.D.	Grab Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	ANALYSIS / (PRESERVATIVE)						COMMENTS	
								Number of Containers	TAL Metals, Cr VI	PCB	SVOC 8270/ 2,3,7,8 TCDD SIM	VOC 8260	DRO		Herb 8151
1) 13-1	X			9-11-17	0945		1	X	X	X					
2) 13-2	X				0950		1	X	X	X					
3) 13-3	X				0955		1	X	X	X					
4) 13-4	X				1000		1	X	X	X					
5) 13-5	X				1010		1	X	X	X					
6) 13-6	X				1015		1	X	X	X					
7) 13-7	X				1018		1	X	X	X					
8) 13-8	X				1022		1	X	X	X					X
9) 13-9	X				1028		1	X	X	X					
10) 13-10	X				1035		1	X	X	X					
REQUISITIONED:	DATE / TIME		RECEIVED:	DATE / TIME		C Data Packag	LAB USE ONLY			COOLER TEMP			NO SEAL ORIGIN		
	9-11-17 1200			9-11-17 1200		Level I	<input type="checkbox"/>			4.2 °C					
REQUISITIONED:	DATE / TIME		RECEIVED:	DATE / TIME		Level II	<input checked="" type="checkbox"/>						EEE-Blacksburg 1710322		
	9-11-17 13:55			9-11-17 1555		Level III	<input type="checkbox"/>						CVTC		
REQUISITIONED:	DATE / TIME		RECEIVED:	DATE / TIME		Level IV	<input type="checkbox"/>						Recd: 09/11/2017 Due: 09/25/2017		



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Certificate of Analysis

Final Report

Client Name:	EEE Consulting (Blacksburg, VA) 201 Church Street Blacksburg VA, 24060	Date Issued:	10/5/2017 13:11
Submitted To:	Jeff Fisher	Project Number:	17-802
Client Site I.D.:	CVTC	Purchase Order:	17-802 Task 2.2

Sample Conditions Checklist

Samples Received at:	2.00°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample Conditions Checklist

Samples Received at:	1.50°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample Conditions Checklist

Samples Received at:	1.00°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes



1941 Reymet Road • Richmond, Virginia 23230 • Tel: (804)-358-8295 Fax: (804)-358-8297

Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample Conditions Checklist

Samples Received at:	7.80°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	No
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

Samples received outside of holding temperature; Carroll Ellis was notified at drop off. THM 12 Sept 2017/11.13



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample Conditions Checklist

Samples Received at:	7.80°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	No
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

Samples received outside of holding temperature; Carroll Ellis was notified at drop off. THM 12 Sept 2017/11.13



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample Conditions Checklist

Samples Received at:	3.50°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes



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Certificate of Analysis

Final Report

Client Name: EEE Consulting (Blacksburg, VA)
201 Church Street
Blacksburg VA, 24060 Date Issued: 10/5/2017 13:11

Submitted To: Jeff Fisher Project Number: 17-802

Client Site I.D.: CVTC Purchase Order: 17-802 Task 2.2

Sample Conditions Checklist

Samples Received at:	4.20°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes



Asbestos Qualitative Analysis Report

Environmental Hazards Services, L.L.C.

7469 Whitepine Rd
Richmond, VA 23237

Telephone: 800.347.4010

Report Number: 17-09-01602

Client: Air Water & Soil Laboratories, Inc
1941 Reymet Rd
Richmond, VA 23237

Received Date: 09/13/2017
Analyzed Date: 09/14/2017
Reported Date: 09/15/2017

Project/Test Address: 17I0322

Client Number:
201458

Fax Number:

Laboratory Results

Lab Sample Number	Client Sample	Sample Description	Asbestos Detected	Narrative ID
17-09-01602-001	17I0322-08	Brown Soil	Chrysotile Detected	

Method: Polarized Light Microscopy
Analyst: Araceli Enzler

Reviewed By Authorized Signatory:



Tasha Eaddy
QA/QC Clerk

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C. California Certification #2319 NY ELAP #11714 NVLAP #101882-0 VELAP 460172.

LEGEND NAD = No Asbestos Detected



Qualitative
PLM

Environmental Hazards Services, LLC
7469 Whitepine Rd
Richmond VA 23237

CHAIN OF CUSTODY

COMPANY NAME: AWS Labs, Inc.	INVOICE TO: AWS Labs, Inc.	PROJECT NAME/Quote #:
CONTACT: Kathy Dondanville	INVOICE CONTACT: Jennifer Sult	SITE NAME: 17I0322
ADDRESS: 1941 Reymet Road, Richmond, VA 23237	INVOICE ADDRESS: 1941 Reymet Rd., Richmond, VA 23237	PROJECT NUMBER: 17I0322
PHONE #: (804) 358-8295	INVOICE PHONE #: (804) 358-8295	P.O. #: 727
FAX #:	EMAIL: support@awslabs.com	Pretreatment Program:

Is sample for compliance reporting? YES NO	Is sample from a chlorinated supply? YES NO	PWS I.D. #:
SAMPLER NAME (PRINT):	SAMPLER SIGNATURE:	Turn Around Time:

CLIENT SAMPLE I.D.	Grab Composite Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS / (PRESERVATIVE)			COMMENTS
									Asbestos PLM EPA600			
1) 17I0322-08	X			09/11/17	10:22		S	1	X			DUE: 09/25/17
2)												17-09-01602 A
3)												
4)												
5)												
6)												
7)												
8)												
9)												
10)												

RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME	QC Data Package	LAB USE ONLY	COOLER TEMP
13 Sept 2017	13.12	Saumon 9/13/17 13:10		Level I	<input type="checkbox"/>	
RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME	Level II	<input type="checkbox"/>	
Saumon 9/13/17	1330	Chicolella SM 9/13/17 1:29 pm		Level III	<input type="checkbox"/>	
RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME	Level IV	<input type="checkbox"/>	

Appendix G: Drum Disposal Documentation

Please print or type
(Form designed for use on site (12-part) transporter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number VAD988172227	2. Page 1 of 1	3. Emergency Response Phone 434-947-6287	4. Waste Tracking Number D233633
5. Generator's Name and Mailing Address CENTRAL VIRGINIA TRAINING CENTER PO BOX 1098 LYNCHBURG, VA 24505 434-947-6287		Generator's Site Address (if different than mailing address) CENTRAL VIRGINIA TRAINING CENTER 521 COLONY RD MADISON HEIGHTS, VA 24572			
Generator's Phone:					
6. Transporter 1 Company Name ENVIRONMENTAL OPTIONS INC		U.S. EPA ID Number VAD000122991			
7. Transporter 2 Company Name		U.S. EPA ID Number			
8. Designated Facility Name and Site Address LEE COUNTY SOLID WASTE FACILITY 3240 HIGHWAY 15 NORTH BISHOPVILLE, SC 29010 803-428-5052		U.S. EPA ID Number 312640-2001			
Facility's Phone:					
9. Waste Shipping Name and Description NON HAZARDOUS SOIL		10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.
1. NON HAZARDOUS SOIL		25	DM	12,500	P
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information 1.0; SOIL 09336 55DMX25					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offeror's Printed/Typed Name JULIA L. LAWSON		Signature 10/16/17		Month Day Year 10 16 17	
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:			
Transporter Signature (for exports only):					
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name JIMMY LAWSON		Signature Jimmy Lawson		Month Day Year 10 16 17	
Transporter 2 Printed/Typed Name		Signature Jimmy Lawson		Month Day Year 10 16 17	
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue		<input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection			
Manifest Reference Number:					
17b. Alternate Facility (or Generator)		U.S. EPA ID Number			
Facility's Phone:					
17c. Signature of Alternate Facility (or Generator)		Month Day Year			
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name Robin Arnold		Signature Robin Arnold		Month Day Year 10 18 17	

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number VAD955172227	2. Page 1 of 1	3. Emergency Response Phone 434-947-6297	4. Manifest Tracking Number 000256704 MWI		
5. Generator's Name and Mailing Address CENTRAL VIRGINIA TRAINING CENTER PO BOX 1098 LYNCHBURG, VA 24505 434-947-6297		Generator's Site Address (if different than mailing address) CENTRAL VIRGINIA TRAINING CENTER 521 COLONY RD MADISON HEIGHTS, VA 24572					
Generator's Phone:							
6. Transporter 1 Company Name ENVIRONMENTAL OPTIONS INC		U.S. EPA ID Number VA0000122004					
7. Transporter 2 Company Name		U.S. EPA ID Number					
8. Designated Facility Name and Site Address ENVIRONMENTAL ENTERPRISES INC 4650 SPRING GROVE AVE CINCINNATI, OH 45232 800-545-1820		U.S. EPA ID Number OHD083377010					
Facility's Phone:							
9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1NA3077, Waste Hazardous waste, solid, n.o.s. (LEAD), 0 , III, RQ		10. Containers	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X		No.	Type	1	DM	250	P
2.							
3.							
4.							
14. Special Handling Instructions and Additional Information ATTN: AUDREY GARRETT 1.) SOIL WITH LEAD : ERG # 171 55DMX1 ✓ 28614							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name Joanna Kimmel		Signature J		Month	Day	Year	10/16/17
16. International Shipments <input type="checkbox"/> Import to U.S.		<input type="checkbox"/> Export from U.S.		Port of entry/exit: _____ Date leaving U.S.: _____			
Transporter signature (for exports only):							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name Jimmy Lawson		Signature J		Month	Day	Year	10/16/17
Transporter 2 Printed/Typed Name		Signature J		Month	Day	Year	
18. Discrepancy							
18a. Discrepancy Indication Space		<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> Full Rejection	
Manifest Reference Number: _____							
18b. Alternate Facility (or Generator)		U.S. EPA ID Number					
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator)		Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1.		2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name		Signature		Month	Day	Year	

GENERATOR	NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number VAD988172227	2. Page 1 of 1	3. Emergency Response Phone 434-947-6297	4. Waste Tracking Number D229922
	5. Generator's Name and Mailing Address CENTRAL VIRGINIA TRAINING CENTER PO BOX 1098 LYNCHBURG, VA 24505 434-947-6297	Generator's Site Address if different than mailing address CENTRAL VIRGINIA TRAINING CENTER 521 COLONY RD MADISON HEIGHTS, VA 24572			
6. Transporter 1 Company Name ENVIRONMENTAL OPTIONS INC					U.S. EPA ID Number VA0000122994
7. Transporter 2 Company Name					U.S. EPA ID Number
8. Designated Facility Name and Site Address LEE COUNTY SOLID WASTE FACILITY 3240 HIGHWAY 15 NORTH BISHOPVILLE, SC 29010 803-428-5052					U.S. EPA ID Number 312640-2001
Facility's Phone:					
9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
1.	No.	Type			
NON HAZARDOUS STAFIL	07157	1 DM	30	g	
2.					
NON HAZARDOUS WATER BASED FILLER	07154	1 DM	55	g	
3.					
NON HAZARDOUS KLENZ GLIDE	07155	1 DM	55	g	
4.					
13. Special Handling Instructions and Additional Information	<p>1.) ; NON HAZARDOUS STA FIL 30 DMX1 2.) ; FILL SEALER WATER BASED 55 DMX1 3.) ; KLENZ GLIDE 55 DMX1</p>				
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's Offeror's Printed/Typed Name AUDREY T. GARRITT	Signature	Month Day Year 17 16 17			
15. International Shipments	<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> Export from U.S.	Port of entry/exit:		
Transporter Signature (for exports only):	Date leaving U.S.: _____				
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name Timmy Lawson	Signature	Month Day Year 17 16 17			
Transporter 2 Printed/Typed Name	Signature	Month Day Year 17 16 17			
17. Discrepancy					
17a. Discrepancy Indication Space	<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> Full Rejection
17b. Alternate Facility (or Generator)	Manifest Reference Number:				U.S. EPA ID Number
Facility's Phone:					
17c. Signature of Alternate Facility (or Generator)					Month Day Year
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name Robin Arent	Signature	Signature Robin Arent 7277			

CERTIFICATE OF TREATMENT-STORAGE-AND **DISPOSAL**

July 27, 2017

Lee County Solid Waste Facility
3240 Hwy 15 N
Bishopville, SC 29010

Generator:
Central Virginia Training Center
521 Colony Rd
Madison Heights, VA 24572

Broker:
Environmental Options
Leann Herman
504-483-3920

Manifest number: D229922

Waste stream profile number: 07155

Number of containers: 1- DM

This certifies that waste stream #07155 on manifest #D229922 was properly sampled, treated, and disposed of in a subtitle D landfill or recycled per the requirements of the state of South Carolina.

For any questions or comments please free to contact:

Matthew A Chapman
960 Egypt Rd
Camden, SC 29020
803-229-2528

CVTC WO List View

<u>Date Created</u>	<u>WO#</u>	<u>BLD#</u>	<u>Description</u>	<u>Requester Remarks</u>
<u>STATUS</u>				
7/18/2017 9:59:47 AM (TC 07/18/2017 08:59:48 AM, AUSTIN, MICHAEL) Removed used oil from the garage , put in recycle barrel.	320926	030	30B REMOVE DRUM OF AIR COMPRESSOR OIL; PUT ON CONTAINMENT PALLET (SEE TIM TO PUT WITH HIS STUFF TO DISPOSE OF)	



July 13, 2017

Debbie Wake
Senior Vice President
Divaris Real Estate, Inc.
200 South 10th Street, Suite 1010
Richmond, VA 23219

Via Email: dwake@divaris.com

Re: Final Site Specific Environmental Conditions Assessment: Central Virginia Training Center,
521 Colony Rd, Madison Heights, VA 24572, Tax Map Parcel 160 A 69
3e Project Number 17-772

Dear Ms. Wake:

EEE Consulting, Inc. (3e) is pleased to provide this Final Site Specific Environmental Conditions Assessment (ECA) for the Central Virginia Training Center (CVTC) facility in Lynchburg, Virginia. The study was conducted to determine the presence or absence of Recognized Environmental Conditions (RECs) at the CVTC. The term REC is defined by ASTM E1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process):

Recognized Environmental Conditions – the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

3e performed the following activities to complete this ECA:

- ❖ Collected, reviewed, and compiled current and historic records for the CVTC in general accordance with ASTM E1527-13 utilizing the following resources, databases and libraries:
 - Sanborn™ Fire Insurance Map Archives.
 - Historic Aerial Photographs.
 - Recent and Historic USGS Topographic Maps.
 - Virginia Department of Environmental Quality (DEQ) GIS database, which includes the location of current and historic leaking petroleum tanks, hazardous waste management and disposal sites, solid waste management and disposal facilities, surface water

quality data, and other environmentally pertinent issues on record with the Virginia DEQ.

- Federal, state, and local database records maintained by Envirosite Corp in accordance with ASTM E1527-13.
- Applicable files on record with the Virginia DEQ through the Freedom of Information Act (FOIA).
- ❖ Site reconnaissance to confirm current land use and property conditions:
 - **3e** personnel took photographs and recorded information regarding current land use and conditions of the property.
 - Interview knowledgeable persons, including but not limited to those involved with the development of the recent environmental reports, local and state agency staff, and representative of the current and historic property owners.
- ❖ Interview knowledgeable persons, including but not limited to:
 - Richard W. Hall, Physical Plant Services Director
 - Kevin O'Malley, Site Construction Inspector for Vanir Construction Management Group
 - Reve Carwile, Safety Officer

Summary of Findings

The following subsections provide a summary of findings in order from significant RECs to noteworthy mentions. These findings are indexed on the attached **Table 1**, and their locations at CVTC are illustrated on the attached **Figure 1**. Applicable photographs are included in the attached Photographic Record, and indexed by Finding Number (*e.g.* Photo 11-2 would indicate the second photograph of Finding Number 11).

1.1. Landfills and Scrap Yards

A total of four (4) closed landfills and/or material scrap yards were identified at CVTC. ***Each of these findings are considered RECs and should be characterized under Phase II Environmental Site Assessments and/or managed under the Virginia DEQ's Voluntary Remediation Program (VRP).***

- ❖ **Finding #13:** Approximate 4-acre sanitary landfill that operated from approximately 1950 through the 1970s. This landfill appears to have utilized and existing low spot and adjoining ravine, which was then filled over the span of several decades. It is likely that all waste generated during CVTC operation over this period was buried here, and/or burned in the adjoining incinerator (Finding #11) and resultant combustion products buried.
- ❖ **Finding #14:** This area was identified as the “New Scrap Yard” by an undated facility map, and there was evidence of fill piles, large ground disturbances, and historic aerial photographs and interviews indicate that the southern portion was used to landfill debris.

The remains of a gas-powered medical waste incinerator were present in the northern portion of the New Scrap Yard (see Finding #12).

- Finding #21: This is an area surrounded by chain link fence fully within the “New Scrap Yard.” According to interviews, it formerly stored PCB containing transformers and electrical equipment generated during prior facility upgrades. All transformers and most electrical equipment have since been removed.
- ❖ Finding #15: A small (less than 1-acre) area in the wooded ravine immediately west of the greenhouse (Building 83) was observed to contain mounds of coal ash and construction debris.
- ❖ Finding #16: An approximate 6-acre area identified as the “Old Scrap Yard” by an undated facility map. Site observations included areas of dead or distressed vegetation on the forest floor, construction debris and significant amounts of suspect asbestos tile protruding from the ground, several piles of discarded 55-gallon drums, and other evidence this area was a combined metal scrap yard and construction debris landfill.

1.2. Incinerators

Two (2) former incinerators were identified at CVTC:

- ❖ Finding #11: A coal-powered waste incinerator adjoining the former sanitary landfill was used to incinerate sanitary waste and potentially medical waste from its erection in 1949 through at least the 1970s. Resultant coal ash and combustion products were buried in the adjoining landfill (Finding #13). A suspect PCB-containing electric transformer was also observed at the overhead electric pole that formerly served this incinerator building. ***Finding #11 is considered an REC for potential of ground surface impacts by combustion products and PCBs.***
- ❖ Finding #12: The remains of natural gas-powered medical waste incinerator were observed in the northern portion of the “New Scrap Yard” (Finding #14). ***While this former incinerator is considered an REC, it is contained within the boundary of Finding #14.***

1.3. Reported Releases

Records on file with the Virginia DEQ indicate four (4) known releases at CVTC. According to records on file, each of these releases have been characterized and mitigated to the satisfaction of the DEQ. As such, they are considered to be Historic RECs (HRECs), and do not warrant further characterization.

- ❖ Finding #9: In October 1996, the Virginia DEQ and the Department of Mental Health, Mental Retardation, and Substance Abuse Services (DMHMRAS) entered into an Executive Compliance Agreement to mitigate environmental risk from the boiler plant

(Building 77). Full compliance was obtained in 1999 after performance of the following activities:

- Removal of coal silos and any remaining coal fuel
 - Remediation of sediments from the unnamed stream receiving storm water from the boiler plant area.
 - Removal of the existing 100,000-gallon No. 6 fuel oil above-ground storage tank (AST).
 - Installation of a new 90,000-gallon No. 2 fuel oil AST in full compliance with containment and monitoring requirements.
- ❖ Finding #17: A 1,000-gallon gasoline underground storage tank (UST) was removed from the ground at the food services building (Building 65) in 1991. A release was identified and reported to the DEQ, and recorded as PC 1992-1677. Subsequent activities included removal of 26-tons of soil and advancement of soil borings to test for petroleum impact. No significant impacts were identified beyond the immediate area of the UST basin, and groundwater was not encountered above the bedrock interface at 40.5-ft below ground surface.
- ❖ Finding #18: Two reported petroleum releases (PC 1999-1203 and PC 2000-2032) are duplicative of a diesel release reported during closure of a UST at the main hospital (Building 46). The original UST for the emergency power generator was replaced, and one soil sample contained diesel range petroleum at a concentration of 112 mg/kg, slightly exceeding the Virginia DEQ release reporting threshold of 100 mg/kg. Due to the location of underground oxygen lines crossing the top of the UST and the relatively low concentration of soil impact, the tank was subsequently closed in place with no further action required by the DEQ. A new UST was installed immediately to the northeast (Finding #29).

1.4. Petroleum Storage

The bulk storage of petroleum occurs at numerous locations throughout the CVTC campus. The locations, descriptions, and status of each finding are summarized in the following **Table 1-4**.

Table 1-4. Summary of bulk petroleum storage

Finding Number	Type	Capacity (Gallons)	Contents	Status	REC?
1	AST	2,000	Diesel	Active use for fueling vehicles at Building 36	No
2	AST	1,000	Diesel	Active use for fueling equipment by grounds crew at New Scrap Yard	No
3	AST	90,000	No. 6 Heating Oil	Active use at Boiler Plant Building 77	No
4	AST	1,000	Diesel	Formerly located at grounds Building 37, now in use at New Scrap Yard (Finding #2)	No
29	UST	1,000	Diesel	Actively used for emergency power generator at Building 46	Yes
30	UST	8,000	Gasoline	Active use for fueling vehicles at Building 36	Yes
31	UST	1,000	Diesel	Actively used for emergency power generator at Building 65	Yes
32	UST	1,000	Diesel	Actively used for emergency power generator at Building 47	Yes
33	UST	1,000	Diesel	Actively used for emergency power generator at Building 31	Yes
34	UST	10,000	Gasoline	Formerly located at Building 36, same location as new UST	Yes
35	UST	1,000	Gasoline	Formerly located at Building 49, removed March 1995	Yes

In addition to the above listed tanks, the following locations of drummed petroleum were observed:

- ❖ Finding #27: Several 55-gallon drums of used motor oil were located within Building 39 (grounds maintenance), and smaller fuel containers were in a block structure just outside this building. Significant oil stains were observed on the dirt floor surrounding these drums and within the block structure. ***These conditions constitute an REC for release of petroleum to the ground surface.***
- ❖ Finding #28: Building 53 is identified as a Boiler House on the historic fire insurance maps, and site observations indicated a significant alteration of steam and water pluming within this structure to its current configuration. There was no indication of coal fuel, thus if this building formerly contained a boiler system, it would have been fueled by a petroleum product (heating oil, natural gas, propane, etc.). One unidentified 1.5-inch diameter iron

pipe exists the building and proceeds underground, indicating the potential that a UST may currently or formerly be located at this Building 53. ***Therefore, this is an REC for the potential that heating oil may have been stored below ground at Building 53.***

- ❖ Finding #37: The vehicle maintenance bays within Building 50 contained several 55-gallon drums of oil and related petroleum products in smaller containers. All containers were appropriately stored and maintained, and no indications of spills or releases were observed. The presence of these containers is not considered to be an REC.
- ❖ Finding #38: A 55-gallon drum of air compressor oil was located in the ground level of Building 30. Compressor oils blended prior to 1978 are known to contain poly-chlor biphenyls (PCBs). The drum was labeled Roland 32-weight Anti-Wear (32AW) by Drydene Oil Company. The Drydene Oil Company was purchased by Castrol in 1991, thus this drum is at least 26-years old. Some indication of minor spills was observed to be associated with this drum, as evident by oil-dry on concrete floor. Recommend characterization of contents to determine the presence or absence of PCBs. If PCBs are detected in the contents of the drum the status of this finding would be a REC.

1.5. Hazardous Chemical Use, Storage, and Waste Generation

There were several areas where hazardous chemicals were used, stored, and/or generated at CVTC, as follows:

- ❖ Finding #5: X-ray fluid and other medically related chemicals (including pharmaceuticals) are stored, dispensed, and some wastes are generated at the current hospital (Building 46). All observed containers were in good working order, and there was no indication of releases. The presence of these chemicals is not considered an REC.
- ❖ Findings #6, #7, and #8: Several drums and numerous small containers of chemicals are stored and used at the Physical Plant (Building 51), Screen House (Building 56), and Paint Shop (Building 82). All of these chemicals were in good working order, with excellent housekeeping and no indications of releases. No floor drains or other potential pathways were observed within any of the chemical storage areas. One 55-gallon drum of hazardous waste (spent paint thinner) was located on a secondary containment pallet within the Paint Shop (Building 82). It was properly labelled, and interviews with site personnel indicate that all generated hazardous waste is properly containerized, transported, and disposed by a licensed contractor. These findings are not considered an REC.
- ❖ Finding #10: According to historic fire insurance maps, aerial photographs, and interviews, the original Physical Plant, Laundry, and Carpenter Shop was located in a building that was razed for the subsequent construction of Building 47 in the mid-1970s. Site observation of current activities associated with these uses indicates that fuel, paints, solvents, and similar chemicals were likely used, stored, and disposed at this historic location. Because operations at this location occurred prior to the advent of environmental regulations or

currently accepted industry practices, there is potential for historic release of petroleum and/or hazardous substances at this location. ***Therefore, this finding is considered an REC.***

- ❖ Finding #19: According to the CVTC Safety Officer, a cardboard container of pulverized sulfur used as a pesticide was stored in the dirt floor crawl space of Building 41, a one-story dilapidated storage shed. This container has since disintegrated and released the pesticide into the crawl space beneath Building 41. ***This is an REC for concentrated release of pesticide into the environment.***
- ❖ Finding #20: An interior room within Building 39 was used by grounds maintenance for several decades to store and handle bulk pesticide containers. One drum labelled used oil and several 5-gallon pails of ice melt were the only containers remaining in this room at the time of site reconnaissance. ***This finding is an REC for historic handling and storage of bulk pesticides.***
- ❖ Finding #36: An off-white powdery chemical was observed to be spilled on the ground outside and within on the wooden floor of storage Building 45-5A. Dead and stressed vegetation was also observed where the unknown chemical was spilled. A 33-gallon drum within the shed appeared to be the source of the spill. While the original drum label indicated a vinyl based asphalt patch, the observed chemical spilled was an off-white powder. ***This finding is an REC for the release of an unknown chemical into the environment.***

1.6. Laundry Services

Site observations, historic resources, and interviews all indicate that no dry cleaning occurred at the current laundry Building 52, which was constructed in 1953. It is unknown but unlikely that dry cleaning occurred at the earlier laundry facility, which was located near Building 47 (see Finding #10).

1.7. Sewer and Septic

Sewage disposal at the majority of the CVTC campus is via a sanitary sewer system that discharges off-site to the local Public Service Authority (PSA) system. On-site sanitary sewer infrastructure formerly discharged to a sewage treatment plant (Buildings 42, 43, and 44) beginning in the late 1940s (Finding #26), which then discharged to a tributary of the James River. This treatment plant has been out of operation for decades, since a direct connection was made to the local PSA, and there were no indications or current conditions indicative of an REC.

Several outlying structures within the CVTC campus still relied on septic systems and drainfields for sewage treatment. Each of these septic systems (Findings #22-25) were observed, and none appeared to receive any sewage from an industrial process. Therefore, the presence of these septic systems is

not considered an REC. These systems will require proper health department notification in the event of closure.

1.8. Other Considerations

While not considered RECs per ASTM E1527-13, both asbestos-containing materials and lead-based paints are likely ubiquitous in most of the buildings, due to age of construction. Any suspect asbestos containing materials or lead-based paint would need to be characterized prior to future renovation and/or demolition. If present, regulated asbestos containing material must be properly removed prior to any demolition or renovation.

1.9. Recommendations

3e recommends the characterization of all findings classified as RECs. Additionally, due to the nature of some of the findings, enrollment of the applicable portions of the CVTC campus into the DEQ's VRP should be considered as an efficient pathway to regulatory closure of the RECs.

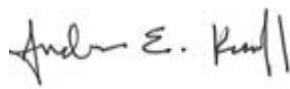
3e greatly appreciates the opportunity to offer our professional services to your group and trusts that this report meets your needs. If you have any questions, please call us at (540) 953-0170.

Sincerely,

EEE Consulting, Inc.



Jeffrey A. Fisher, QEP
Senior Project Manager



Andrew E. Kassoff, PE, PG, LEED AP
President

Attachments:

Figure 1 – Aerial Photograph and Findings Locations

Table 1 – Summary of Findings

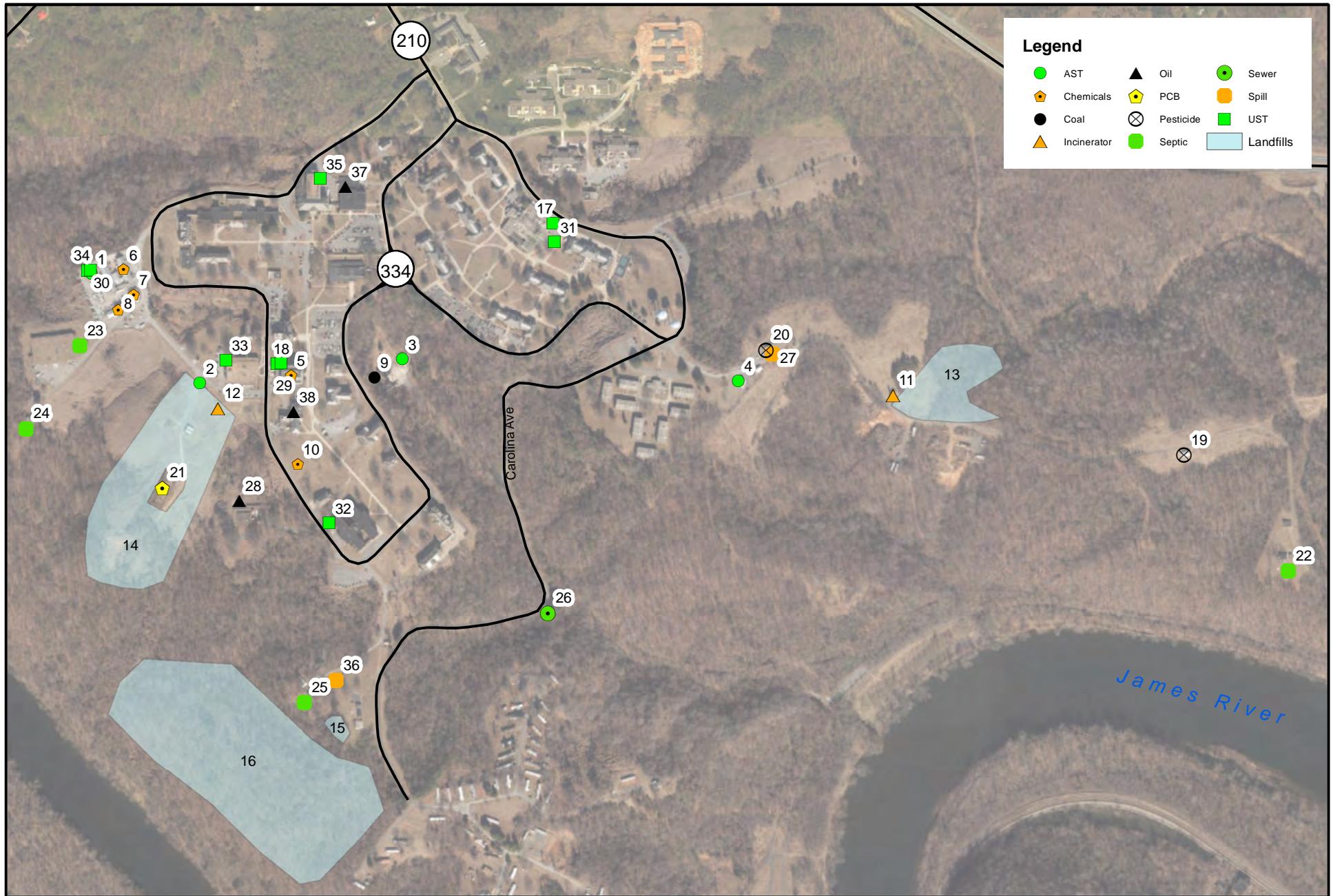
Attachment A – Photo Sheet

Attachment B – Envirosite Database Search

Attachment C – Historic Aerial Photographs

Attachment D – Historic Topographic Maps

Attachment E – Historic Fire Insurance Maps



EEE Consulting, Inc.

Environmental, Engineering and Educational Solutions
Prepared by J. Kimmel, July 2017
Sources: ESRI Aerial Imagery 2017
Projection: NAD 1983 StatePlane Virginia South FIPS 4502 Feet



Aerial Photograph and Findings Locations

Central Virginia Training Center Environmental Assessment
Madison Heights, Virginia

EEE Project No. 17-772

A horizontal scale bar representing distance in feet. The bar is marked at 0, 500, and 1,000. Below the bar, the word "Feet" is written in italics.

Table 1 - Summary of Findings

Finding #	Identity	Building #	Lat	Lon	Description	Source	REC Per ASTM E1527-13?	Recommendations & Notes
1	AST	36	37.41242	-79.1259	current 2,000-gallon diesel AST	Site visit	No	No evidence of staining around tank
2	AST	west of 31	37.4109	-79.124	1,000-gallon diesel AST in good condition, former tank from grounds crew building 37	Site visit, interview	No	No evidence of staining around tank
3	AST	77	37.41127	-79.1205	90,000-gallon #2 AST, formerly 100,000-gallon #6 AST with remote fill	Site visit, interview, FOIA	No	No evidence of staining around tank
4	AST	37	37.41094	-79.124	1,000-gallon diesel AST used to be located at grounds crew facility	Interview	De minimis	AST no longer present, moved and appears to be in good condition. No evidence of leaks or stains
5	Chemicals	46	37.41117	-79.1225	X-ray chemicals and other medically related interior storage	Site visit	No	Stored and used appropriately, no significant materials in lab
6	Chemicals	51	37.41245	-79.1256	Physical plant chemicals, all small containers	Site visit	No	All stored appropriately and no evidence of spills
7	Chemicals	56	37.41214	-79.1251	Screen building used to create vinyl signs and repair window screens, Small amounts of adhesives and paints	Site visit	No	
8	Chemicals	82	37.41194	-79.1254	Paint shop, some generation of hazardous wastes	Site visit	No	All stored appropriately and no evidence of spills. No floor drains present
9	COAL	77	37.41103	-79.121	Coal burning, ash, and accidental discharges to tributary via storm water inlets. Cleaned and ceased coal operations in 1999	FOIA	HREC	All coal ash and remaining coal were removed and excavated under DEQ supervision between 1996 and 1998. This includes around the boiler plant, and the rail siding unloading area to the southeast.
10	Historic Chemicals	47	37.40989	-79.1224	Location of former buildings & grounds, a building prior to 47	Historic Fire insurance maps, aerials, interviews	Yes	Use of paints, solvents, etc. prior to regulatory requirements for storage and disposal
11	Incinerator	13	37.41081	-79.1122	Former coal powered incinerator, used for sanitary and likely also medical waste	Site visit, interview, historic sources	Yes	Shallow soil samples for dioxins, dibenzofurans, PAHs and metals
12	Incinerator	west of 31	37.41057	-79.1237	Former medical waste incinerator, no longer operational	Site visit, interview, FOIA	Yes	Within the limits of the new scrapyard compound (see Finding 14)
13	Landfill	13	37.41097	-79.1109	~4-acre former sanitary landfill, operated since beginning of facility until approximately 1960s	Site visit, interview, historic sources	Yes	Delineate groundwater, secure cover, etc. and put through the VRP
14	Landfill	west of 31	37.40871	-79.1255	Landfill area, dubbed "New Scrap Yard"	Site visit, interview, historic sources	Yes	Delineate groundwater, secure cover, etc. and put through the VRP
15	Landfill	west of 83	37.40629	-79.122	Small landfilled area with construction debris and coal ash	Site visit, interview, historic sources	Yes	Delineate groundwater, secure cover, etc. and put through the VRP
16	Landfill	southwest of 83	37.4052	-79.1225	Large landfill area (6+ acres) dubbed "Old Scrap Yard." Asbestos tiles observed becoming exposed in forest floor, several mounds of discarded drums, etc.	Site visit, interview, historic sources	Yes	Delineate groundwater, secure cover, etc. and put through the VRP
17	LUST, UST	65	37.41312	-79.118	PC 1992-1677. 1,000-gallon gasoline UST removed, along with 26-tons of soil. 3/18/1992. no groundwater encountered above rock at 40.5-ft. All TPH less than 50 mg/kg in final soil samples	Interview, FOIA	HREC	Notation of prior work.
18	LUST, UST	46	37.41124	-79.1226	1,000-gallon diesel UST for backup generator, closed in place due to oxygen lines crossing tank. One sample was 112 mg/kg TPH-DRO, release reported and recorded as PC 2000-2032, but no requirements for follow-up. Appears duplicative of PC 1999-1203	Site visit, interview, FOIA	HREC	Note location of old UST (filled in place), remove UST if possible and perform proper closure assessment
19	Pesticide	41	37.41003	-79.1071	Spilled container of sulfur compound in crawl space, per Reve Carwile	Interview	Yes	segregate first foot of soil beneath building during demolition
20	Pesticide	39	37.41144	-79.1143	Pesticide storage, all bulk containers previously removed	Site visit, interview	Yes	segregate first foot of soil beneath building during demolition
21	PCBs	west of 31	37.40955	-79.1246	fence-enclosed area, formerly housed PCB containing transformers	Site visit, interview	Yes	Prior storage of PCB transformers pending final disposal considered an REC due to material threat of release of PCBs to surrounding ground surface
22	Septic	34-A	37.40862	-79.1053	Septic system for part time residence	Site visit, interview	No	
23	Septic	66	37.41151	-79.1269	Septic system for stock warehouse	Site visit, interview	No	No floor drains, system only for sanitary wastes
24	Septic	48	37.41034	-79.1269	Septic system for part time residence	Site visit, interview	No	
25	Septic	45	37.40664	-79.122	Septic system for part time residence	Site visit, interview	No	
26	Sewer	42-43	37.40786	-79.118	Former sewage treatment plant and outlet	Site visit	No	Long since out of operation, and receiving stream appeared free of any visual impacts
27	Spills	39	37.41136	-79.1143	Surficial oil spills inside garage dirt floor, and inside block containment structure	Site visit	Yes	excavate visually impacted soil, shallow soil borings
28	Suspected Heating Oil	53	37.40933	-79.1233	Originally identified as a boiler house adjoining laundry services building.	Site visit, historic sources	Yes	One soil boring to determine presence/absence of heating oil
29	UST	46	37.41124	-79.1227	1,000-gallon diesel UST for backup generator	Site visit, interview	Yes	Remove UST, perform closure assessment
30	UST	36	37.41253	-79.1258	current 8,000-gallon gasoline UST	Site visit	Yes	Remove UST, perform closure assessment
31	UST	65	37.4129	-79.1179	1,000-gallon diesel UST for backup generator, same place as former	Site visit, interview	Yes	Remove UST, perform closure assessment
32	UST	47	37.40901	-79.1219	1,000-gallon diesel UST for backup generator, same place as former	Site visit, interview	Yes	Remove UST, perform closure assessment
33	UST	31	37.41114	-79.1236	1,000-gallon diesel UST for backup generator, same place as former	Site visit, interview	Yes	Remove UST, perform closure assessment
34	UST	36	37.41253	-79.1258	former 10,000-gallon gasoline UST removed March 13, 1995. Same pit as new UST	Site visit, interview, FOIA	Yes	
35	UST	49	37.41378	-79.122	former 1,000-gallon UST, removed March 27, 1995. 4-ft NE corner of Bldg. 49	Site visit, interview, FOIA	Yes	place one boring in location of former pit
36	Unknown Spill	45-5	37.40689	-79.1224	drum labelled Sta-Fil, but spills of unknown contents (not a vinyl asphalt patch as labelled), dead vegetation	Site visit	Yes	Characterize and excavate soil
37	Oil and Automotive	50	37.41364	-79.1216	Oil, petroleum and chemical storage for automotive maintenance	Site visit	No	All stored in good condition, free of spills or staining
38	Oil drum	30	37.4104	-79.1225	One old Drydene oil drum (company out of business since 1991) and air compressors, suggesting compressor maintenance. 32 aw hydraulic oil	Site visit	Undetermined	Some evidence of minor spill, recommend characterization of contents to determine presence or absence of PCB's

Attachment A – Photo Sheet



Photo 1-1 View of Diesel AST at Building 36, looking west. No evidence of staining or odors around tank.



Photo 2-1 View of Diesel AST at equipment yard commonly referred to as the former "ball field," looking east towards Building 31. No evidence of staining or odors around tank. This AST was formerly located at the grounds crew Building 37.



Photo 3-1 View of 90,000-gallon No. 2 Heating Oil AST at the boiler plant, Building 77.



Photo 3-2 Interior of containment dike, 90,000-gallon No. 2 Heating Oil AST at the boiler plant, Building 77



Photo 3-3 Offloading area for tanker trucks, 90,000-gallon No. 2 Heating Oil AST at the boiler plant, Building 77



Photo 3-4 Standing water within containment dike, no petroleum sheen evident



Photo 3-5 Additional view of 90,000-gallon No. 2 Heating Oil AST at the boiler plant, Building 77



Photo 3-6 Location of former 100,000-gallon No. 6 Heating Oil AST at the boiler plant, Building 77. AST removed in 1999.



Photo 3-7 Location of former remote fill for 100,000-gallon No.6 heating oil AST at Building 77. This site is across road from Building 21.



Photo 3-8 Location of former remote fill for 100,000-gallon No.6 heating oil AST as presented in the August 1999 AST Closure Report.



Photo 5-1 Discarded X-ray slides in basement of Building 1, adjoining morgue. Film material should be properly disposed.



Photo 5-2 New and spent X-ray fluids at dental department, Building 46. No evidence of spills or release. De minimis accumulation, and proper disposal procedures appear to be implemented.

46-2



Photo 5-3 Entrance to X-ray in Building 46. All appurtenances in use, clean, and well maintained.

46-3



Photo 5-4 Entrance to additional medical supply storage in Building 46. No entrance due to security restrictions. All other areas of current hospital in clean working order.



Photo 7-1 Pails of adhesive in the screen building (Building 56). No evidence of chemical spills.



Photo 8-1 Paint station within Building 82, well maintained and tidy.



Photo 8-2 Paint thinner and solvent storage within Building 82. No evidence of spills or staining, and no floor drains present within building.



Photo 8-3 Spent paint thinner and solvent storage as hazardous waste within Building 82. No evidence of spills or staining, and no floor drains present within building. Minimal accumulation, and when full the drum is properly disposed by an third party (Environmental Options).



Photo 8-4 Additional paint station within Building 82, well maintained and tidy.



Photo 8-5 Small container paint storage within Building 82, well maintained and tidy.



Photo 8-6 Large container paint storage within Building 82, well maintained and tidy.



Photo 9-1 Apparent former coal bin at boiler plant (Building 77), no visual evidence of remaining coal or fines.



Photo 9-2 Storm water drop inlet at boiler plant (Building 77), no current visual evidence of fines or other coal related impacts.



Photo 9-3 Storm water outlet immediately below boiler plant (Building 77), apparent headwaters of stream restoration/remediation completed in 1998 as part of Executive Compliance Agreement.



Photo 9-4 View of former rail siding used to deliver coal to facility, located east of Building 43 (old sewer treatment plant). No rails or ties remain.



Photo 9-5 Remains of coal hopper at former rail siding used to deliver coal to facility, located east of Building 43 (old sewer treatment plant). No visual evidence of any remaining coal.

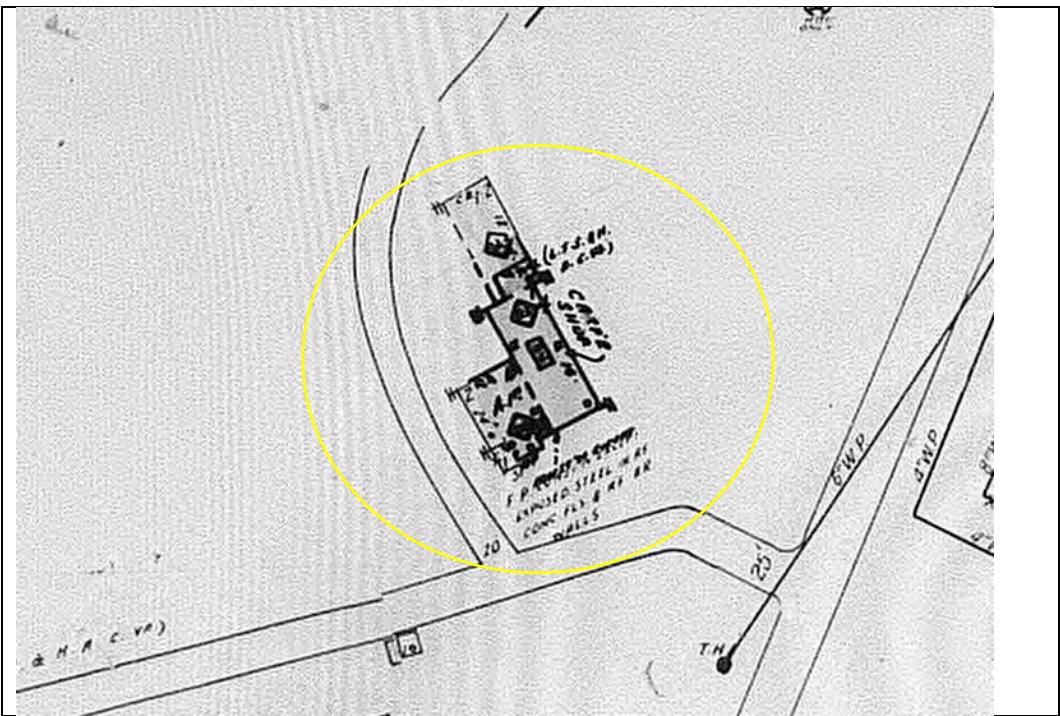


Photo 10-1 1965 Sanborn Fire Insurance Map indicating former physical plant building (carpenter shop) at location of existing Building 47. This is also the location of the original laundry building, until new laundry was constructed in 1953. This is an REC for likely use, storage, and disposal of paints, solvents, and similar chemicals for carpentry, signage, and similar services performed by physical plant prior to regulations or current industry practices. It is also likely that gasoline and/or diesel fuel was stored at this location to service vehicle fleets, as current vehicle fueling occurs at the relocated Physical Plant office.



Photo 11-1 View of former coal-powered incinerator, used for flammable sanitary wastes and likely medical wastes from construction in 1949 through cessation of use (likely in the 1970s).



Photo 11-2 Upper story interior of incinerator, former feed ports filled with concrete.



Photo 11-3 View into former incinerator, ground level.



Photo 11-4 Ground level within incinerator building, cleanouts and dampers.



Photo 11-5 Remains of electric powered blower within incinerator building

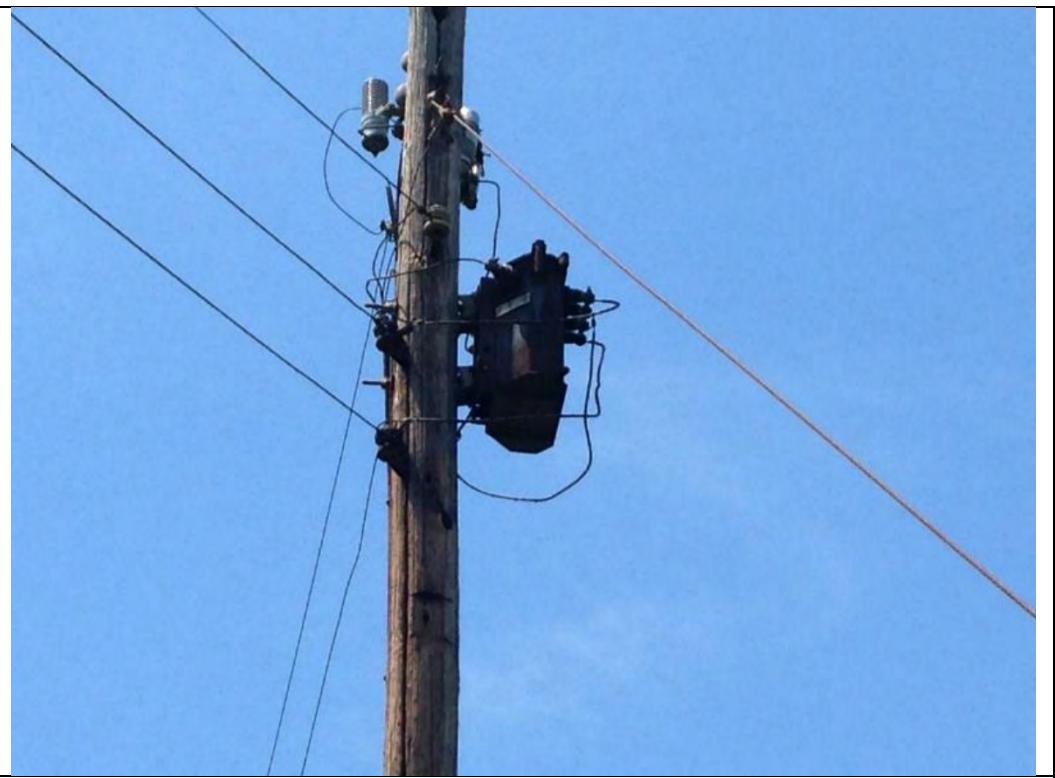


Photo 11-6 Pole-mounted transformer outside incinerator Building 13, not in use and suspect PCB-containing due to age and design.



Photo 12-1 Remains of former medical waste incinerator, located within the “ball field” equipment yard southwest of Building 31.



Photo 13-1 Portion of former sanitary landfill/dump immediately east of incinerator Building 13.



Photo 13-2 View looking north towards toe of slope, apparent limits of former sanitary landfill east of Building 13.

13-4



Photo 13-3 Rusted metal and other debris exposed in wooded area of former landfill near Building 13.



Photo 13-4 Undated photograph (likely early 1960s) showing Dempster Dumpster system in use at the former sanitary landfill near Building 13. Text on back of photograph reads:

The truck equipped to handle the Dempster-Dumpster units is pictured dumping its load at the sanitary fill. Anything which is burnable is burned and then the bulldozer crushes cans and other debris and pushes the waste in a trench and covers it. Formerly when wastes were burned in the incinerator, the cans were

always dumped on an unsightly hillside and became the excellent breeding place for mosquitoes and a fine nesting place for rats. The sanitary fill reduces the unsightliness and eliminates the breeding places for insects. Rats, although evidence will always be found around a large institution, have reduced in numbers around the institution. Cleanliness of the lawns and around buildings improved overnight when the system was installed.



Photo 14-1 View looking west towards “ball field” area, which includes a former scrap yard and landfill area further south.



Photo 14-2 Fill area, former landfill, immediately south of the “ball field” scrap storage yard.



Photo 14-3 Additional view of scrap area and landfill area in background

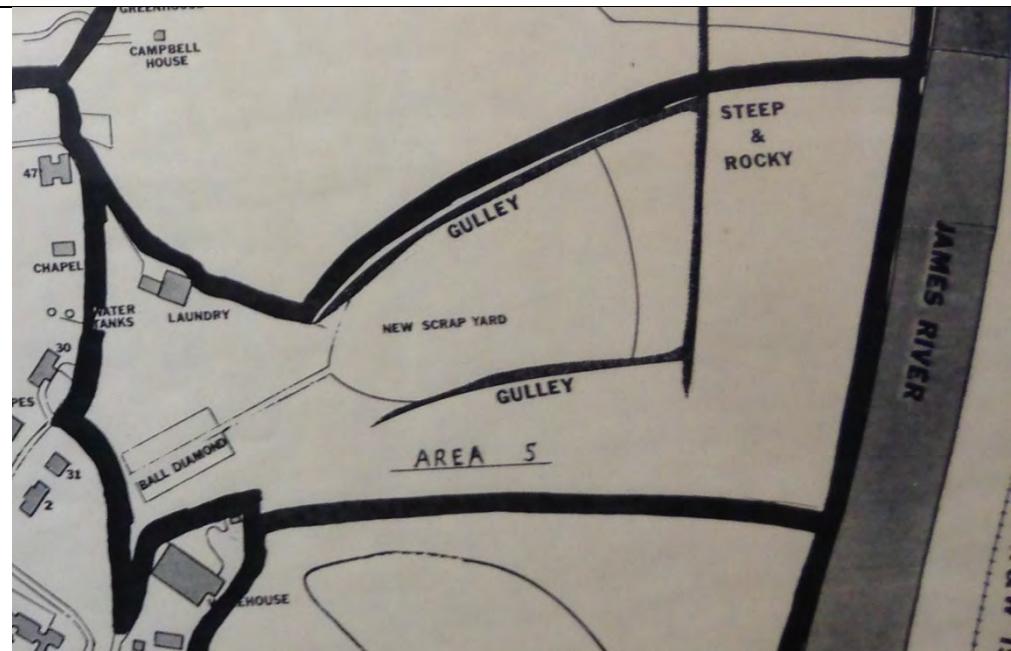


Photo 14-4 Location and layout of “New Scrap Yard” southwest of Building 31 and beyond “Ball Diamond” as portrayed in undated facility map.



Photo 15-1 Coal ash pile west of greenhouse Building 83

83-10

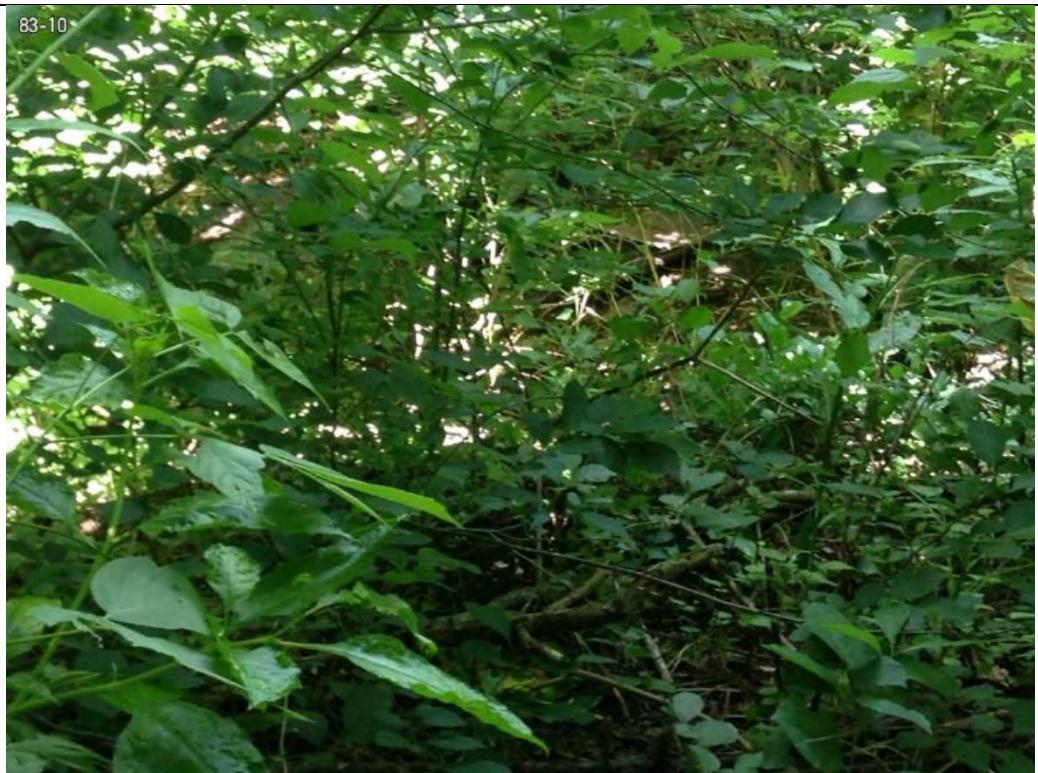


Photo 15-2 Coal ash and construction debris pile west of greenhouse Building 83

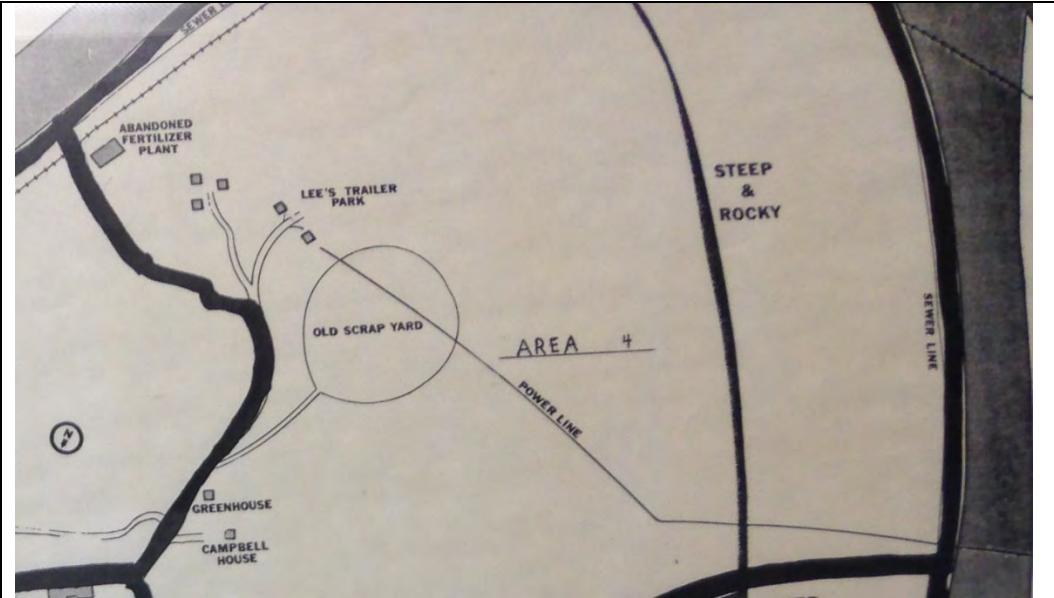


Photo 16-1 Location and layout of “Old Scrap Yard” southwest of Greenhouse (Building 83) as portrayed in undated facility map.



Photo 16-2 Abandoned Dempster-Dumpster



Photo 16-3 Partially covered fill and construction debris



Photo 16-4 Suspect asbestos tiles emerging from forested fill area



Photo 16-5 Area of stressed vegetation within Old Scrap Yard and landfill



Photo 16-6 Discarded drums within Old Scrap Yard and fill area



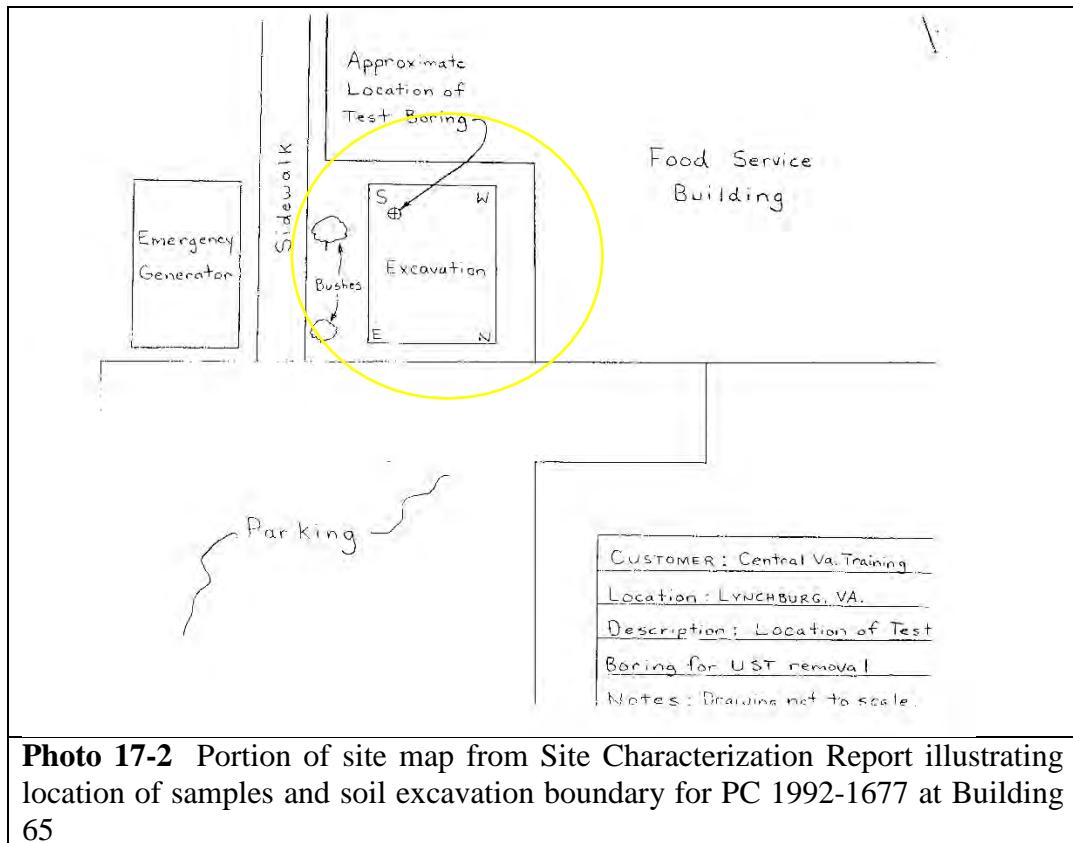
Photo 16-7 Construction debris emergent from the forest floor within Old Scrap Yard and fill area

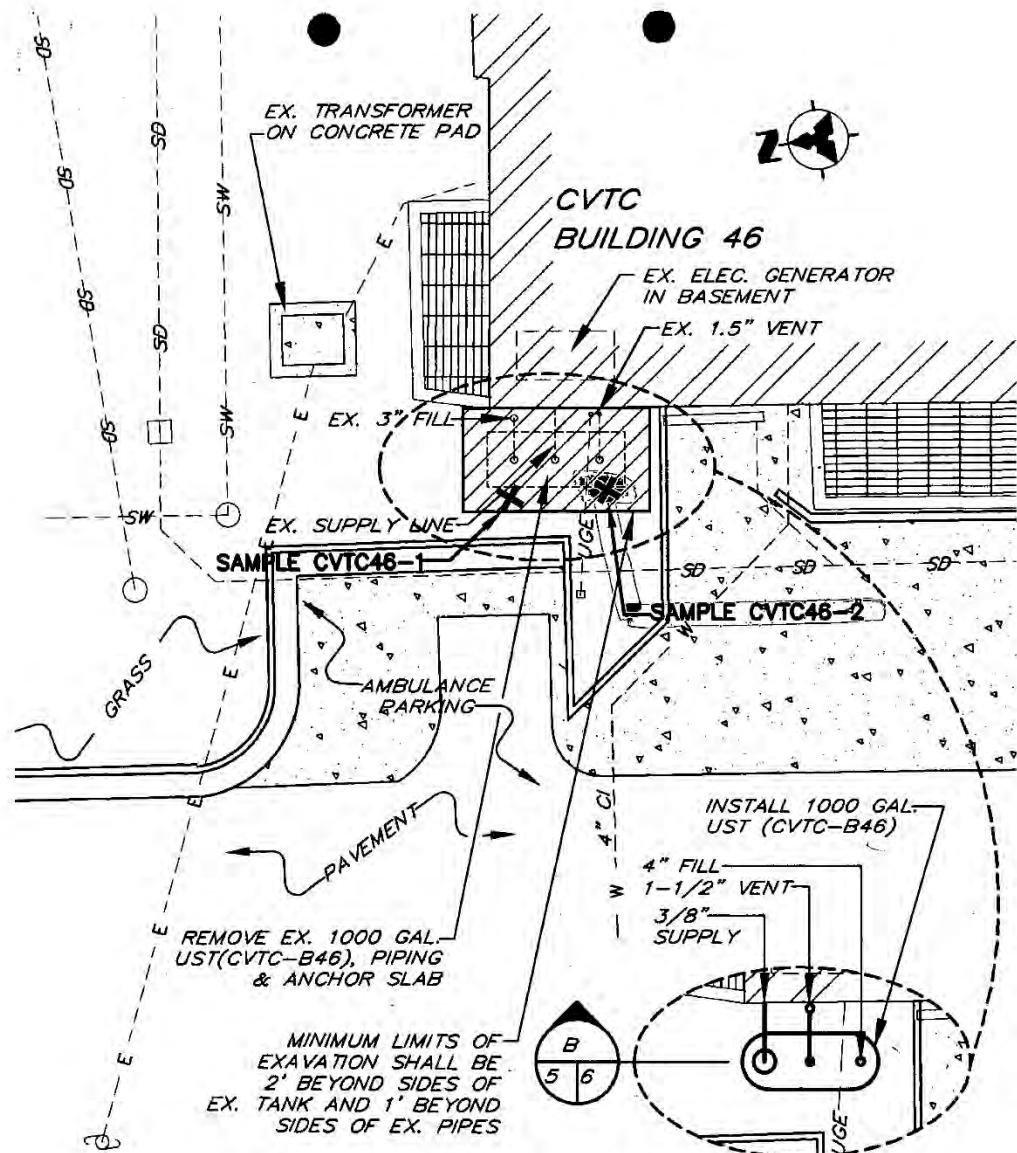


Photo 16-8 Additional example of covered fill/debris piles within Old Scrap Yard and fill area



Photo 17-1 View of former gasoline release and soil excavation at Building 65 (PC 1992-1677)





DEMOLITION AND INSTALLATION PLAN

TANK #CVTC-B46

SCALE: 1" = 10'

Photo 18-1 Portion of site map from PC 2000-2032 release report illustrating location of samples and UST, which was filled in place

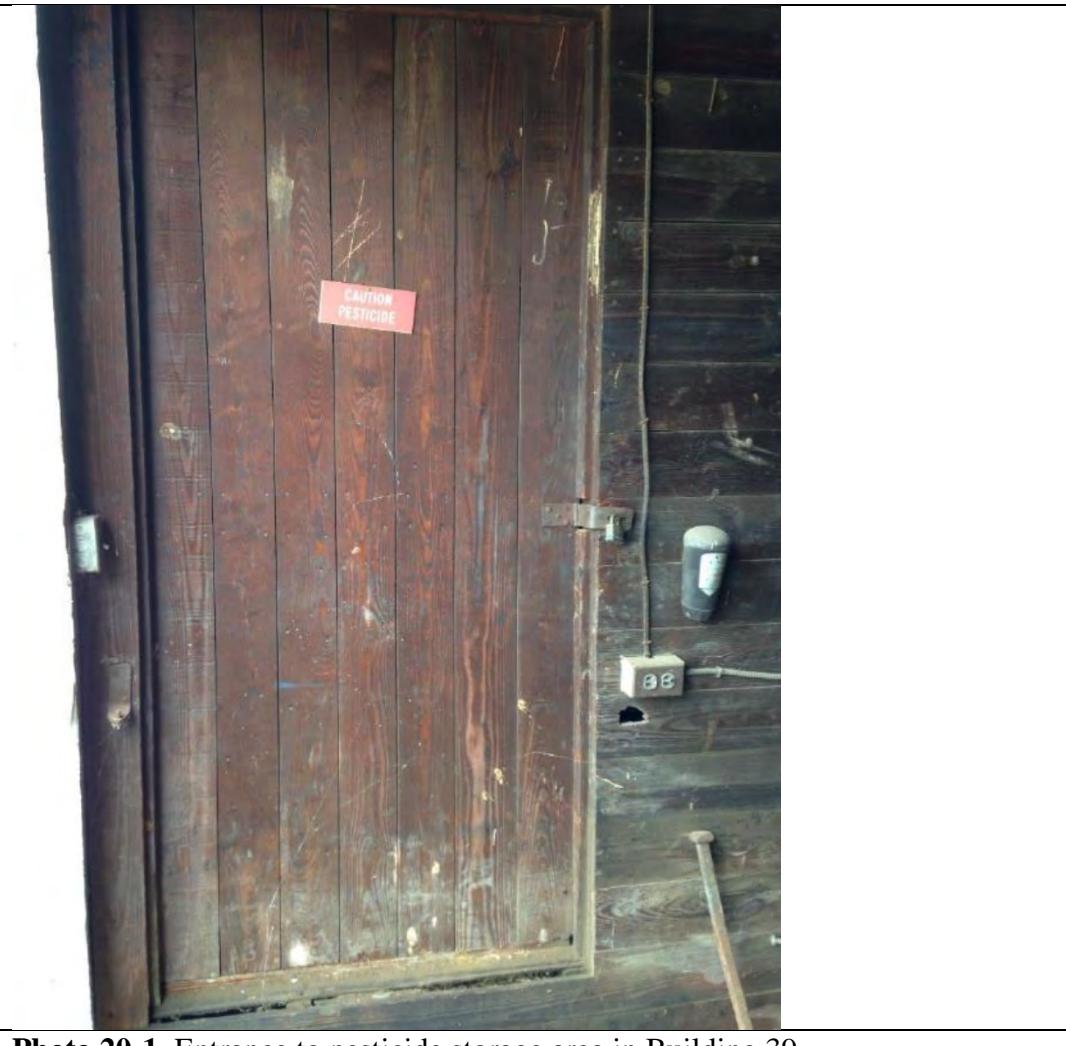


Photo 20-1 Entrance to pesticide storage area in Building 39



Photo 20-2 Drum of possible used motor oil (per label) located inside pesticide storage area of Building 39



Photo 20-3 5-gallon pails of de-icing compound within the pesticide storage area of Building 30

new landfill



Photo 21-1 View within fenced area of New Scrap Yard, formerly used to store out-of-service PCB-containing transformers and electrical equipment.

new landfill



Photo 21-2 Additional view within fenced area

45-1



Photo 25-1 Septic cleanout and location of system behind Building 45. Typical example of similar systems observed throughout facility at Buildings 34-A, 48, and 66. Would need proper closure prior to demolition, but not an REC.

43-3



Photo 26-1 View of old sewage treatment plant Building 43



Photo 26-2 Close-up of sparging and treatment cells within old sewage plant



Photo 27-1 Drums of used motor oil with visual indication of spills onto the surrounding dirt floor within Building 39

39-6



Photo 27-2 Gasoline and oil containers within concrete block structure outside Building 39, heavy petroleum staining on bare dirt floor.

39-2



Photo 27-3 View of concrete block structure



Photo 28-1 Unidentified underground utilities entering Building 53



Photo 28-2 Former boiler tank (no longer used for existing system) in Building 53



Photo 28-3 Terminated and modified piping with Building 53 indicates a prior boiler or arrangement.

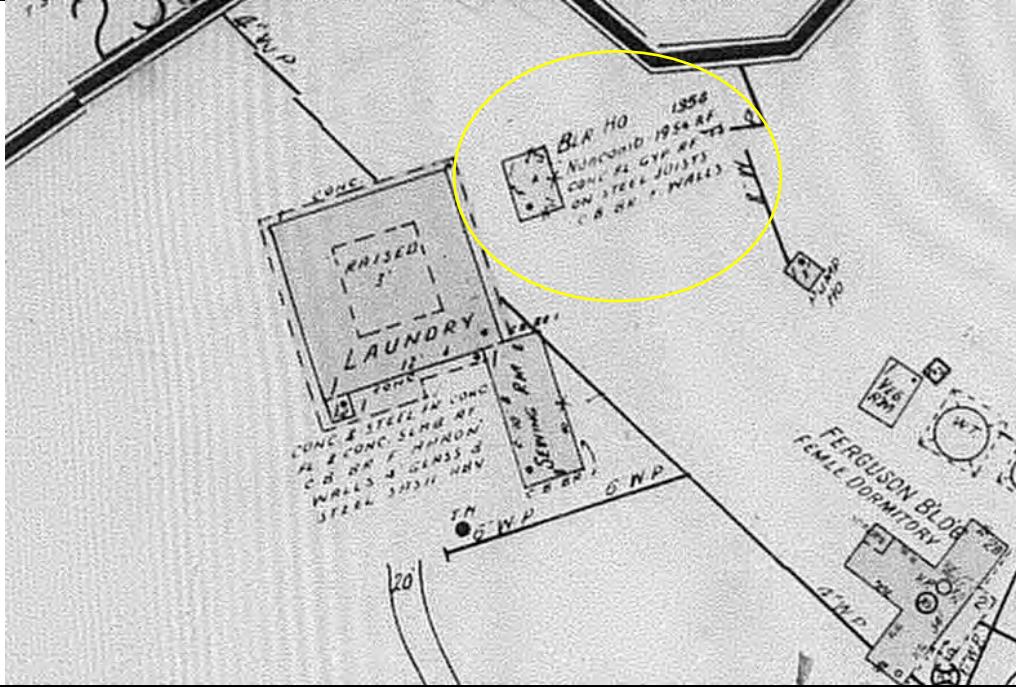


Photo 28-4 Portion of the 1965 Sanborn Fire Insurance Map identifying Building 53 as a Boiler House, but does not indicate fuel source.

UST and generator near 46



Photo 29-1 1,000-gallon diesel UST for generator within basement of Building 46

46-8



Photo 29-2 Close-up of 1,000-gallon diesel UST access, Building 46



Photo 30-1 Location of 8,000-gallon gasoline UST at Building 36



Photo 30-2 Dispenser above 8,000-gallon gasoline UST at Building 36

UST near 65



Photo 31-1 1,000-gallon diesel UST and backup power generator at Building 65

UST near 47 temp closed



Photo 32-1 1,000-gallon diesel UST and backup power generator at Building 47

generator near 31



Photo 33-1 1,000-gallon diesel UST and backup power generator at Building 31



Photo 35-1 View of Building 49, former 1,000-gallon gasoline UST location as indicated by yellow oval

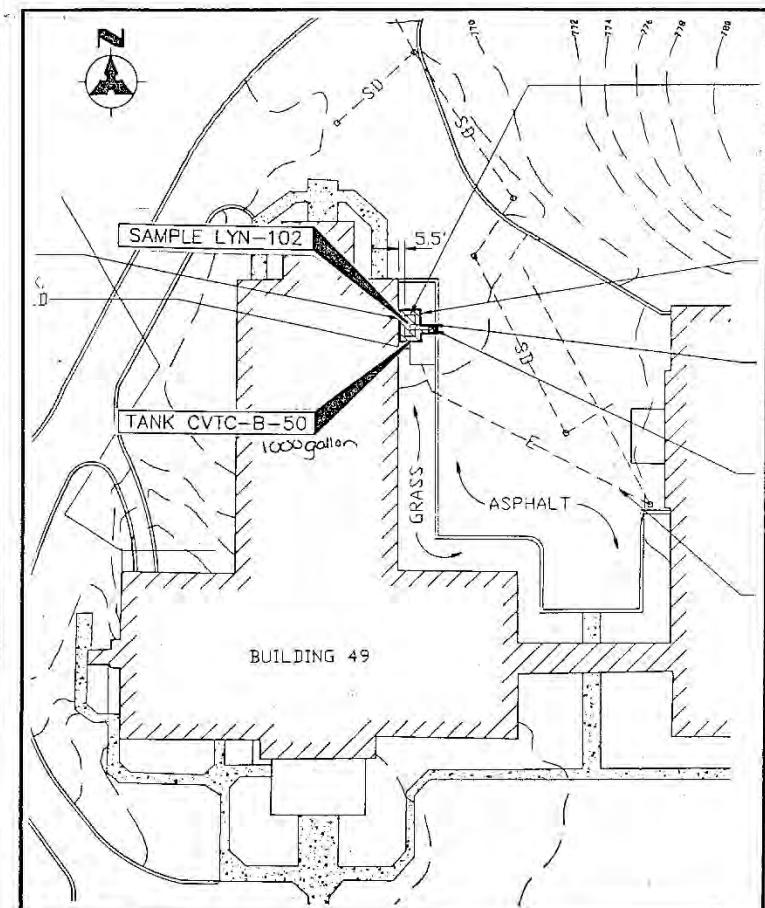


EXHIBIT 2

CLOSURE REPORT
CENTRAL VIRGINIA TRAINING CENTER
TANK #CVTC-B-50
SCALE 1" = 40'

PH&A

Penton, Harris & Rust & Associates, Inc.
Engineers, Surveyors, Planners, Landscape Architects

Offices:
Fairfax, Va.
Bridgewater, Va.
Leesburg, Va.
Virginia Beach, Va.
Covington, Va.
Winchester, Va.

DATE: JUNE 1995 JOB #8276-15

Photo 35-2 Copy of site map from 1995 showing UST and sample locations



Photo 36-1 Spilled chemical and associated dead vegetation outside storage Building 45-5



Photo 36-2 33-gallon drum of unknown chemical. Label indicates a vinyl based asphalt patch, but observed chemical spilled is an off-white powder



Photo 37-1 New motor oil drums on spill pallets within vehicle maintenance bays in Building 50



Photo 37-2 Used motor oil drums on spill pallets within vehicle maintenance bays in Building 50

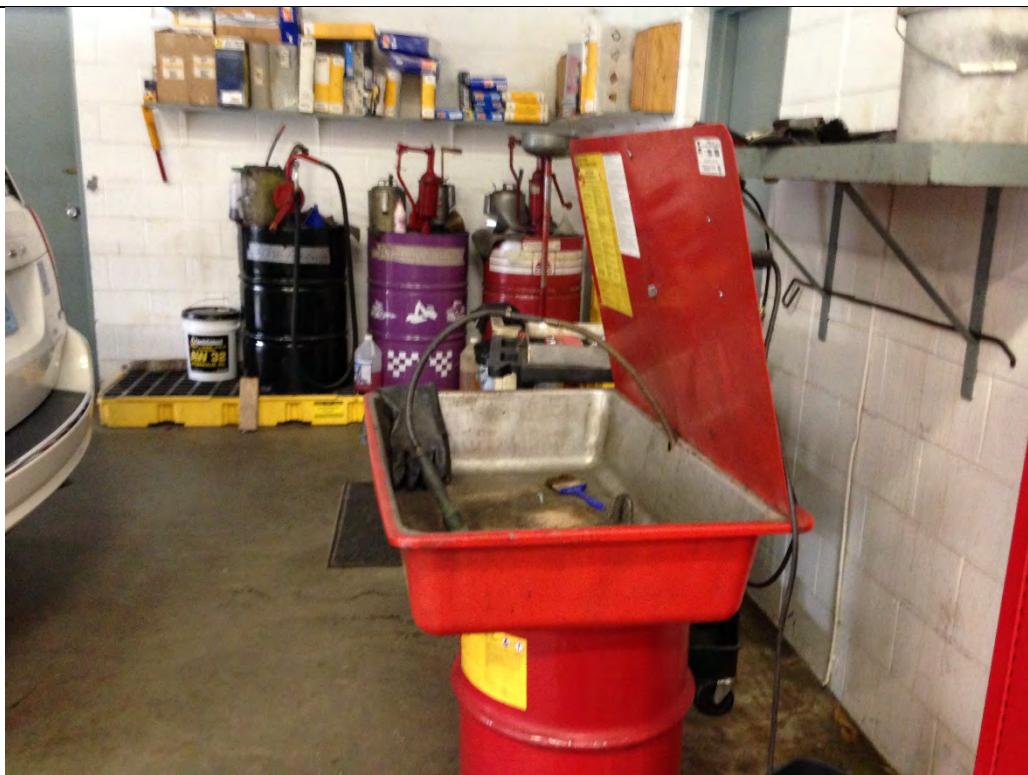


Photo 37-3 Parts washer and new motor oil drums on spill pallets within vehicle maintenance bays in Building 50



Photo 37-4 Small chemical and parts storage associated with vehicle maintenance in Building 50



Photo 38-1 Air compressor storage in lower level of Building 30



Photo 38-2 55-gallon drum of air compressor oil: Roland 32-weight Anti-Wear (AW) by Drydene Oil Company. Drydene was purchased by Castrol in 1991, thus this drum is at least 26-years old. Some indication of minor spills associated with this drum, as evident by oil-dry on floor.

Attachment B – Envirosite Database Search



Government Records Report | 2017

Order Number: 13052

Report Generated: 06/16/2017

Project Name: Central Virginia Training Center
Project Number: 17-772

Central Virginia Training Center
Route 334
Madison Heights, VA 24572

1175 Post Road East
Westport, CT 06880
Toll Free: 866-211-2028
www.envirositecorp.com

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Envirosite corporation has conducted a search of all reasonably ascertainable records in accordance with EPA's AAI (40 CFR Part 312) requirements and the ASTM E-1527-13 Environmental Site Assessments standard.

SUBJECT PROPERTY INFORMATION:

ADDRESS:

Central Virginia Training Center
Route 334
Madison Heights, VA 24572

COORDINATES:

Latitude (North):	37.410621 - 37°24'38.2"
Longitude (West):	-79.117949 - -79°7'4.6"
Universal Transverse Mercator:	Zone 17N
UTM X (Meters):	666560.62
UTM Y (Meters):	4142087.71

ELEVATION:

Elevation: 720.932 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH SUBJECT PROPERTY:

Subject Property Map: 37079d1 KELLY, VA
Most Recent Revision: 2016

Subject Property Map: 37079d2 LYNCHBURG, VA
Most Recent Revision: 2016

Executive Summary by Distance

2017

<u>MAP ID</u>	<u>SITE NAME</u>	<u>ADDRESS</u>	<u>DATABASE(S)</u>	<u>RELATIVE ELEVATION</u>	<u>DIRECTION / DISTANCE</u>
A1	CENTRAL VIRGINIA TRAINING CENTER	510 COLONY DRIVE	PCD - VA, SPILLS - VA		SP
2	110020865839	LYNCHBURG TRAINING SCHO...	FRS		SP
A3	SSO - CENTRAL VIRGINIA TRAINING C...	MANHOLE OFF RT 1013	PCD - VA, SPILLS - VA		SP
A4	SSO - MANHOLE IN WOODS BEHIND B...	CENTRAL VIRGINIA TRAINING...	PCD - VA, SPILLS - VA		SP
A5	CENTRAL VIRGINIA TRAINING CENTER	CENTRAL VIRGINIA TRAINING...	PCD - VA, SPILLS - VA		SP
A6	CENTRAL VA TRAINING CENTER	521 COLONY ROAD	LPT - VA		SP
A7	CENTRAL VIRGINIA TRAINING CENTER	521 COLONY ROAD	AFS, AST - VA, DOCKET, ECHO, FRS, LPT - VA, RCRA_LQG, SWF/LF - VA, UST - VA		SP
8	CHARLES THOMPSON PROPERTY	126 SUNSET DR	LPT - VA	Higher	NNW / 0.061 mi.
B9	LINDY HACKETT	121 LILLY LANE	Archived SPILLS - VA	Lower	SSW / 0.096 mi.
B10	LINDY R HACKET, JR	121 LILLY LANE	Archived SPILLS - VA	Lower	SSW / 0.096 mi.
11	FISHER AUTO PARTS INC	48265 AMHERST HWY	ECHO, FRS, RCRA_CESQG	Lower	W / 0.096 mi.
12	OVERLOOK PROPERTY	100 OVERLOOK DR	UST - VA	Higher	S / 0.105 mi.
13	COMMERCIAL STEEL ERECTION; INC	288 RAGLAND ROAD	UST - VA	Higher	NNE / 0.147 mi.
C14	LYNCHBURG FOUNDRY - LOWER BASI...	GARNETT ST AT CONCORD RD	AST - VA, UST - VA	Lower	WSW / 0.178 mi.
C15	LYNCHBURG FOUNDRY LOWER BASIN	GARNET ST & CONCORD TUR...	RCRA_NONGEN	Lower	WSW / 0.178 mi.
C16	LYNCHBURG PLANT	GARNETT ST AT CONCORD RD	LPT - VA	Lower	WSW / 0.178 mi.
D17	MEAD PUMP STATION	CONCORD TURNPIKE	LPT - VA	Lower	SW / 0.184 mi.
18	TRI COUNTY BROADCASTING INC	239 RAGLAND RD	LPT - VA	Higher	NNE / 0.185 mi.
E19	ROCK-TENN COMPANY	1801 CONCORD TURNPIKE	RCRA_NONGEN	Lower	SW / 0.185 mi.
E20	SEVEN HILLS PAPERBOARD PROCESS ...	1801 CONCORD TPK	PCD - VA, SPILLS - VA	Lower	SW / 0.185 mi.
E21	ROCK-TENN COMPANY - TYREEANNA SITE	1801 CONCORD TURNPIKE	ENF - VA, SWF/LF - VA	Lower	SW / 0.185 mi.
E22	1801 CONCORD TURNPIKE - 160 GAL ...	1801 CONCORD TURNPIKE	PCD - VA, SPILLS - VA	Lower	SW / 0.185 mi.
E23	WESTROCK CONVERTING CO	1801 CONCORD TURNPIKE	AST - VA, UST - VA	Lower	SW / 0.185 mi.
E24	ROCK TENN LYNCHBURG MILL	1801 CONCORD TURNPIKE	LPT - VA	Lower	SW / 0.185 mi.
D25	LUBE OIL LEAKING FROM LOCOMOTIV...	2000 CONCORD TPK	PCD - VA, SPILLS - VA	Lower	SW / 0.187 mi.
D26	LUBE OIL LEAKING FROM LOCOMOTIV...	2000 CONCORD TPK	PCD - VA, SPILLS - VA	Lower	SW / 0.187 mi.
D27	LUBE OIL LEAK - CSX YARD	2000 CONCORD TURNPIKE	PCD - VA, SPILLS - VA	Lower	SW / 0.187 mi.
D28	DIESEL SPILL - CSX YARD LYNCHBURG	2000 CONCORD TURNPIKE	PCD - VA, SPILLS - VA	Lower	SW / 0.187 mi.
29	CSX EXCAVATION SITE	1900 BLOCK CONCORD TURNPIKE	PCD - VA, SPILLS - VA	Lower	SW / 0.188 mi.
30	DUMP SITE - VOLK, LLC, KAVANAUGH...	107 KAVANAUGH ROAD	PCD - VA, SPILLS - VA	Lower	ESE / 0.262 mi.
F31	SANITARY SEWER LINE CONNECTED ...	50 WASHINGTON ST	PCD - VA, SPILLS - VA	Lower	W / 0.282 mi.
G32	LYNCHBURG CSO AT GARNET ST	2151 CONCORD TURNPIKE	LPT - VA	Lower	SSW / 0.287 mi.
G33	WILLIAMS OIL COMPANY	2200 CONCORD TURNPIKE	AST - VA, LPT - VA, UST - VA	Lower	SSW / 0.304 mi.
G34	WILLIAMS OIL CO - LOWER BASIN	2200 CONCORD TURNPIKE	LPT - VA	Lower	SSW / 0.304 mi.
G35	WILLIAMS OIL CO. - LOWER BASIN	2200 CONCORD TURNPIKE	LPT - VA	Lower	SSW / 0.304 mi.
F36	FISH KILL & SSO - 1312 JEFFERSON STREET	1312 JEFFERSON STREET	PCD - VA, SPILLS - VA	Lower	W / 0.315 mi.
G37	JACKSON GEORGE RESIDENCE	2205 CONCORD TPKE	LPT - VA	Lower	SSW / 0.317 mi.

Executive Summary by Distance

2017

MAP ID	SITE NAME	ADDRESS	DATABASE(S)	RELATIVE ELEVATION	DIRECTION / DISTANCE
F38	18 HORSEFORD RD OVERFLOW	18 HORSEFORD RD	PCD - VA, SPILLS - VA	Lower	W / 0.329 mi.
H39	BANTON OWEN RESIDENCE	605 MAIN ST.	LPT - VA	Lower	WNW / 0.333 mi.
I40	SSO - FROM CSO 057	1300 BLOCK OF JEFFERSON ...	PCD - VA, SPILLS - VA	Lower	W / 0.337 mi.
H41	POSSIBLE ACM AT RESIDENTIAL DEMO...	240 ROCKY HILL RD	PCD - VA, SPILLS - VA	Lower	WNW / 0.337 mi.
H42	DEMO SITE - ACM	240 ROCKY HILL RD	PCD - VA, SPILLS - VA	Lower	WNW / 0.337 mi.
H43	HEATING OIL RELEASE - DEMO SITE	240 ROCKY HILL RD	PCD - VA, SPILLS - VA	Lower	WNW / 0.337 mi.
I44	CSO 057	1312/1348 JEFFERSON STREET	PCD - VA, SPILLS - VA	Lower	W / 0.346 mi.
I45	FISH KILL - JEFFERSON STREET ACROS...	1312/1348 JEFFERSON STREE...	PCD - VA, SPILLS - VA	Lower	W / 0.346 mi.
46	BURNING FECES IN A BUCKET - 450 M...	450 MAIN STREET	PCD - VA, SPILLS - VA	Higher	WNW / 0.396 mi.
47	CITYSCAPE LLC 1220 COMMERCE ST	1220 COMMERCE ST	LPT - VA	Lower	W / 0.415 mi.
48	HUD DEMOLITION PROJECT	234 ROCKY HILL RD	LPT - VA	Lower	WNW / 0.437 mi.
J49	SSO - FROM MANHOLE IN WOODS BE...	BEHIND 314 FLORIDA AVENUE	PCD - VA, SPILLS - VA	Lower	WSW / 0.452 mi.
50	VARNEY FOSTER RESIDENCE	2222 TULIP ST	LPT - VA	Higher	WSW / 0.467 mi.
J51	SSO - 318 FLORIDA AVENUE	318 FLORIDA AVENUE	PCD - VA, SPILLS - VA	Lower	WSW / 0.484 mi.
52	AUDREY TYREE RESIDENCE	98 CHURCH ST	LPT - VA	Higher	NW / 0.495 mi.
53	GRIFFIN PIPE PRODUCTS CO.	10 ADAMS STREET	BRS, CORRACTS, RCRA_LQG	Lower	WNW / 0.707 mi.

SUBJECT PROPERTY SEARCH RESULTS:

The subject property was identified in the following records. For more information on this property, see Map Findings section on page 16.

<u>SITE</u>	<u>DATABASE(S)</u>	<u>EPA ID</u>
CENTRAL VIRGINIA TRAINING CENTER 510 COLONY DRIVE MADISON HEIGHTS, VA 24572	PCD - VA, SPILLS - VA	N/A
110020865839 LYNCHBURG TRAINING SCHOOL AND HOSPITAL VA	FRS	N/A
SSO - CENTRAL VIRGINIA TRAINING CENTER MANHOLE OFF RT 1013 MADISON HEIGHTS, VA 24572	PCD - VA, SPILLS - VA	N/A
SSO - MANHOLE IN WOODS BEHIND BUILDING NO. 2 CENTRAL VIRGINIA TRAINING CENTER (CVTC) MADISON HEIGHTS, VA 24572	PCD - VA, SPILLS - VA	N/A
CENTRAL VIRGINIA TRAINING CENTER CENTRAL VIRGINIA TRAINING CENTER AMHERST, VA	PCD - VA, SPILLS - VA	N/A
CENTRAL VA TRAINING CENTER 521 COLONY ROAD MADISON HEIGHTS, VA 24572	LPT - VA	N/A
CENTRAL VIRGINIA TRAINING CENTER 521 COLONY ROAD MADISON HEIGHTS, VA 24572	AFS, AST - VA, DOCKET, ECHO, FRS, LPT - VA, RCRA_LQG, SWF/LF - VA, UST - VA	VAD988172227

SEARCH RESULTS:

FEDERAL RCRA CORRACTS FACILITIES LIST

CORRACTS: List of facilities where Resource Conservation and Recovery Act Corrective Action Program used to investigate and remediate hazardous releases

LOWER ELEVATION

<u>MAP ID</u>	<u>SITE NAME</u>	<u>SITE ADDRESS</u>	<u>DIRECTION/DISTANCE</u>	<u>PAGE</u>
53	GRIFFIN PIPE PRODUCTS CO.	10 ADAMS STREET	WNW / 0.707 mi.	174

FEDERAL RCRA GENERATORS LIST

RCRA_CESQG: Resource Conservation and Recovery Act listing of licensed conditionally exempt small quantity generators

LOWER ELEVATION

<u>MAP ID</u>	<u>SITE NAME</u>	<u>SITE ADDRESS</u>	<u>DIRECTION/DISTANCE</u>	<u>PAGE</u>
11	FISHER AUTO PARTS INC	48265 AMHERST HWY	W / 0.096 mi.	73

RCRA_NONGEN: Resource Conservation and Recovery Act listing of licensed non-generators

LOWER ELEVATION

<u>MAP ID</u>	<u>SITE NAME</u>	<u>SITE ADDRESS</u>	<u>DIRECTION/DISTANCE</u>	<u>PAGE</u>
C15	LYNCHBURG FOUNDRY LOWER BASIN ROCK-TENN COMPANY	GARNET ST & CONCORD TURNPIKE 1801 CONCORD TURNPIKE	WSW / 0.178 mi.	84
E19			SW / 0.185 mi.	94

STATE AND TRIBAL REGISTERED STORAGE TANK LISTS

AST - VA: Registered Aboveground Storage Tanks in Virginia

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
C14	LYNCHBURG FOUNDRY - LOWER BASIN PLANT	GARNETT ST AT CONCORD RD	WSW / 0.178 mi.	80
E23	WESTROCK CONVERTING CO	1801 CONCORD TURNPIKE	SW / 0.185 mi.	102

UST - VA: Registered Underground Storage Tanks in Virginia

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
12	OVERLOOK PROPERTY	100 OVERLOOK DR	S / 0.105 mi.	77
13	COMMERCIAL STEEL ERECTION; INC	288 RAGLAND ROAD	NNE / 0.147 mi.	77

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
C14	LYNCHBURG FOUNDRY - LOWER BASIN PLANT	GARNETT ST AT CONCORD RD	WSW / 0.178 mi.	80
E23	WESTROCK CONVERTING CO	1801 CONCORD TURNPIKE	SW / 0.185 mi.	102

STATE AND TRIBAL LEAKING STORAGE TANK LISTS

LPT - VA: Petroleum Storage tanks with known releases

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
8	CHARLES THOMPSON PROPERTY	126 SUNSET DR	NNW / 0.061 mi.	69
18	TRI COUNTY BROADCASTING INC	239 RAGLAND RD	NNE / 0.185 mi.	93
50	VARNEY FOSTER RESIDENCE	2222 TULIP ST	WSW / 0.467 mi.	170
52	AUDREY TYREE RESIDENCE	98 CHURCH ST	NW / 0.495 mi.	173

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
C16	LYNCHBURG PLANT	GARNETT ST AT CONCORD RD	WSW / 0.178 mi.	92
D17	MEAD PUMP STATION	CONCORD TURNPIKE	SW / 0.184 mi.	92
E24	ROCK TENN LYNCHBURG MILL	1801 CONCORD TURNPIKE	SW / 0.185 mi.	108
G32	LYNCHBURG CSO AT GARNET ST	2151 CONCORD TURNPIKE	SSW / 0.287 mi.	129
G33	WILLIAMS OIL COMPANY	2200 CONCORD TURNPIKE	SSW / 0.304 mi.	130
G34	WILLIAMS OIL CO - LOWER BASIN	2200 CONCORD TURNPIKE	SSW / 0.304 mi.	136
G35	WILLIAMS OIL CO. - LOWER BASIN	2200 CONCORD TURNPIKE	SSW / 0.304 mi.	137
G37	JACKSON GEORGE RESIDENCE	2205 CONCORD TPKE	SSW / 0.317 mi.	141
H39	BANTON OWEN RESIDENCE	605 MAIN ST.	WNW / 0.333 mi.	145
47	CITYSCAPE LLC 1220 COMMERCE ST	1220 COMMERCE ST	W / 0.415 mi.	166
48	HUD DEMOLITION PROJECT	234 ROCKY HILL RD	WNW / 0.437 mi.	167

STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

SWF/LF - VA: State Landfill locations

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
E21	ROCK-TENN COMPANY - TYREEANNA SITE	1801 CONCORD TURNPIKE	SW / 0.185 mi.	98

Executive Summary by Database

2017

RECORDS OF EMERGENCY RELEASE REPORTS

ARCHIVED SPILLS - VA: The VA Department of Environment Quality's Pollution Response Program responses to air, water, and waste pollution incidents prior to October 2009.

LOWER ELEVATION

<u>MAP ID</u>	<u>SITE NAME</u>	<u>SITE ADDRESS</u>	<u>DIRECTION/DISTANCE</u>	<u>PAGE</u>
B9	LINDY HACKETT	121 LILLY LANE	SSW / 0.096 mi.	70
B10	LINDY R HACKET, JR	121 LILLY LANE	SSW / 0.096 mi.	72

PCD - VA: The pollution control database is Virginia's version of the spills listing

EQUAL/HIGHER ELEVATION

<u>MAP ID</u>	<u>SITE NAME</u>	<u>SITE ADDRESS</u>	<u>DIRECTION/DISTANCE</u>	<u>PAGE</u>
46	BURNING FECES IN A BUCKET - 450 MAIN STREET	450 MAIN STREET	WNW / 0.396 mi.	163

LOWER ELEVATION

<u>MAP ID</u>	<u>SITE NAME</u>	<u>SITE ADDRESS</u>	<u>DIRECTION/DISTANCE</u>	<u>PAGE</u>
E20	SEVEN HILLS PAPERBOARD PROCESS WATER OVERFLOW	1801 CONCORD TPK	SW / 0.185 mi.	95
E22	1801 CONCORD TURNPIKE - 160 GAL ETHOSYLADPE	1801 CONCORD TURNPIKE	SW / 0.185 mi.	99
D25	LUBE OIL LEAKING FROM LOCOMOTIVE - CSX YARD	2000 CONCORD TPK	SW / 0.187 mi.	109
D26	LUBE OIL LEAKING FROM LOCOMOTIVE - CSX YARD MP 172	2000 CONCORD TPK	SW / 0.187 mi.	111
D27	LUBE OIL LEAK - CSX YARD	2000 CONCORD TURNPIKE	SW / 0.187 mi.	114
D28	DIESEL SPILL - CSX YARD LYNCHBURG	2000 CONCORD TURNPIKE	SW / 0.187 mi.	116
29	CSX EXCAVATION SITE	1900 BLOCK CONCORD TURNPIKE	SW / 0.188 mi.	119
30	DUMP SITE - VOLK, LLC, KAVANAUGH ROAD	107 KAVANAUGH ROAD	ESE / 0.262 mi.	122
F31	SANITARY SEWER LINE CONNECTED TO STORM DRAIN	50 WASHINGTON ST	W / 0.282 mi.	125
F36	FISH KILL & SSO - 1312 JEFFERSON STREET	1312 JEFFERSON STREET	W / 0.315 mi.	138
F38	18 HORSEFORD RD OVERFLOW	18 HORSEFORD RD	W / 0.329 mi.	142
I40	SSO - FROM CSO 057	1300 BLOCK OF JEFFERSON STREET	W / 0.337 mi.	145
H41	POSSIBLE ACM AT RESIDENTIAL DEMO SITE	240 ROCKY HILL RD	WNW / 0.337 mi.	148
H42	DEMO SITE - ACM	240 ROCKY HILL RD	WNW / 0.337 mi.	151
H43	HEATING OIL RELEASE - DEMO SITE	240 ROCKY HILL RD	WNW / 0.337 mi.	153
I44	CSO 057	1312/1348 JEFFERSON STREET	W / 0.346 mi.	156
I45	FISH KILL - JEFFERSON STREET ACROSS FROM ROCK TENN	1312/1348 JEFFERSON STREET ACROSS FROM ROCK TENN	W / 0.346 mi.	161
J49	SSO - FROM MANHOLE IN WOODS BEHIND 314 FLORIDA AVENUE	BEHIND 314 FLORIDA AVENUE	WSW / 0.452 mi.	168
J51	SSO - 318 FLORIDA AVENUE	318 FLORIDA AVENUE	WSW / 0.484 mi.	171

Following sites were unable to be mapped.

<u>SITE NAME:</u>	<u>ADDRESS, CITY, ZIP:</u>	<u>DATABASE(S):</u>
A G BOONE COMPANY	ROUTE 29 NORTH, MADISON HEIGHTS 24572	UST - VA
AMSTED IND-GRIFFIN PIPE PRODUCTS CO	THOMAS ROAD, MADISON HEIGHTS 24572	ARCHIVED RCRA TSDF, CORRACTS, Corrective Actions_2020, RCRA_NONGEN, RCRA_TSDF
BELL ATLANTIC	ROUTE 701, MADISON HEIGHTS 24572	UST - VA
BRYANT SALVAGE	OLD RECYCLING R..., MADISON HEIGHTS 24572	Archived SPILLS - VA
BUILDING LOT	100 BLOCK OF TO..., MADISON HEIGHTS 24572	Archived SPILLS - VA
BURLINGTON IND - LYNCHBURG TERMINAL	HWY 1301, MADISON HEIGHTS 24572	UST - VA
CHESAPEAKE & POTOMAC TELEPHONE CO	US RT 29 N, LYNCHBURG 24572	ECHO, FRS, RCRA_NONGEN
CONSTRUCTION SITE	100 BLOCK OF TO..., MADISON HEIGHTS 24572	Archived SPILLS - VA
DACAM CORP	HWY 766 & KINGS..., MADISON HEIGHTS 24572	ECHO, FRS, RCRA_NONGEN

Following sites were unable to be mapped. (cont.)

SITE NAME:	ADDRESS, CITY, ZIP:	DATABASE(S):
EARLY BIRD MARKET	HWY. 29 NORTH, MADISON HEIGHTS 24572	UST - VA
ELLIOTTS ONE HOUR CLEANERS	SEMINOLE SHOPPI..., MADISON HEIGHTS 24572	ECHO, FRS, RCRA_NONGEN
FISHER AUTO PARTS INC	RTE 29 NORTH, MADISON HEIGHTS 24572	RCRA_NONGEN
FOAM IN JAMES-AMHERST SIDE OF RIVER ...	RIVEREDGE PARK-AMHER..., MADISON HE...	PCD - VA, SPILLS - VA
GRIFFIN PIPE LANDFILL - AMHERST	THOMAS ROAD, MADISON HEIGHTS 24572	SWF/LF - VA
HOLIDAY INN TEXACO	U.S. 29 NORTH, MADISON HEIGHTS 24572	UST - VA
HUSS TRUCKING	ROUTE 29, MADISON HEIGHTS 24572	Archived SPILLS - VA
HYDRAULIC OIL RELEASE - STOWE LUMBER	EAST PERCH ROAD, MADISON HEIGHTS	PCD - VA, SPILLS - VA
JAMES & NANCY MCCRAY RESIDENCE	CORNER OF CRAB CREEK & E..., MONROE...	Archived SPILLS - VA
K MART #7136	US 29 NORTH, MADISON HEIGHTS 24572	ECHO, FRS, RCRA_NONGEN
KENAN TRANSPORT LLC	ROUTE 29, MADISON HEIGHTS	HMIRS (DOT)
LOT 15, NEW BETHEL ESTATES 3	15 NIKONHA LANE, SALT CREEK 24572	Archived SPILLS - VA
MADISON HEIGHTS LANDFILL	RIVERVIEW ROAD, MADISON HEIGHTS 24572	SWF/LF - VA
MILITARY SURPLUS STORE	HWY. 29 NORTH, MADISON HEIGHTS 24572	UST - VA
MVA WITH DIESEL RELEASE - MONACAN B...	MVA WITH DIESEL RELE..., MADISON HEIGHTS	PCD - VA, SPILLS - VA
OVERTURNED TRUCK	RT 29 SB BEFORE RT 2..., MADISON HEIGHTS	PCD - VA, SPILLS - VA
P&G OIL COMPANY INC	LAKEVIEW DR, MADISON HEIGHTS 24572	AST - VA
PHILLIPS 66 CO #24899	U.S. 29 NORTH, MADISON HEIGHTS 24572	UST - VA
SSO - MANHOLE IN FORCE MAIN	100 YARDS UPSTREAM O..., MADISON HEIGHTS	PCD - VA, SPILLS - VA
SW-MIXED CDD & TIRES RIVERSIDE PARK	ROCKY HILL RD., MADISON HEIGHTS	PCD - VA, SPILLS - VA
UNIVERSITY FIRESTONE INC	AMHERST PIKE, MADISON HEIGHTS 24572	UST - VA

DATABASE(S) WITH NO MAPPED SITES:

FEDERAL RCRA NON-CORRACTS TSD FACILITIES LIST

ARCHIVED RCRA TSDF	Archived Resource Conservation and Recovery Act: Treatment Storage and Disposal Facilities
RCRA_TSDF	Resource Conservation and Recovery Act: Treatment Storage and Disposal Facilities

FEDERAL CERCLIS LIST

CERCLIS_NFRAP	Comprehensive Environmental Response Compensation and Liability Act
CERCLIS-HIST	No Further Remedial Action Planned
FEDERAL FACILITY	Comprehensive Environmental Response Compensation and Liability Act
SEMS_8R_ACTIVE SITES	Federal Facility sites
SEMS_8R_ARCHIVED SITES	Sites on SEMS Active Site Inventory
	Sites on SEMS Archived Site Inventory

FEDERAL DELISTED NPL SITE LIST

DELISTED NPL	Delisted National Priority List
DELISTED PROPOSED NPL	Delisted proposed National Priority List
SEMS_DELETED NPL	Sites Deleted from National Priorities List

FEDERAL ERNS LIST

ERNS	Emergency Response Notification System
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FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES

FED_E_C	Engineering Controls
FED_I_C	Institutional Controls
RCRA_IC_EC	RCRA sites with Institutional and Engineering Controls
I_C - VA	Institutional Controls

FEDERAL NPL SITE LIST

NPL	National Priority List
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FEDERAL NPL SITE LIST (cont.)

NPL EPA R1 GIS	GIS for EPA Region 1 NPL
NPL EPA R6 GIS	GIS for EPA Region 6 NPL
NPL EPA R8 GIS	GIS for EPA Region 8 NPL
NPL EPA R9 GIS	GIS for EPA Region 9 NPL
NPL LIENS	National Priority List Liens
PART NPL	Part National Priority List
PROPOSED NPL	Proposed National Priority List
SEMS_FINAL_NPL	Sites included on the Final National Priorities List
SEMS_PROPOSED_NPL	Sites Proposed to be Added to the National Priorities List

FEDERAL RCRA GENERATORS LIST

RCRA_FULL_DETAIL	Resource Conservation and Recovery Act_Full detail
RCRA_SQG	Resource Conservation and Recovery Act_Small Quantity Generators

STATE AND TRIBAL REGISTERED STORAGE TANK LISTS

FEMA UST	FEMA Underground Storage Tanks
INDIAN UST R1	Underground Storage Tanks on Indian Land in EPA Region 1
INDIAN UST R10	Underground Storage Tanks on Indian Land in EPA Region 10
INDIAN UST R2	Underground Storage Tanks on Indian Land in EPA Region 2
INDIAN UST R4	Underground Storage Tanks on Indian Land in EPA Region 4
INDIAN UST R5	Underground Storage Tanks on Indian Land in EPA Region 5
INDIAN UST R6	Underground Storage Tanks on Indian Land in EPA Region 6
INDIAN UST R7	Underground Storage Tanks on Indian Land in EPA Region 7
INDIAN UST R8	Underground Storage Tanks on Indian Land in EPA Region 8
INDIAN UST R9	Underground Storage Tanks on Indian Land in EPA Region 9

RECORDS OF EMERGENCY RELEASE REPORTS

HMIRS (DOT)	Hazardous Materials Information Reporting Systems
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STATE AND TRIBAL LEAKING STORAGE TANK LISTS

INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land in EPA Region 1
INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land in EPA Region 10
INDIAN LUST R2	Leaking Underground Storage Tanks on Indian Land in EPA Region 2
INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land in EPA Region 4
INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land in EPA Region 5
INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land in EPA Region 6
INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land in EPA Region 7
INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land in EPA Region 8
INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land in EPA Region 9
PRO LUST - VA	Leaking Underground Storage Tanks
SWRO LPT - VA	Leaking Petroleum Storage Tanks
TRO LUST - VA	Leaking Underground Storage Tanks
VRO LUST - VA	Leaking Underground Storage Tanks

STATE AND TRIBAL VOLUNTARY CLEANUP SITES

ARCHIVED VRP - VA	Archived Voluntary Remediation Program
VRP - VA	Voluntary Remediation Program

OTHER ASCERTAINABLE RECORDS

CORRECTIVE ACTIONS_2020	Wastes - Hazardous Waste - Corrective Action
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LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES

DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Sites
INDIAN ODI R8	Open Dump Inventory
ODI	Open Dump Inventory
TRIBAL ODI	Indian Open Dump Inventory Sites

LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES

FED CDL	DOJ Clandestine Drug Labs
US HIST CDL	Historical Clandestine Drug Labs

LOCAL BROWNFIELD LISTS

FED BROWNFIELDS
TRIBAL BROWNFIELDS
BROWNFIELDS - VA

Federal Brownfields
Tribal Brownfields
Brownfield

LOCAL LAND RECORDS

LIENS 2

CERCLA Lien Information

OTHER ASCERTAINABLE RECORDS

BRS
CDC HAZDAT
COAL ASH DOE
COAL ASH EPA
COAL GAS
CONSENT (DECREES)
DOD
DOT OPS
ENOI
FA HWF
FEDLAND
FTTS
FTTS INSP
FUDS
ICIS
INDIAN RESERVATION
LEAD_SMELTER
LUCIS
MINES
MLTS
NPL AOC
OSHA
PADS
PCB TRANSFORMER
RAATS
RADINFO
RMP
ROD
SCRD DRYCLEANERS
SEMS_SMELTER
SSTS
TOSCA-CHEMICAL
TOSCA-PLANT
TRIS
UMTRA
AIRS - VA
CEDS - VA
DAYCARE - VA
DRYCLEANERS - VA
ENF - VA

Biennial Reporting Systems
Hazardous Substance Release and Health Effects Information
Coal Ash: Department of Energy
Coal Ash: Environmental Protection Agency
Coal Gas Plants
Superfund Consent Decree
Department of Defense
Department of Transportation Office of Pipeline Safety
Electronic Notice of Intent
Financial Assurance for Hazardous Waste Facilities
Federal Lands
FIFRA/TSCA Tracking System
FIFRA/TSCA Tracking System: Inspections
Formerly Used Defense Sites
Integrated Compliance Information System
Indian Reservations
Lead Smelter Sites
Land Use Control Information Systems
Mines
Material Licensing Tracking Systems
Areas related to NPL remediation sites
Occupational Safety & Health Administration
PCB Activity Database Systems
Polychlorinated Biphenyls Transformers
RCRA Administrative Action Tracking Systems
Radiation Information Systems
Risk Management Plans
Record of Decision
SCRD Drycleaners
Sites on SEMS Potential Smelter Activity
Section 7 Tracking Systems
Toxic Substance Control Act: Chemicals
Toxic Substance Control Act: Plants
Toxic Release Inventory Systems
Uranium Mill Tailing Sites
Air Permits
Comprehensive Environmental Data System
Child Care
Drycleaners
Enforcement Actions Data

Property Proximity Map

2017

SUBJECT NAME: Central Virginia Training Center
 ADDRESS: Route 334, Madison Heights, VA 24572
 LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
 ORDER #: 13052
 REPORT DATE: June 16, 2017

Subject Property
 Department of Defense (No Data)
 FEMA FloodZone 100

Equal/Higher Elevation
 Lower Elevation
 DFIRM Floodzone 100
 FEMA FloodZone 100

DFIRM Floodzone 500
 FEMA FloodZone 500
 Indian Reservation (No Data)

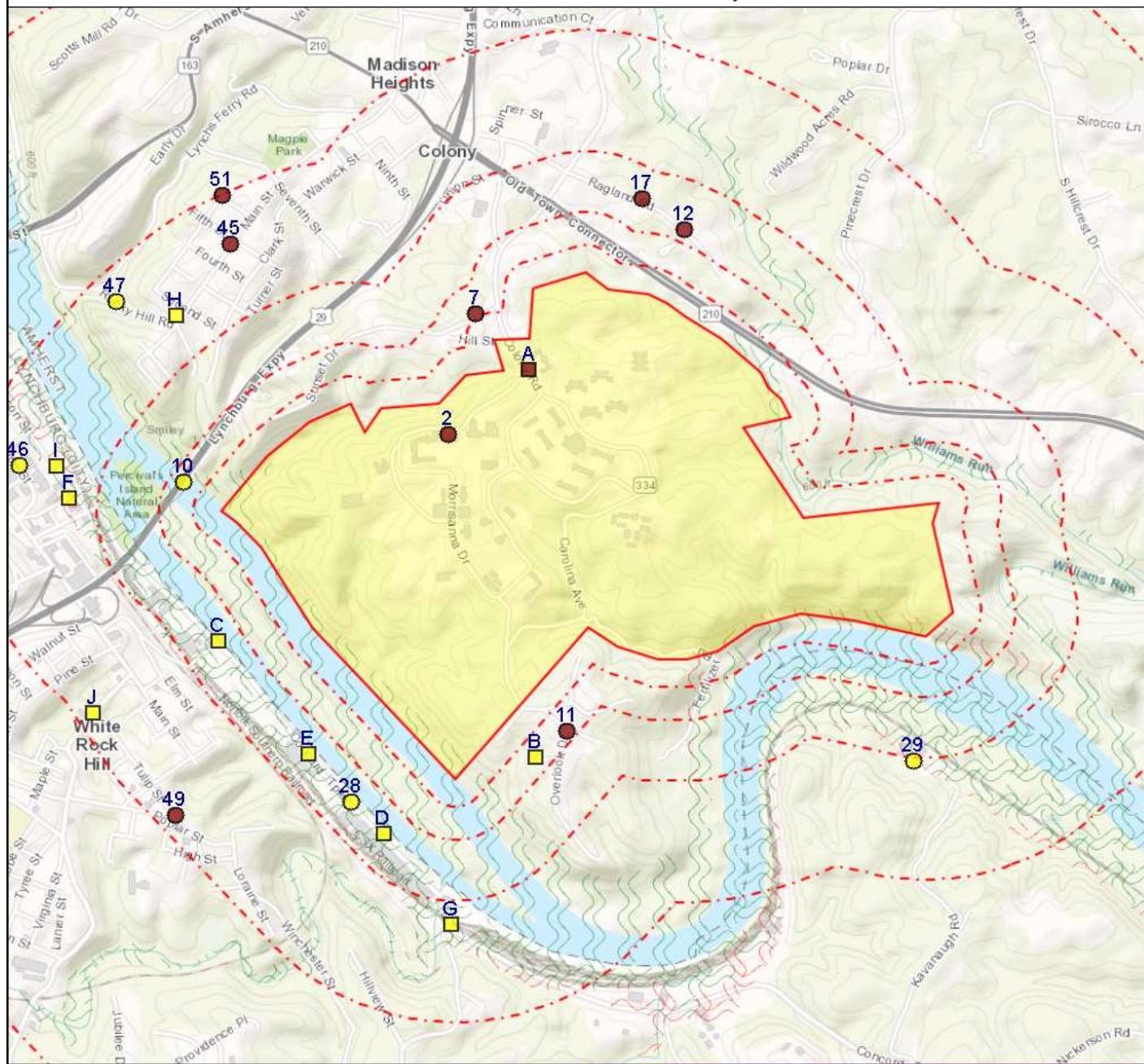
CDC HAZDAT (No Data)
 Federal Lands (No Data)
 National Priority List (No Data)

0.00 0.25 0.50 0.75 1.00 1.25 1.50
 Mile(s)

Page 10 of 309

SUBJECT NAME: Central Virginia Training Center
 ADDRESS: Route 334, Madison Heights, VA 24572
 LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
 ORDER #: 13052
 REPORT DATE: June 16, 2017



Subject Property

Department of Defense (No Data)

FEMA FloodZone 100

Equal/Higher Elevation

DFIRM Floodzone 100

FEMA FloodZone 500

Lower Elevation

DFIRM Floodzone 500

Indian Reservation (No Data)

CDC HAZDAT (No Data)

Federal Lands (No Data)

National Priority List (No Data)

<u>DATABASE</u>	<u>SUBJECT PROPERTY</u>	<u>SEARCH DISTANCE (MILES)</u>	<u><1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>>1</u>	<u>TOTAL MAPPED</u>
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FEDERAL RCRA NON-CORRACTS TSD FACILITIES LIST

ARCHIVED RCRA TSDF		0.500	0	0	0	--	--	0
RCRA_TSDF		0.500	0	0	0	--	--	0

FEDERAL CERCLIS LIST

CERCLIS NFRAP		0.500	0	0	0	--	--	0
CERCLIS-HIST		0.500	0	0	0	--	--	0
FEDERAL FACILITY		1.000	0	0	0	0	--	0
SEMS_8R_ACTIVE SITES		0.500	0	0	0	--	--	0
SEMS_8R_ARCHIVED SITES		0.500	0	0	0	--	--	0

FEDERAL RCRA CORRACTS FACILITIES LIST

CORRACTS		1.000	0	0	0	1	--	1
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FEDERAL DELISTED NPL SITE LIST

DELISTED NPL		1.000	0	0	0	0	--	0
DELISTED PROPOSED NPL		1.000	0	0	0	0	--	0
SEMS_DELETED NPL		1.000	0	0	0	0	--	0

FEDERAL ERNS LIST

ERNS		SP	--	--	--	--	--	0
------	--	----	----	----	----	----	----	---

FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES

FED E C		0.500	0	0	0	--	--	0
FED I C		0.500	0	0	0	--	--	0
RCRA IC_EC		0.250	0	0	--	--	--	0
I C - VA		0.500	0	0	0	--	--	0

FEDERAL NPL SITE LIST

NPL		1.000	0	0	0	0	--	0
NPL EPA R1 GIS		1.000	0	0	0	0	--	0
NPL EPA R6 GIS		1.000	0	0	0	0	--	0
NPL EPA R8 GIS		1.000	0	0	0	0	--	0
NPL EPA R9 GIS		1.000	0	0	0	0	--	0
NPL LIENS		SP	--	--	--	--	--	0
PART NPL		1.000	0	0	0	0	--	0
PROPOSED NPL		1.000	0	0	0	0	--	0
SEMS_FINAL NPL		1.000	0	0	0	0	--	0
SEMS_PROPOSED NPL		1.000	0	0	0	0	--	0

<u>DATABASE</u>	<u>SUBJECT PROPERTY</u>	<u>SEARCH DISTANCE (MILES)</u>	<u><1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>>1</u>	<u>TOTAL MAPPED</u>
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FEDERAL RCRA GENERATORS LIST

RCRA_CESQG		0.250	1	0	--	--	--	1
RCRA_FULL_DETAIL		0.250	0	0	--	--	--	0
RCRA_LQG	X	0.250	0	0	--	--	--	1
RCRA_NONGEN		0.250	0	2	--	--	--	2
RCRA_SQG		0.250	0	0	--	--	--	0

STATE AND TRIBAL REGISTERED STORAGE TANK LISTS

FEMA UST		0.250	0	0	--	--	--	0
INDIAN UST R1		0.250	0	0	--	--	--	0
INDIAN UST R10		0.250	0	0	--	--	--	0
INDIAN UST R2		0.250	0	0	--	--	--	0
INDIAN UST R4		0.250	0	0	--	--	--	0
INDIAN UST R5		0.250	0	0	--	--	--	0
INDIAN UST R6		0.250	0	0	--	--	--	0
INDIAN UST R7		0.250	0	0	--	--	--	0
INDIAN UST R8		0.250	0	0	--	--	--	0
INDIAN UST R9		0.250	0	0	--	--	--	0
AST - VA	X	0.250	0	2	--	--	--	3
UST - VA	X	0.250	1	3	--	--	--	5

RECORDS OF EMERGENCY RELEASE REPORTS

HMIRS (DOT)		SP	--	--	--	--	--	0
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STATE AND TRIBAL LEAKING STORAGE TANK LISTS

INDIAN LUST R1		0.500	0	0	0	--	--	0
INDIAN LUST R10		0.500	0	0	0	--	--	0
INDIAN LUST R2		0.500	0	0	0	--	--	0
INDIAN LUST R4		0.500	0	0	0	--	--	0
INDIAN LUST R5		0.500	0	0	0	--	--	0
INDIAN LUST R6		0.500	0	0	0	--	--	0
INDIAN LUST R7		0.500	0	0	0	--	--	0
INDIAN LUST R8		0.500	0	0	0	--	--	0
INDIAN LUST R9		0.500	0	0	0	--	--	0
LPT - VA	X	0.500	1	4	10	--	--	17
PRO LUST - VA		0.500	0	0	0	--	--	0
SWRO LPT - VA		0.500	0	0	0	--	--	0
TRO LUST - VA		0.500	0	0	0	--	--	0
VRO LUST - VA		0.500	0	0	0	--	--	0

<u>DATABASE</u>	<u>SUBJECT PROPERTY</u>	<u>SEARCH DISTANCE (MILES)</u>	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	<u>TOTAL MAPPED</u>
STATE AND TRIBAL VOLUNTARY CLEANUP SITES								
ARCHIVED VRP - VA		0.500	0	0	0	--	--	0
VRP - VA		0.500	0	0	0	--	--	0
STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS								
SWF/LF - VA	X	0.500	0	1	0	--	--	2
OTHER ASCERTAINABLE RECORDS								
CORRECTIVE ACTIONS_2020		0.500	0	0	0	--	--	0
LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES								
DEBRIS REGION 9		0.500	0	0	0	--	--	0
INDIAN ODI R8		0.500	0	0	0	--	--	0
ODI		0.500	0	0	0	--	--	0
TRIBAL ODI		0.500	0	0	0	--	--	0
LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES								
FED CDL		SP	--	--	--	--	--	0
US HIST CDL		SP	--	--	--	--	--	0
LOCAL BROWNFIELD LISTS								
FED BROWNFIELDS		0.500	0	0	0	--	--	0
TRIBAL BROWNFIELDS		0.500	0	0	0	--	--	0
BROWNFIELDS - VA		0.500	0	0	0	--	--	0
LOCAL LAND RECORDS								
LIENS 2		SP	--	--	--	--	--	0
RECORDS OF EMERGENCY RELEASE REPORTS								
ARCHIVED SPILLS - VA		0.125	2	--	--	--	--	2
PCD - VA	X	0.500	0	7	13	--	--	24
SPILLS - VA	X	0.125	0	--	--	--	--	4
OTHER ASCERTAINABLE RECORDS								
AFS	X	SP	--	--	--	--	--	1
BRS		SP	--	--	--	--	--	0
CDC HAZDAT		SP	--	--	--	--	--	0
COAL ASH DOE		0.500	0	0	0	--	--	0
COAL ASH EPA		0.500	0	0	0	--	--	0
COAL GAS		1.000	0	0	0	0	--	0
CONSENT (DECREES)		1.000	0	0	0	0	--	0

<u>DATABASE</u>	<u>SUBJECT PROPERTY</u>	<u>SEARCH DISTANCE (MILES)</u>	<u><1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>>1</u>	<u>TOTAL MAPPED</u>
OTHER ASCERTAINABLE RECORDS (cont.)								
DOD		1.000	0	0	0	0	--	0
DOT OPS		SP	--	--	--	--	--	0
ECHO	X	SP	--	--	--	--	--	1
ENOI		SP	--	--	--	--	--	0
FA HWF		SP	--	--	--	--	--	0
FEDLAND		1.000	0	0	0	0	--	0
FRS	X	SP	--	--	--	--	--	2
FTTS		SP	--	--	--	--	--	0
FTTS INSP		SP	--	--	--	--	--	0
FUDS		1.000	0	0	0	0	--	0
ICIS		SP	--	--	--	--	--	0
INDIAN RESERVATION		1.000	0	0	0	0	--	0
LEAD_SMELTER		SP	--	--	--	--	--	0
LUCIS		0.500	0	0	0	--	--	0
MINES		0.250	0	0	--	--	--	0
MLTS		SP	--	--	--	--	--	0
NPL AOC		1.000	0	0	0	0	--	0
OSHA		SP	--	--	--	--	--	0
PADS		SP	--	--	--	--	--	0
PCB TRANSFORMER		SP	--	--	--	--	--	0
RAATS		SP	--	--	--	--	--	0
RADINFO		SP	--	--	--	--	--	0
RMP		0.500	0	0	0	--	--	0
ROD		1.000	0	0	0	0	--	0
SCRD DRYCLEANERS		0.250	0	0	--	--	--	0
SEMS_SMELTER		SP	--	--	--	--	--	0
SSTS		SP	--	--	--	--	--	0
TOSCA-CHEMICAL		SP	--	--	--	--	--	0
TOSCA-PLANT		SP	--	--	--	--	--	0
TRIS		SP	--	--	--	--	--	0
UMTRA		0.500	0	0	0	--	--	0
AIRS - VA		SP	--	--	--	--	--	0
CEDS - VA		SP	--	--	--	--	--	0
DAYCARE - VA		SP	--	--	--	--	--	0
DRYCLEANERS - VA		0.250	0	0	--	--	--	0
ENF - VA		SP	--	--	--	--	--	0

Map Id: A1
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
510 COLONY DRIVE
MADISON HEIGHTS, VA 24572
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21815845
EPA ID: N/R

PCD - VA

Incident Date :	11/10/2014
Call Received Date :	11/10/2014
Closure Date :	12/18/2014
Closure Comments :	5 day letter received
Site Summary :	N/R
Reference ID :	30239
IR Number :	2015-L-1152
Facility Name :	CVTC maintains lines, Amherst County collector, goes to City of Lynchburg
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Water
Incident Subtype :	Point Source, Water
Materials :	N/R
Effect to Receptor :	N/R
Water Body :	James River
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	blockage in line (likely rags)
Corrective Action Taken :	contractor hired to clean out line
Weather Status :	Dry
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	Y
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Call Reported by Name :	Richard Hall
Call Reported by Company Name :	Central Virginia Training Center
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	sewage
Original Call Location Description :	Central Virginia Training Center property Blackwater Trail access on Amherst County side of James River

Map Id: A1
 Direction:
 Distance:
 Actual: Not Available
 Elevation:
 Relative:

Site Name :	CENTRAL VIRGINIA TRAINING CENTER 510 COLONY DRIVE MADISON HEIGHTS, VA 24572
Database(s) :	[PCD - VA, SPILLS - VA] (cont.)

Envirosite ID: 21815845
EPA ID: N/R

PCD - VA (**cont.**)

Original Call Incident Description : Mahole overflowing; caused by blockage in line (likely by rags)

SPILLS - VA

Incident Date :	11/10/2014
Call Received Date :	11/10/2014
Closure Date :	12/18/2014
IR Number :	2015-L-1152
Associated IR :	N/R
Reference ID :	30239
Status :	Closed
Facility Name :	CVTC maintains lines, Amherst County collector, goes to City of Lynchburg
Region :	South Central
Incident Type :	Water
Incident Subtype :	Point Source * Water
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	N/R
Effect to Receptor :	N/R
Water Body :	James River
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	blockage in line (likely rags)
Corrective Action Taken :	contractor hired to clean out line
Weather Status :	Dry
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	Mahole overflowing; caused by blockage in line (likely by rags)
Original Call Material Description :	sewage
Original Call Location Description :	Central Virginia Training Center property Blackwater Trail access on Amherst County side of James River
Incident Ongoing at Time of Call :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Permitted (Y/N) :	N
Call Reported by Name :	Richard Hall
Call Reported by Company Name :	Central Virginia Training Center
Call RP Company Name :	N/R

Map Id: A1
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
510 COLONY DRIVE
MADISON HEIGHTS, VA 24572
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815845
EPA ID: N/R

SPILLS - VA (*cont.*)

Call RP Name : N/R
Call Property Owner Company Name : N/R
Call Property Owner Name : N/R
Closure Comments : 5 day letter received
Site Summary : N/R

Map Id: 2
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : 110020865839
LYNCHBURG TRAINING SCHOOLAND
HOSPITAL
VA
Database(s) : [FRS]

Envirosite ID: 29453276
EPA ID: N/R

FRS

Registry ID : 110020865839

AQS contains ambient air pollution data collected by EPA, State, Local, and Tribal air pollution control agencies from thousands of monitoring stations.

Map Id: A3
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : SSO - CENTRAL VIRGINIA TRAINING
CENTER
MANHOLE OFF RT 1013
MADISON HEIGHTS, VA 24572
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21815863
EPA ID: N/R

PCD - VA

Incident Date : 07/29/2013
Call Received Date : 07/31/2013
Closure Date : 07/31/2013
Closure Comments : Plumbing contractor hired to clear line blockage. NFA

Site Summary : Mr. Carwile, Safety Officer with Central Virginia Training Center, called in a sewer overflow today at 3:13 p.m. The overflow has reached a small stream. Stream empties into James River. Plumbing contractor enroute to clear line blockage.

Reference ID : 20641
IR Number : 2014-L-0416
Facility Name : Central Virginia Training Ctr
Region : South Central

Map Id: A3
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : SSO - CENTRAL VIRGINIA TRAINING CENTER
MANHOLE OFF RT 1013
MADISON HEIGHTS, VA 24572
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815863
EPA ID: N/R

PCD - VA (*cont.*)

Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Water
Incident Subtype :	SSO, Water
Materials :	Sewage (1800-1800 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	1800
High Quantity to Water :	1800
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	2
Impacts :	SSO Reached Receiving Waters
Other Impacts :	N/R
Steps Taken :	Removed Blockage
Steps Taken Description :	N/R
System Components :	Manhole
Other System Components :	N/R
Cause of Event :	line blockage
Corrective Action Taken :	plumbing contractor hired to clear blockage
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	1800
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Call Reported by Name :	Reeve Carwile
Call Reported by Company Name :	CVTC
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	sewage
Original Call Location Description :	SSO - Central Virginia Training CenterManhole off Rt 1013Madison Heights
Original Call Incident Description :	Mr. Carwile, Safety Officer with Central Virginia Training Center, called in a sewer overflow today at 3:13 p.m. The overflow has reached a small stream.

SPILLS - VA

Incident Date :	07/29/2013
Call Received Date :	07/31/2013
Closure Date :	07/31/2013

Map Id: A3
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : SSO - CENTRAL VIRGINIA TRAINING CENTER
MANHOLE OFF RT 1013
MADISON HEIGHTS, VA 24572
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815863
EPA ID: N/R

SPILLS - VA (*cont.*)

IR Number :	2014-L-0416
Associated IR :	N/R
Reference ID :	20641
Status :	Closed
Facility Name :	Central Virginia Training Ctr
Region :	South Central
Incident Type :	Water
Incident Subtype :	SSO * Water
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Sewage (1800-1800 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	1800
High Quantity to Water :	1800
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	2
Impacts :	SSO Reached Receiving Waters
Other Impacts :	N/R
Steps Taken :	Removed Blockage
Steps Taken Description :	N/R
System Components :	Manhole
Other System Components :	N/R
Cause of Event :	line blockage
Corrective Action Taken :	plumbing contractor hired to clear blockage
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	1800
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	Mr. Carwile, Safety Officer with Central Virginia Training Center, called in a sewer overflow today at 3:13 p.m. The overflow has reached a small stream.
Original Call Material Description :	sewage
Original Call Location Description :	SSO - Central Virginia Training CenterManhole off Rt 1013Madison Heights
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Permitted (Y/N) :	Y
Call Reported by Name :	Reeve Carwile
Call Reported by Company Name :	CVTC
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	Plumbing contractor hired to clear line blockage. NFA

Map Id: A3
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : SSO - CENTRAL VIRGINIA TRAINING CENTER
MANHOLE OFF RT 1013
MADISON HEIGHTS, VA 24572
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815863
EPA ID: N/R

SPILLS - VA (*cont.*)

Site Summary :

Mr. Carwile, Safety Officer with Central Virginia Training Center, called in a sewer overflow today at 3:13 p.m. The overflow has reached a small stream. Stream empties into James River. Plumbing contractor enroute to clear line blockage.

Map Id: A4
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : SSO - MANHOLE IN WOODS BEHIND BUILDING NO. 2
CENTRAL VIRGINIA TRAINING CENTER (CVTC)
MADISON HEIGHTS, VA 24572
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21815873
EPA ID: N/R

PCD - VA

Incident Date :	10/12/2012
Call Received Date :	10/15/2012
Closure Date :	05/01/2013
Closure Comments :	Repairs completed - returned to compliance.

Site Summary :

Mr. Richard Hall, Plant Manager, called in a sewer overflow at The Central Va Training Center today at 11:30 a.m. There is a sewer manhole overflowing deep in the woods behind building No.2. The cause and volume is unknown at this time. There is a small branch located near the overflow; Mr. Hall indicated that he wasn't sure if the sewage had made it that far. Mr. Hall has a contractor setting up today to start work. He plans to call Monday with an update.

Reference ID :	16261
IR Number :	2013-L-0932
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Water
Incident Subtype :	SSO, Water
Materials :	Sewage (-1--1 Gallons)
Effect to Receptor :	Threatened
Water Body :	James River
Low Quantity to Water :	-1
High Quantity to Water :	-1
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R

Map Id: A4
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : SSO - MANHOLE IN WOODS BEHIND
BUILDING NO. 2
CENTRAL VIRGINIA TRAINING CENTER
(CVTC)
MADISON HEIGHTS, VA 24572

Envirosite ID: 21815873
EPA ID: N/R

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

PCD - VA (*cont.*)

Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	SSO Reached Public Land Only
Other Impacts :	N/R
Steps Taken :	Removed Blockage
Steps Taken Description :	N/R
System Components :	Manhole
Other System Components :	N/R
Cause of Event :	blocked sewer line
Corrective Action Taken :	contractor hired to do repairs
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	0
Unknown Discharge (Y/N) :	Y
Incident Ongoing at Time of Call :	Y
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Call Reported by Name :	Richard Hall
Call Reported by Company Name :	Central Virginia Training Center (CVTC)
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	sewage

Original Call Location Description :

SSO - Manhole in woods behind Building No. 2Central Virginia Training Center (CVTC)Madison Heights

Original Call Incident Description :

Mr. Richard Hall, Plant Manager, called in a sewer overflow at The Central Va Training Center today at 11:30 a.m. There is a sewer manhole overflowing deep in the woods behind building No.2. The cause and volume is unknown at this time. There is a small branch located near the overflow; Mr. Hall indicated that he wasn't sure if the sewage had made it that far. Mr. Hall has a contractor setting up today to start work. He plans to call Monday with an update.

SPILLS - VA

Incident Date :	10/12/2012
Call Received Date :	10/15/2012
Closure Date :	05/01/2013
IR Number :	2013-L-0932
Associated IR :	N/R
Reference ID :	16261
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Water
Incident Subtype :	SSO * Water

Map Id: A4
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : SSO - MANHOLE IN WOODS BEHIND
BUILDING NO. 2
CENTRAL VIRGINIA TRAINING CENTER
(CVTC)
MADISON HEIGHTS, VA 24572

Envirosite ID: 21815873
EPA ID: N/R

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

SPILLS - VA (*cont.*)

Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Sewage (-1--1 Gallons)
Effect to Receptor :	Threatened
Water Body :	James River
Low Quantity to Water :	-1
High Quantity to Water :	-1
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	SSO Reached Public Land Only
Other Impacts :	N/R
Steps Taken :	Removed Blockage
Steps Taken Description :	N/R
System Components :	Manhole
Other System Components :	N/R
Cause of Event :	blocked sewer line
Corrective Action Taken :	contractor hired to do repairs
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	0
Unknown Discharge (Y/N) :	Y

Original Call Incident Description :

Mr. Richard Hall, Plant Manager, called in a sewer overflow at The Central Va Training Center today at 11:30 a.m. There is a sewer manhole overflowing deep in the woods behind building No.2. The cause and volume is unknown at this time. There is a small branch located near the overflow; Mr. Hall indicated that he wasn't sure if the sewage had made it that far. Mr. Hall has a contractor setting up today to start work. He plans to call Monday with an update.

Original Call Material Description :	sewage
Original Call Location Description :	SSO - Manhole in woods behind Building No. 2Central Virginia Training Center (CVTC)Madison Heights
Incident Ongoing at Time of Call :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Permitted (Y/N) :	N
Call Reported by Name :	Richard Hall
Call Reported by Company Name :	Central Virginia Training Center (CVTC)
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	Repairs completed - returned to compliance.

Map Id: A4
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : SSO - MANHOLE IN WOODS BEHIND
BUILDING NO. 2
CENTRAL VIRGINIA TRAINING CENTER
(CVTC)
MADISON HEIGHTS, VA 24572

Envirosite ID: 21815873
EPA ID: N/R

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

SPILLS - VA (*cont.*)

Site Summary :

Mr. Richard Hall, Plant Manager, called in a sewer overflow at The Central Va Training Center today at 11:30 a.m. There is a sewer manhole overflowing deep in the woods behind building No.2. The cause and volume is unknown at this time. There is a small branch located near the overflow; Mr. Hall indicated that he wasn't sure if the sewage had made it that far. Mr. Hall has a contractor setting up today to start work. He plans to call Monday with an update.

Map Id: A5
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
CENTRAL VIRGINIA TRAINING CENTER
AMHERST, VA

Envirosite ID: 21815900
EPA ID: N/R

Database(s) : [PCD - VA, SPILLS - VA]

PCD - VA

Incident Date :	09/18/2010
Call Received Date :	09/29/2010
Closure Date :	10/14/2010

Closure Comments :	Closed following calls from G. Micklem, Amherst Co. Service Authority. No sewage issues involved - NFA.
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Site Summary :	boiler water released following explosion at plant. Erosion washed soil into river for a couple of days. Glenn Micklem, Amherst Co. Service Authority, checked their sewage infrastructure in area. No damage or defects found - No sewage release involved.
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Reference ID :	5933
IR Number :	2011-L-0826
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Drinking Water Supply
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Incident Type :	Water
Incident Subtype :	Point Source, Water
Materials :	N/R
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	-1
High Quantity to Water :	-1
Quantity Units :	Gallons
Other Receptors :	N/R

Map Id: A5
 Direction:
 Distance:
 Actual: Not Available
 Elevation:
 Relative:

Site Name :	CENTRAL VIRGINIA TRAINING CENTER CENTRAL VIRGINIA TRAINING CENTER AMHERST, VA
Database(s) :	[PCD - VA, SPILLS - VA] (cont.)

Envirosite ID: 21815900
EPA ID: N/R

PCD - VA (**cont.**)

RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Call Reported by Name :	Greg Anderson
Call Reported by Company Name :	DEQ BRRO R
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	N/R
Original Call Location Description :	Fertilizer Road
Original Call Incident Description :	Incident - James River Keeper (Dave Slight) thought was sewage; Glen Micklem ACSA thinks it came from the boiler explosion at CVTC

SPILLS - VA

Incident Date :	09/18/2010
Call Received Date :	09/29/2010
Closure Date :	10/14/2010
IR Number :	2011-L-0826
Associated IR :	N/R
Reference ID :	5933
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Water
Incident Subtype :	Point Source * Water
Threat to :	Drinking Water Supply
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Materials :	N/R
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	-1
High Quantity to Water :	-1
Quantity Units :	Gallons

Map Id: A5
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
CENTRAL VIRGINIA TRAINING CENTER
AMHERST, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815900
EPA ID: N/R

SPILLS - VA (*cont.*)

Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	Incident - James River Keeper (Dave Sligh) thought was sewage; Glen Micklem ACSA thinks it came from the boiler explosion at CVTC
Original Call Material Description :	N/R
Original Call Location Description :	Fertilizer Road
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Permitted (Y/N) :	N
Call Reported by Name :	Greg Anderson
Call Reported by Company Name :	DEQ BRRO R
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	Closed following calls from G. Micklem, Amherst Co. Service Authority. No sewage issues involved - NFA.
Site Summary :	boiler water released following explosion at plant. Erosion washed soil into river for a couple of days. Glenn Micklem, Amherst Co. Service Authority, checked their sewage infrastructure in area. No damage or defects found - No sewage release involved.

Map Id: A6
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [LPT - VA]

Envirosite ID: 24850964
EPA ID: N/R

LPT - VA

Release Reported :	05/13/1999
PC Number :	19991203
CEDS Facility ID :	200000082499
Case Status :	Closed
Case Closed Date :	07/30/1999
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	Y
Regulated Petroleum UST (1) :	N/R
Excluded UST (1) :	N/R
Deferred UST (1) :	N/R
Partially Deferred UST (1) :	N/R
Exempt 1 UST (2) :	N/R
Exempt 2 Heating Oil UST (2) :	N/R
Small Heating Oil AST (2) :	N/R
Regulated AST (3) :	N/R
Unregulated AST (3) :	N/R
Other (Y/N) :	N/R
Other Description :	N/R
Unknown (Y/N) :	N/R
Priority :	N/R
Suspect Confirm Indicator :	Suspected

Latitude :	37.4112176753281
Longitude :	-79.1225981967231

Release Reported :	03/18/1992
PC Number :	19921677
CEDS Facility ID :	200000082499
Case Status :	Closed
Case Closed Date :	08/10/1994
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	Y
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	3
Suspect Confirm Indicator :	Confirmed

Latitude :	37.4130039199006
Longitude :	-79.1180182476381

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT - VA, RCRA_LQG, SWF/LF - VA, UST - VA]

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS

Programmatic ID :	AIR VA0000005100900017
Facility Registry ID :	110020676053
Region Code :	03
County Code :	VA009
Primary SIC Code :	N/R
NAICS Code :	622110
NAICS Code Description :	N/R
D&B Number :	N/R
Facility Default Air Classification Code:	SMI
Facility Type of Ownership Code :	STF
Air CMS Category Code :	N/R
HPV Status :	N/R

Program Information

Activity Date :	07/12/2016
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	07/22/2016
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Activity Date : 07/12/2016

Air Program : State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	07/22/2016
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Activity Date :	05/26/2016
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	07/07/2016
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Activity Date : 05/26/2016

Air Program : State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	07/07/2016
Activity Type :	Inspection/Evaluation

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Group :	Compliance Monitoring
Activity Date :	02/26/2016
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	03/03/2016
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/12/2016
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	01/21/2016
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/12/2016
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	01/21/2016
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/13/2015
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	07/23/2015
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/13/2015
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	07/23/2015
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Date :	03/19/2015
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	03/31/2015
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/29/2015
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	03/31/2015
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/29/2015
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	Active
Activity Status Date :	03/31/2015
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/15/2014
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/15/2014
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Date :	04/10/2014
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/21/2014
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/21/2014
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	09/17/2013
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	09/17/2013
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Date :	08/27/2013
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/27/2013
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/18/2013
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/22/2013
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/22/2013
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Date :	10/01/2012
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/01/2012
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	09/13/2012
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	09/13/2012
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	06/11/2012
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Date :	08/01/2011
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/01/2011
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	05/03/2011
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/13/2011
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/13/2011
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
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(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Date :	07/14/2010
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/14/2010
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	06/16/2010
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	06/16/2010
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/22/2010
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/22/2010

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
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(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/03/2010
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/03/2010
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/17/2010
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/17/2010
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/19/2009
Air Program :	New Source Performance Standards

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
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(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/19/2009
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/20/2009
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/15/2009
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/08/2008
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/11/2008
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
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(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Group :	Compliance Monitoring
Activity Date :	02/11/2008
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/08/2008
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/01/2008
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/01/2008
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	09/12/2007
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
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(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Date :	09/12/2007
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/30/2007
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/30/2007
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/22/2007
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/22/2007
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
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(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Date :	08/07/2007
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/07/2007
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/11/2007
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/11/2007
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/13/2006
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/13/2006

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	09/01/2006
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	09/01/2006
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/23/2006
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/23/2006
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/27/2006

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/23/2006
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/23/2006
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/07/2005
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/07/2005
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/07/2005
Air Program :	New Source Performance Standards

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
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(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/07/2005
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	05/11/2005
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	05/11/2005
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/14/2005
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/10/2005
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
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(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/10/2005
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	11/10/2004
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	11/10/2004
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/04/2004
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/04/2004
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
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(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	05/14/2004
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/25/2004
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/08/2004
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	11/04/2003
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	11/04/2003
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
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(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Date :	07/17/2003
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/17/2003
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/09/2003
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/09/2003
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/27/2003
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/27/2003

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/06/2003
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/07/2003
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/07/2003
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/17/2002
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/17/2002

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/17/2002
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/17/2002
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/08/2002
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/08/2002
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/04/2002
Air Program :	New Source Performance Standards

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/04/2002
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/19/2002
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/19/2002
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/08/2002
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/08/2002
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/26/2001
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/26/2001
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/17/2001
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/16/2001
Air Program :	New Source Performance Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	10/16/2001
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/06/1999
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/21/1998
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	11/14/1997
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/01/1997
Air Program :	Stratospheric Ozone Protection
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	01/28/1997

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	11/13/1995
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	12/12/1994
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/27/1994
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	06/15/1993
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/03/1992
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/26/1991
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/02/1990
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	05/03/1989
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	08/03/1988

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	07/14/1987
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	04/10/1986
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	05/07/1985
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/13/1985
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AFS (cont.)

Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	02/24/1984
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	06/07/1983
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring
Activity Date :	03/09/1983
Air Program :	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Facility Air Operating Status Code :	OPR
Activity Status :	N/R
Activity Status Date :	N/R
Activity Type :	Inspection/Evaluation
Activity Group :	Compliance Monitoring

AST - VA

Facility ID :	7020931
Facility Type :	STATE
CEDS Facility ID :	200000082499
Region Code :	BRROL

Tank Information	
Tank Number :	70777D
Install Date :	12/01/1997
Date Closed :	N/R
Tank Status :	CURR IN USE

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AST - VA (cont.)

Tank Owner ID :	31748
Tank Type :	AST
Capacity :	90000
Federally Regulated Tank :	N
Contents :	HEATING OIL
Other Contents :	N/R

Tank Material Information

Tank Number :	70777D
Tank Owner ID :	31748
Tank Material Bare Steel :	Y
Tank Material Insulated Steel :	N
Tank Material Concrete Coated/Concrete Vault:	N
Tank Material Unknown :	N
Tank Material Other :	Y
Tank Material Other Notes :	Black Iron
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N
Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N
Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

Tank Information

Install Date :	07/20/1973
Date Closed :	11/30/1998
Tank Number :	77
Tank Status :	DISMANTLED
Tank Owner ID :	31748
Tank Type :	AST
Capacity :	100000
Federally Regulated Tank :	N
Contents :	FUEL OIL #6
Other Contents :	N/R

Tank Material Information

Tank Number :	77
Tank Owner ID :	31748
Tank Material Bare Steel :	Y
Tank Material Insulated Steel :	N

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

AST - VA (cont.)

Tank Material Concrete Coated/Concrete	
Vault:	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N
Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N
Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

DOCKET

Standard Industrial Classification(SIC) Summary

Enforcement Action Name :	CENTRAL VIRGINIA TRAINING CENTER
Primary SIC Code :	N/R
Primary SIC Description :	N/R
Primary NAICS Code :	622110
Primary NAICS Description :	N/R

Enforcement Action Name :	CENTRAL VIRGINIA TRAINING CENTER
Primary SIC Code :	N/R
Primary SIC Description :	N/R
Primary NAICS Code :	924110
Primary NAICS Description :	N/R

Enforcement Action Identifier :	03-2013-0090
Final Ordr Iss/Final Order Enter Date:	03/28/2013
Final Order Name :	CENTRAL VIRGINIA TRAINING CENTER MS4
Settlement FRS ICIS Facility ID :	3400023048
Final Order FRS Name :	CENTRAL VIRGINIA TRAINING CENTER
SEP Category :	N/R
SEP Description :	N/R

Complaint Summary

Respondent/Defendant Name :	CENTRAL VIRGINIA TRAINING CENTER
Named in Complaint :	N
Named in Final Order :	Y

Pollutant Summary

Pollutants (SRS) :	Oil & grease [polar]
--------------------	----------------------

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

DOCKET **(cont.)**

Pollutants (SRS) : Sediment

Violation and Enforcement Action Summary

Court Docket Number : CWA-03-2013-0090DN
Complaint/Proposed Order Actual Date: N/R
Final Ordr Iss/Final Order Enter Date: 03/28/2013
Admin EA Closed Actual Date : 03/28/2013
Enforcement Action Name : CENTRAL VIRGINIA TRAINING CENTER MS4
Enforcement Action Resolution : Final Order No Penalty

Violation Type : Violation Of A Permit Requirement

Statute Code : CWA
Law Section Code : 301/402
Law Section Description : NPDES Permit Violations

Statute Code : CWA
Law Section Code : 308
Law Section Description : Information Request, Records, Entry

Violation Penalties and Compliance Summary

Compliance Action Cost : 3000
EPA Penalty Assessed Amount : 0
Cost Recovery Required : N/R
Cost of SEP : 0
Cost of Complying Actions : N/R

ECHO

Last Inspection Date : 05/26/2016
Registry ID : 110020676053
FIPS Code : 51009
EPA Region : 03
Inspection Count : 1
Last Inspection Days : 304
Informal Count : 0
Last Informal Action Date : N/R
Formal Action Count : 1
Last Formal Action Date : 03/28/2013
Total Penalties : 0
Penalty Count : 0
Last Penalty Date : N/R
Last Penalty Amount : N/R
QTRS IN NC : 0
Programs IN SNC : 0
Current Compliance Status : No Violation

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

ECHO (cont.)

Three-Year Compliance Status :	N/R
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	N/R
Derived HUC :	02080203
Derived WBD :	N/R
Derived STCTY FIPS :	51009
Derived Zip :	24572
Derived CD113 :	06
Derived CB2010 :	510090105021015
MYRTK Universe :	NNY
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC Codes :	N/R
Facility NAICS Codes :	81232 622110
Facility Last Inspection EPA Date :	04/01/1997
Facility Last Inspection State Date :	05/26/2016
Facility Last Formal Act EPA Date :	03/28/2013
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N
US Mexico Border Flag :	N/R
Chesapeake Bay Flag :	N/R
AIR Flag :	Y
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

ECHO (cont.)

Active Flag : Y
NAA Flag : N/R
Latitude : 37.41528
Longitude : -79.12015

FRS

Registry ID : 110020676053

AFS contains compliance and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies.

The CEDS is the Virginia Department of Environmental Quality's (DEQ) electronic data system for maintaining data on sources of pollutants in all media.

AIR contains compliance and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies.

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

LPT - VA

Release Reported :	09/21/1999
PC Number :	20002032
CEDS Facility ID :	200000082499
Case Status :	Closed
Case Closed Date :	03/01/2001
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	Y
Regulated Petroleum UST (1) :	Y
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	3

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

LPT - VA (cont.)

Suspect Confirm Indicator : Confirmed

Latitude : 37.4111533036621
Longitude : -79.1227363261728

RCRA_LQG

Date form received by agency : 12/17/2015
Facility name : CENTRAL VIRGINIA TRAINING CENTER
Facility address : 521 COLONY ROAD, MADISON HEIGHTS VA 24572
EPA ID : VAD988172227
Mailing address : PO BOX 1098, LYNCHBURG VA 24505
Contact : REVE CARWILE, JR
Contact address : 521 COLONY ROAD, MADISON HEIGHTS VA 24572
Contact country : US
Contact telephone : 434-907-5396
Contact email : REVELY.CARWILE@DBHDS.VIRGINIA.GOV
EPA Region : 03
Land type : State
Source type : Notification
Classification : Large Quantity Generator

Description :

Handlers that generate 1,000 kg or more of hazardous waste during any calendar month; or generate more than 1 kg of acutely hazardous waste during any calendar month; or generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1 kg of acutely hazardous waste at any time; or generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Owner/Operator Summary :

Owner Operator name : COMMONWEALTH VIRGINIA MHRSAS
Owner Operator address : PO BOX 1797, RICHMOND VA 23214
Owner Operator country : N/R
Owner Operator telephone : 804-786-3926
Owner Operator Email : N/R
Owner Operator Fax : N/R
Legal status : State
Owner Operator Type : Owner
Owner/Op start date : N/R
Owner/Op end date : N/R

Owner Operator name : CENTRAL VIRGINIA TRAINING CENTER
Owner Operator address : N/R
Owner Operator country : US
Owner Operator telephone : N/R
Owner Operator Email : N/R
Owner Operator Fax : N/R
Legal status : State
Owner Operator Type : Operator

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

RCRA_LQG (cont.)

Owner/Op start date : 01/01/1910
Owner/Op end date : N/R

Owner Operator name : CENTRAL VIRGINIA TRAINING CENTER
Owner Operator address : 521 COLONY ROAD, MADISON HEIGHTS VA 24572
Owner Operator country : US
Owner Operator telephone : 434-947-6846
Owner Operator Email : N/R
Owner Operator Fax : N/R
Legal status : State
Owner Operator Type : Owner
Owner/Op start date : 01/01/1910
Owner/Op end date : N/R

Handler Activities Summary :

U.S. importer of hazardous waste : No
Mixed waste (haz. and radioactive) : No
Recycler of hazardous waste : No
Transporter of hazardous waste : No
Treater storer or disposer of HW : No
Underground injection activity : No
On-site burner exemption : No
Furnace exemption : No
Used oil fuel burner : No
Used oil processor : No
Used oil refiner : No
Used oil fuel marketer to burner : No
Used oil Specification marketer : No
Used oil transfer facility : No
Used oil transporter : No

Historical Generators :

Date form received by agency : 07/05/1990
Facility name : CENTRAL VA TRAINING CENTER
Classification : Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary :

Waste code : D002
Waste name : CORROSIVE WASTE

Facility has No violations / inspections reported.

Evaluation Action Summary :

Evaluation date : 09/16/2010
Evaluation : COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation : N/R
Date achieved compliance : N/R
Evaluation lead agency : State

SWF/LF - VA

Facility Operation Effective Date : 01/01/1996
Facility Operation Status : Closed
Landfill Type : RMW INCINERATOR [SW]

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

SWF/LF - VA (cont.)

Unit Effective Date :	01/01/1996
Unit Name :	Department Of Mental Health-Central Va. Training
Unit Status :	Closed
Permit Number :	PBR293
Regional Office :	South Central Regional Offi
Contact Name :	N/R
Telephone :	N/R

UST - VA

Facility ID :	7020931
Facility Type :	STATE
CEDS Facility ID :	200000082499
Region Code :	BRROL

Tank Information

Install Date :	12/14/1999
Date Closed :	N/R
Tank Number :	B31
Tank Status :	CURR IN USE
Tank Owner ID :	31748
Tank Type :	UST
Capacity :	1000
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	B31
Tank Owner ID :	31748
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	Y
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	12/14/1999
Date Closed :	N/R

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

UST - VA (cont.)

Tank Number :	B46
Tank Status :	CURR IN USE
Tank Owner ID :	31748
Tank Type :	UST
Capacity :	1000
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	B46
Tank Owner ID :	31748
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	Y
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	03/01/1995
Date Closed :	N/R
Tank Number :	B51
Tank Status :	CURR IN USE
Tank Owner ID :	31748
Tank Type :	UST
Capacity :	8000
Federally Regulated Tank :	Y
Contents :	GASOLINE
Other Contents :	N/R

Tank Material Information

Tank Number :	B51
Tank Owner ID :	31748
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	Y
Tank Material Concrete :	N
Tank Material Impressed Current :	N

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

UST - VA (cont.)

Tank Material Double Walled :	Y
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	10/01/1988
Date Closed :	N/R
Tank Number :	B47-7
Tank Status :	CURR IN USE
Tank Owner ID :	31748
Tank Type :	UST
Capacity :	1000
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	B47-7
Tank Owner ID :	31748
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	Y
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	10/01/1988
Date Closed :	N/R
Tank Number :	B65-8
Tank Status :	CURR IN USE
Tank Owner ID :	31748
Tank Type :	UST
Capacity :	1000

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

UST - VA (cont.)

Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	B65-8
Tank Owner ID :	31748
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	Y
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	04/11/1983
Date Closed :	12/09/1998
Tank Number :	R6-B31
Tank Status :	REM FROM GRD
Tank Owner ID :	31748
Tank Type :	UST
Capacity :	1000
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	R6-B31
Tank Owner ID :	31748
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

UST - VA (cont.)

Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	04/11/1972
Date Closed :	03/14/1995
Tank Number :	R1-B51
Tank Status :	REM FROM GRD
Tank Owner ID :	31748
Tank Type :	UST
Capacity :	10000
Federally Regulated Tank :	Y
Contents :	GASOLINE
Other Contents :	N/R

Tank Material Information

Tank Number :	R1-B51
Tank Owner ID :	31748
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	Y
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	04/11/1971
Date Closed :	12/18/1998
Tank Number :	G4-B46
Tank Status :	CLS IN GRD
Tank Owner ID :	31748
Tank Type :	UST
Capacity :	1000
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

UST - VA (cont.)

Tank Material Information

Tank Number :	G4-B46
Tank Owner ID :	31748
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	04/11/1968
Date Closed :	03/27/1995
Tank Number :	R3-B50
Tank Status :	REM FROM GRD
Tank Owner ID :	31748
Tank Type :	UST
Capacity :	2000
Federally Regulated Tank :	Y
Contents :	GASOLINE
Other Contents :	N/R

Tank Material Information

Tank Number :	R3-B50
Tank Owner ID :	31748
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Map Id: A7
Direction:
Distance:
Actual: Not Available
Elevation:
Relative:

Site Name : CENTRAL VIRGINIA TRAINING CENTER
521 COLONY ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [AFS, AST - VA, DOCKET, ECHO, FRS, LPT
- VA, RCRA_LQG, SWF/LF - VA, UST - VA]
(cont.)

Envirosite ID: 324246609
EPA ID: VAD988172227

UST - VA **(cont.)**

Tank Information

Install Date :	04/11/1961
Date Closed :	02/01/1991
Tank Number :	R2
Tank Status :	REM FROM GRD
Tank Owner ID :	31748
Tank Type :	UST
Capacity :	2000
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	R2
Tank Owner ID :	31748
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Map Id: 8
Direction: NNW
Distance: 0.061 mi.
Actual: 323.957 ft.
Elevation: 0.152 mi. / 802.001 ft.
Relative: Higher

Site Name : CHARLES THOMPSON PROPERTY
126 SUNSET DR
MADISON HEIGHTS, VA 24572
Database(s) : [LPT - VA]

Envirosite ID: 24832625
EPA ID: N/R

LPT - VA

Release Reported :	07/01/2013
PC Number :	20142004
CEDS Facility ID :	200000859896
Case Status :	Closed
Case Closed Date :	10/07/2013

Map Id: 8
Direction: NNW
Distance: 0.061 mi.
Actual: 323.957 ft.
Elevation: 0.152 mi. / 802.001 ft.
Relative: Higher

Site Name : CHARLES THOMPSON PROPERTY
126 SUNSET DR
MADISON HEIGHTS, VA 24572
Database(s) : [LPT - VA] (*cont.*)

Envirosite ID: 24832625
EPA ID: N/R

LPT - VA (*cont.*)

Region :	WCRO
Program :	RP Lead
Heating Oil Category :	Category 2
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	Y
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	2
Suspect Confirm Indicator :	Confirmed

Latitude : 37.4169991920778
Longitude : -79.1221159469426

Map Id: B9
Direction: SSW
Distance: 0.096 mi.
Actual: 505.962 ft.
Elevation: 0.132 mi. / 696.49 ft.
Relative: Lower

Site Name : LINDY HACKETT
121 LILLY LANE
MADISON HEIGHTS, VA 24572
Database(s) : [ARCHIVED SPILLS - VA]

Envirosite ID: 330020714
EPA ID: N/R

Archived SPILLS - VA

Closure Date :	10/04/2006
Incident Date :	09/15/2006
Call Received Date :	09/15/2006
IR Number :	2007-L-0079
Associated IR :	N/R
Reference ID :	N/R
Incident Type :	Air
Incident Subtype :	Air
Region :	South Central
Threat to :	N/R
Terrorism (Y/N) :	NO
Characterize Incident :	N/R
Materials :	Airborne Particulates(-1 - -1 Pound)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	Unknown

Map Id: B9
Direction: SSW
Distance: 0.096 mi.
Actual: 505.962 ft.
Elevation: 0.132 mi. / 696.49 ft.
Relative: Lower

Site Name : LINDY HACKETT
121 LILLY LANE
MADISON HEIGHTS, VA 24572
Database(s) : [ARCHIVED SPILLS - VA] (*cont.*)

Envirosite ID: 330020714
EPA ID: N/R

Archived SPILLS - VA (*cont.*)

RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	N/R
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	N/R
Discharge Type :	N/R
Discharge Volume :	N/R
Unknown Discharge (Y/N) :	NO

Original Call Incident Description :

Lindy Hackett, Madison Heights, VA resident, left a message on September 15, 2006 to report a complaint dealing with black soot and Rock Tenn Company. On September 18, 2006, Mr. Hackett complained that black soot has been gathering on his car, on his house, and inside his house. He reported that the soot was coming from the Rock Tenn Company. Mr. Hackett expressed a desire for Rock Tenn to pay him about \$500 for the clean-up of his house and vehicles. The vehicles he complained of becoming dirty by Rock Tenn were a white conversion van, a mobile camper, and a white Plymouth Sundance. Rock Tenn was contacted on September 18, 2006 and reported no malfunctions or changes in operation. Three samples of the alleged residue were collected on September 18, 2006; from the trunk of the Plymouth, from south-side of house siding, and from front siding of house. The samples were sent to The Office of Air Quality Planning and Monitoring for microscopic inspection. Analysis results of the samples were received via fax on October 4, 2006. The samples taken contained masses of mold, mold spores, stellate hairs, and paint pigment. It is assumed that Rock Tenn is not responsible for the black spots on the complainants house and cars.

Original Call Material Description :	Soot
Original Call Location Description :	Lindy Hackett-121 Lilly Lane-Madison Heights-VA-24572-Amherst County
Incident Ongoing at Time of Call :	N/R
Agencies Notified (Y/N) :	NO
Other Agencies :	N/R
Permitted (Y/N) :	NO
Call Reported by Name :	N/R
Call Reported by Company Name :	Lindy Hackett, Jr.
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Closure Summary :	See Site Summary for details

Site Summary : Mr. Hackett resident is across the river from Rock Tenn. About 4 years ago, Rock Tenn operated coal-fired boilers which often produced coal soot that was found on Mr. Hackett's property. Rock Tenn has since removed the coal-fired boilers and now mainly use natural gas and methane for fuel and burn no coal.

Map Id: B10
Direction: SSW
Distance: 0.096 mi.
Actual: 505.962 ft.
Elevation: 0.132 mi. / 696.49 ft.
Relative: Lower

Site Name : LINDY R HACKET, JR
121 LILLY LANE
MADISON HEIGHTS, VA 24572
Database(s) : [ARCHIVED SPILLS - VA]

Envirosite ID: 330020715
EPA ID: N/R

Archived SPILLS - VA

Closure Date :	02/05/2002
Incident Date :	N/R
Call Received Date :	01/30/2002
IR Number :	2002-L-0127
Associated IR :	N/R
Reference ID :	N/R
Incident Type :	Air
Incident Subtype :	Air
Region :	South Central
Threat to :	N/R
Terrorism (Y/N) :	NO
Characterize Incident :	N/R
Materials :	Airborne Particulates(-1 --1 Unknown)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	Rock-Tenn Corp
RP Name :	Henry Hendrickson
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	N/R
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	N/R
Discharge Type :	N/R
Discharge Volume :	N/R
Unknown Discharge (Y/N) :	NO
Original Call Incident Description :	Lives above the river overlooking Mead, Inc. For about a year and a half they have been fighting black soot. About 1.5 years ago, spoke with Lab Minerals (assigned a case number, 557874) and investigated. Found they were changing motors over (coal to gas?) and releasing soot. Can wash his vehicle and the next morning, the car is again covered in black soot.
Original Call Material Description :	Black soot
Original Call Location Description :	Lindy R Hacket, Jr-121 Lilly Lane-Madison Heights-VA-24572-Amherst County
Incident Ongoing at Time of Call :	N/R
Agencies Notified (Y/N) :	NO
Other Agencies :	N/R
Permitted (Y/N) :	YES
Call Reported by Name :	N/R
Call Reported by Company Name :	Lindy Hackett, Jr.
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R

Map Id: B10
Direction: SSW
Distance: 0.096 mi.
Actual: 505.962 ft.
Elevation: 0.132 mi. / 696.49 ft.
Relative: Lower

Site Name : LINDY R HACKET, JR
121 LILLY LANE
MADISON HEIGHTS, VA 24572
Database(s) : [ARCHIVED SPILLS - VA] (*cont.*)

Envirosite ID: 330020715
EPA ID: N/R

Archived SPILLS - VA (*cont.*)

Closure Summary :	See Site Summary for details
Site Summary :	Craig Nicol spoke with Mr. Hendrickson of Rock-Tenn on 1/31/02. Facility had coal feed problems on 1/20/02, and boiler steam load problems while switching boilers on 1/21, 1/22, and 1/23/02. Mr. Hendrickson will send employee to wash house and car for Mr. Hacket. During site visit, soot residue was observed on house, vehicles, and lawn furniture. Mr. Hacket will call Mr. Hendrickson.

Map Id: 11
Direction: W
Distance: 0.096 mi.
Actual: 509.009 ft.
Elevation: 0.094 mi. / 495.013 ft.
Relative: Lower

Site Name : FISHER AUTO PARTS INC
48265 AMHERST HWY
MADISON HEIGHTS, VA 24572
Database(s) : [ECHO, FRS, RCRA_CESQG]

Envirosite ID: 26858212
EPA ID: N/R

ECHO

Last Inspection Date :	09/13/2005
Registry ID :	110005289142
FIPS Code :	51009
EPA Region :	03
Inspection Count :	0
Last Inspection Days :	4212
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	0
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation
Three-Year Compliance Status :	N/R
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	OTHER
Accuracy Meters :	80
Derived Tribes :	N/R
Derived HUC :	02080203
Derived WBD :	020802030305
Derived STCTY FIPS :	51009
Derived Zip :	24572
Derived CD113 :	06
Derived CB2010 :	510090105021022
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R

Map Id: 11
Direction: W
Distance: 0.096 mi.
Actual: 509.009 ft.
Elevation: 0.094 mi. / 495.013 ft.
Relative: Lower

Site Name : FISHER AUTO PARTS INC
48265 AMHERST HWY
MADISON HEIGHTS, VA 24572
Database(s) : [ECHO, FRS, RCRA_CESQG] (*cont.*)

Envirosite ID: 26858212
EPA ID: N/R

ECHO (*cont.*)

CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC Codes :	N/R
Facility NAICS Codes :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	09/13/2005
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeake Bay Flag :	Y
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	N/R
Latitude :	37.4119
Longitude :	-79.1327

FRS

Registry ID : 110005289142

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

Map Id: 11
Direction: W
Distance: 0.096 mi.
Actual: 509.009 ft.
Elevation: 0.094 mi. / 495.013 ft.
Relative: Lower

Site Name : FISHER AUTO PARTS INC
48265 AMHERST HWY
MADISON HEIGHTS, VA 24572
Database(s) : [ECHO, FRS, RCRA_CESQG] (*cont.*)

Envirosite ID: 26858212
EPA ID: N/R

RCRA_CESQG

Date form received by agency :	09/20/2005
Facility name :	FISHER AUTO PARTS INC
Facility address :	48265 AMHERST HWY, MADISON HEIGHTS VA 24572
EPA ID :	VAR000012443
Mailing address :	48265 AMHERST HWY, MADISON HEIGHTS VA 24572
Contact :	TIM TRENT
Contact address :	48265 AMHERST HWY, MADISON HEIGHTS VA 24572
Contact country :	US
Contact telephone :	804-847-1043
Contact email :	N/R
EPA Region :	03
Land type :	Private
Source type :	Implementer
Classification :	Conditionally Exempt Small Quantity Generator

Description :

Handlers that generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

Owner/Operator Summary :

Owner Operator name :	FISHER AUTO PARTS INC
Owner Operator address :	PO BOX 2246, STAUNTON VA 24402-2246
Owner Operator country :	N/R
Owner Operator telephone :	540-885-8901
Owner Operator Email :	N/R
Owner Operator Fax :	N/R
Legal status :	Private
Owner Operator Type :	Owner
Owner/Op start date :	N/R
Owner/Op end date :	N/R

Handler Activities Summary :

U.S. importer of hazardous waste :	No
Mixed waste (haz. and radioactive) :	No
Recycler of hazardous waste :	No
Transporter of hazardous waste :	No
Treater storor or disposer of HW :	No
Underground injection activity :	No
On-site burner exemption :	No
Furnace exemption :	No
Used oil fuel burner :	No
Used oil processor :	No
Used oil refiner :	No
Used oil fuel marketer to burner :	No
Used oil Specification marketer :	No
Used oil transfer facility :	No
Used oil transporter :	No

Historical Generators :

Map Id: 11
Direction: W
Distance: 0.096 mi.
Actual: 509.009 ft.
Elevation: 0.094 mi. / 495.013 ft.
Relative: Lower

Site Name : FISHER AUTO PARTS INC
48265 AMHERST HWY
MADISON HEIGHTS, VA 24572
Database(s) : [ECHO, FRS, RCRA_CESQG] (*cont.*)

Envirosite ID: 26858212
EPA ID: N/R

RCRA_CESQG (*cont.*)

Date form received by agency : 11/02/1998
Facility name : FISHER AUTO PARTS INC
Classification : Small Quantity Generator

Hazardous Waste Summary :
Waste code : D001
Waste name : IGNITABLE WASTE

Waste code : D002
Waste name : CORROSIVE WASTE

Waste code : D006
Waste name : CADMIUM

Waste code : D008
Waste name : LEAD

Waste code : D018
Waste name : BENZENE

Waste code : D027
Waste name : 1,4-DICHLOROBENZENE

Waste code : D039
Waste name : TETRACHLOROETHYLENE

Waste code : D040
Waste name : TRICLORETHYLENE

Facility has No violations / inspections reported.

Evaluation Action Summary :
Evaluation date : 09/13/2005
Evaluation : FOCUSED COMPLIANCE INSPECTION
Area of violation : N/R
Date achieved compliance : N/R
Evaluation lead agency : State

Evaluation date : 09/13/2005
Evaluation : COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation : N/R
Date achieved compliance : N/R
Evaluation lead agency : State

Map Id: 12
Direction: S
Distance: 0.105 mi.
Actual: 554.981 ft.
Elevation: 0.137 mi. / 725.131 ft.
Relative: Higher

Site Name : OVERLOOK PROPERTY
100 OVERLOOK DR
MADISON HEIGHTS, VA 24572
Database(s) : [UST - VA]

Envirosite ID: 14456431
EPA ID: N/R

UST - VA

Facility ID : 7042222
Facility Type : COMMERCIAL
CEDS Facility ID : 200000857608
Region Code : BRROL

Tank Information

Install Date : N/R
Date Closed : 06/02/2012
Tank Number : 1
Tank Status : REM FROM GRD
Tank Owner ID : 36113
Tank Type : UST
Capacity : 500
Federally Regulated Tank : N
Contents : GASOLINE
Other Contents : N/R

Tank Material Information

Tank Number : 1
Tank Owner ID : 36113
Tank Material Asphalt/Bare Steel : N
Tank Material CCP/STI-P3 : N
Tank Material Composite : N
Tank Material Fiberglass : N
Tank Material Concrete : N
Tank Material Impressed Current : N
Tank Material Double Walled : N
Tank Material Lined Interior : N
Tank Material Excavation Liner : N
Tank Material Polyethylene Tank Jacket: N
Tank Material Secondary Containment : N
Tank Material Repaired : N
Tank Material Unknown : N
Tank Material Other : N
Tank Material Other Notes : N/R

Map Id: 13
Direction: NNE
Distance: 0.147 mi.
Actual: 777.218 ft.
Elevation: 0.137 mi. / 725.427 ft.
Relative: Higher

Site Name : COMMERCIAL STEEL ERECTION; INC
288 RAGLAND ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [UST - VA]

Envirosite ID: 14454913
EPA ID: N/R

UST - VA

Facility ID : 7008656
Facility Type : CONTRACTOR
CEDS Facility ID : 200000164305

Map Id: 13
Direction: NNE
Distance: 0.147 mi.
Actual: 777.218 ft.
Elevation: 0.137 mi. / 725.427 ft.
Relative: Higher

Site Name : COMMERCIAL STEEL ERECTION; INC
288 RAGLAND ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [UST - VA] (*cont.*)

Envirosite ID: 14454913
EPA ID: N/R

UST - VA (*cont.*)

Region Code : BRROL

Tank Information

Install Date :	04/22/1981
Date Closed :	11/05/1996
Tank Number :	R1
Tank Status :	REM FROM GRD
Tank Owner ID :	26858
Tank Type :	UST
Capacity :	2500
Federally Regulated Tank :	Y
Contents :	GASOLINE
Other Contents :	N/R

Tank Material Information

Tank Number :	R1
Tank Owner ID :	26858
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	04/22/1981
Date Closed :	11/05/1996
Tank Number :	R2
Tank Status :	REM FROM GRD
Tank Owner ID :	26858
Tank Type :	UST
Capacity :	2000
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	R2
Tank Owner ID :	26858
Tank Material Asphalt/Bare Steel :	Y

Map Id: 13
Direction: NNE
Distance: 0.147 mi.
Actual: 777.218 ft.
Elevation: 0.137 mi. / 725.427 ft.
Relative: Higher

Site Name : COMMERCIAL STEEL ERECTION; INC
288 RAGLAND ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [UST - VA] (*cont.*)

Envirosite ID: 14454913
EPA ID: N/R

UST - VA (*cont.*)

Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	04/22/1981
Date Closed :	11/05/1996
Tank Number :	R3
Tank Status :	REM FROM GRD
Tank Owner ID :	26858
Tank Type :	UST
Capacity :	2000
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	R3
Tank Owner ID :	26858
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Map Id: C14
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG FOUNDRY - LOWER BASIN PLANT
GARNETT ST AT CONCORD RD
LYNCHBURG, VA 24505
Database(s) : [AST - VA, UST - VA]

Envirosite ID: 13221322
EPA ID: N/R

AST - VA

Facility ID : 7006931
Facility Type : INDUSTRIAL
CEDS Facility ID : 200000081685
Region Code : BRROL

Tank Information

Install Date : 01/01/1992
Date Closed : N/R
Tank Number : 1
Tank Status : CURR IN USE
Tank Owner ID : 39523
Tank Type : AST
Capacity : 15000
Federally Regulated Tank : N
Contents : FUEL OIL
Other Contents : N/R

Tank Material Information

Tank Number : 1
Tank Owner ID : 39523
Tank Material Bare Steel : Y
Tank Material Insulated Steel : N
Tank Material Concrete Coated/Concrete
Vault: N
Tank Material Unknown : N
Tank Material Other : N
Tank Material Other Notes : N/R
Tank Type Cathodic/CP : N
Tank Type Single Wall : N
Tank Type Double Wall : N
Tank Type Lined Interior : N
Tank Type Double Bottom : N
Tank Type Portable/Skid : N
Tank Type Shop Fabricated/Built : N
Tank Type Vaulted Below Grade : N
Tank Type Vertical : N
Tank Type Horizontal : N
Tank Type Unknown : N
Tank Type Other : N
Tank Type Other Notes : N/R

UST - VA

Facility ID : 7006931
Facility Type : INDUSTRIAL
CEDS Facility ID : 200000081685
Region Code : BRROL

Tank Information

Install Date : 04/23/1978

Map Id: C14
 Direction: WSW
 Distance: 0.178 mi.
 Actual: 941.521 ft.
 Elevation: 0.095 mi. / 500.656 ft.
 Relative: Lower

Site Name : LYNCHBURG FOUNDRY - LOWER BASIN PLANT
 GARNETT ST AT CONCORD RD
 LYNCHBURG, VA 24505
Database(s) : [AST - VA, UST - VA] (**cont.**)

Envirosite ID: 13221322
EPA ID: N/R

UST - VA (**cont.**)

Date Closed :	03/01/1989
Tank Number :	R2
Tank Status :	REM FROM GRD
Tank Owner ID :	39523
Tank Type :	UST
Capacity :	1000
Federally Regulated Tank :	Y
Contents :	KEROSENE
Other Contents :	N/R

Tank Material Information

Tank Number :	R2
Tank Owner ID :	39523
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	04/23/1978
Date Closed :	03/01/1989
Tank Number :	R3
Tank Status :	REM FROM GRD
Tank Owner ID :	39523
Tank Type :	UST
Capacity :	2000
Federally Regulated Tank :	Y
Contents :	GASOLINE
Other Contents :	N/R

Tank Material Information

Tank Number :	R3
Tank Owner ID :	39523
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N

Map Id: C14
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG FOUNDRY - LOWER BASIN PLANT
GARNETT ST AT CONCORD RD
LYNCHBURG, VA 24505
Database(s) : [AST - VA, UST - VA] (**cont.**)

Envirosite ID: 13221322
EPA ID: N/R

UST - VA (**cont.**)

Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	04/23/1976
Date Closed :	N/R
Tank Number :	1
Tank Status :	PERM OUT OF USE
Tank Owner ID :	39523
Tank Type :	UST
Capacity :	20000
Federally Regulated Tank :	N
Contents :	HEATING OIL
Other Contents :	N/R

Tank Material Information

Tank Number :	1
Tank Owner ID :	39523
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	Y
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	04/23/1970
Date Closed :	N/R
Tank Number :	4
Tank Status :	PERM OUT OF USE
Tank Owner ID :	39523
Tank Type :	UST
Capacity :	10000
Federally Regulated Tank :	N

Map Id: C14
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG FOUNDRY - LOWER BASIN PLANT
GARNETT ST AT CONCORD RD
LYNCHBURG, VA 24505
Database(s) : [AST - VA, UST - VA] (**cont.**)

Envirosite ID: 13221322
EPA ID: N/R

UST - VA (**cont.**)

Contents :	HEATING OIL
Other Contents :	N/R

Tank Material Information

Tank Number :	4
Tank Owner ID :	39523
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	04/23/1966
Date Closed :	12/05/1988
Tank Number :	R5
Tank Status :	REM FROM GRD
Tank Owner ID :	39523
Tank Type :	UST
Capacity :	10000
Federally Regulated Tank :	Y
Contents :	UNKNOWN
Other Contents :	N/R

Tank Material Information

Tank Number :	R5
Tank Owner ID :	39523
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N

Map Id: C14
 Direction: WSW
 Distance: 0.178 mi.
 Actual: 941.521 ft.
 Elevation: 0.095 mi. / 500.656 ft.
 Relative: Lower

Site Name : LYNCHBURG FOUNDRY - LOWER BASIN PLANT
 GARNET ST AT CONCORD RD
 LYNCHBURG, VA 24505
Database(s) : [AST - VA, UST - VA] (**cont.**)

Envirosite ID: 13221322
EPA ID: N/R

UST - VA (**cont.**)

Tank Material Other :	N
Tank Material Other Notes :	N/R

Map Id: C15
 Direction: WSW
 Distance: 0.178 mi.
 Actual: 941.521 ft.
 Elevation: 0.095 mi. / 500.656 ft.
 Relative: Lower

Site Name : LYNCHBURG FOUNDRY LOWER BASIN
 GARNET ST & CONCORD TURNPIKE
 LYNCHBURG, VA 24505
Database(s) : [RCRA_NONGEN]

Envirosite ID: 14569610
EPA ID: VAD000820514

RCRA_NONGEN

Date form received by agency :	09/22/1999
Facility name :	LYNCHBURG FOUNDRY LOWER BASIN
Facility address :	GARNET ST & CONCORD TURNPIKE, LYNCHBURG VA 24505
EPA ID :	VAD000820514
Mailing address :	PO BOX 6200, LYNCHBURG VA 24505
Contact :	N/R
Contact address :	N/R
Contact country :	US
Contact telephone :	N/R
Contact email :	N/R
EPA Region :	03
Land type :	N/R
Source type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified

Handler Activities Summary :	
U.S. importer of hazardous waste :	No
Mixed waste (haz. and radioactive) :	No
Recycler of hazardous waste :	No
Transporter of hazardous waste :	No
Treater storer or disposer of HW :	No
Underground injection activity :	No
On-site burner exemption :	No
Furnace exemption :	No
Used oil fuel burner :	No
Used oil processor :	No
Used oil refiner :	No
Used oil fuel marketer to burner :	No
Used oil Specification marketer :	No
Used oil transfer facility :	No
Used oil transporter :	No

Historical Generators :	
Date form received by agency :	02/27/1996
Facility name :	INTERMET LOWER BASIN PLANT
Classification :	Large Quantity Generator

Map Id: C15
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG FOUNDRY LOWER BASIN
GARNET ST & CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [RCRA_NONGEN] (*cont.*)

Envirosite ID: 14569610
EPA ID: VAD000820514

RCRA_NONGEN (*cont.*)

Date form received by agency : 02/25/1994
Facility name : LYNCHBURG FOUNDRY LOWER BASIN
Classification : Large Quantity Generator

Date form received by agency : 02/25/1992
Facility name : LYNCHBURG FOUNDRY COMPANY LOWER BASIN
Classification : Large Quantity Generator

Date form received by agency : 03/01/1990
Facility name : INTERMET - LYNCHBURG FOUNDRY
Classification : Large Quantity Generator

Date form received by agency : 11/17/1980
Facility name : LYNCHBURG FOUNDRY LOWER BASIN
Classification : Not a generator, verified

Date form received by agency : 08/18/1980
Facility name : LYNCHBURG FOUNDRY LOWER BASIN
Classification : Large Quantity Generator

Facility Has Received Notices of Violations :

Regulation violated : Yes
Area of violation : LDR - General
Date violation : 02/06/1990
Date achieved compliance : 04/24/1990
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 04/12/1990
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - Pre-transport
Date violation : 10/07/1993
Date achieved compliance : 11/12/1993
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 10/07/1993
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - General

Map Id: C15
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG FOUNDRY LOWER BASIN
GARNET ST & CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [RCRA_NONGEN] (*cont.*)

Envirosite ID: 14569610
EPA ID: VAD000820514

RCRA_NONGEN (*cont.*)

Date violation :	07/26/1995
Date achieved compliance :	11/16/1998
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	09/13/1995
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	08/20/1998
Date achieved compliance :	11/16/1998
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	09/13/1995
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	08/20/1998
Date achieved compliance :	11/16/1998
Violation lead agency :	State
Enforcement action :	N/R
Enforcement action date :	N/R
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	N/R
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	10/15/1998
Date achieved compliance :	11/16/1998
Violation lead agency :	State
Enforcement action :	N/R
Enforcement action date :	N/R
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	N/R
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Map Id: C15
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG FOUNDRY LOWER BASIN
GARNET ST & CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [RCRA_NONGEN] (*cont.*)

Envirosite ID: 14569610
EPA ID: VAD000820514

RCRA_NONGEN (*cont.*)

Regulation violated :	Yes
Area of violation :	LDR - General
Date violation :	03/18/1991
Date achieved compliance :	06/03/1991
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	05/06/1991
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	LDR - General
Date violation :	03/18/1991
Date achieved compliance :	06/03/1991
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	04/30/1991
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	03/18/1991
Date achieved compliance :	06/03/1991
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	05/06/1991
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	03/18/1991
Date achieved compliance :	06/03/1991
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	04/30/1991
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State

Map Id: C15
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG FOUNDRY LOWER BASIN
GARNET ST & CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [RCRA_NONGEN] (*cont.*)

Envirosite ID: 14569610
EPA ID: VAD000820514

RCRA_NONGEN (*cont.*)

Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - General
Date violation : 03/02/1988
Date achieved compliance : 05/02/1988
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 03/22/1988
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - General
Date violation : 05/02/1988
Date achieved compliance : 06/08/1988
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 05/04/1988
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - General
Date violation : 06/17/1987
Date achieved compliance : 08/17/1987
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 07/01/1987
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - General
Date violation : 04/18/1984
Date achieved compliance : 10/24/1984
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 06/19/1984

Map Id: C15
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG FOUNDRY LOWER BASIN
GARNET ST & CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [RCRA_NONGEN] (*cont.*)

Envirosite ID: 14569610
EPA ID: VAD000820514

RCRA_NONGEN (*cont.*)

Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - General
Date violation : 01/31/1989
Date achieved compliance : 07/12/1989
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 02/10/1989
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Evaluation Action Summary :

Evaluation date : 02/06/1990
Evaluation : COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation : LDR - General
Date achieved compliance : 04/24/1990
Evaluation lead agency : State

Evaluation date : 10/07/1993
Evaluation : COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation : Generators - Pre-transport
Date achieved compliance : 11/12/1993
Evaluation lead agency : State

Evaluation date : 01/25/1999
Evaluation : NON-FINANCIAL RECORD REVIEW
Area of violation : N/R
Date achieved compliance : N/R
Evaluation lead agency : State

Evaluation date : 02/01/1999
Evaluation : NON-FINANCIAL RECORD REVIEW
Area of violation : N/R
Date achieved compliance : N/R
Evaluation lead agency : State

Evaluation date : 07/26/1995
Evaluation : COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation : Generators - General
Date achieved compliance : 11/16/1998

Map Id: C15
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG FOUNDRY LOWER BASIN
GARNET ST & CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [RCRA_NONGEN] (*cont.*)

Envirosite ID: 14569610
EPA ID: VAD000820514

RCRA_NONGEN (*cont.*)

Evaluation lead agency :	State
Evaluation date :	08/20/1998
Evaluation :	COMPLIANCE SCHEDULE EVALUATION
Area of violation :	Generators - General
Date achieved compliance :	11/16/1998
Evaluation lead agency :	State
Evaluation date :	08/20/1998
Evaluation :	COMPLIANCE SCHEDULE EVALUATION
Area of violation :	Generators - General
Date achieved compliance :	11/16/1998
Evaluation lead agency :	State
Evaluation date :	10/15/1998
Evaluation :	NON-FINANCIAL RECORD REVIEW
Area of violation :	Generators - General
Date achieved compliance :	11/16/1998
Evaluation lead agency :	State
Evaluation date :	03/18/1991
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	LDR - General
Date achieved compliance :	06/03/1991
Evaluation lead agency :	State
Evaluation date :	03/18/1991
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	LDR - General
Date achieved compliance :	06/03/1991
Evaluation lead agency :	State
Evaluation date :	03/18/1991
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - General
Date achieved compliance :	06/03/1991
Evaluation lead agency :	State
Evaluation date :	03/18/1991
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - General
Date achieved compliance :	06/03/1991
Evaluation lead agency :	State
Evaluation date :	03/02/1988
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - General
Date achieved compliance :	05/02/1988
Evaluation lead agency :	State

Map Id: C15
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG FOUNDRY LOWER BASIN
GARNET ST & CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [RCRA_NONGEN] (*cont.*)

Envirosite ID: 14569610
EPA ID: VAD000820514

RCRA_NONGEN (*cont.*)

Evaluation date :	05/02/1988
Evaluation :	COMPLIANCE SCHEDULE EVALUATION
Area of violation :	Generators - General
Date achieved compliance :	06/08/1988
Evaluation lead agency :	State
Evaluation date :	09/30/1991
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	06/17/1987
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - General
Date achieved compliance :	08/17/1987
Evaluation lead agency :	State
Evaluation date :	04/18/1984
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - General
Date achieved compliance :	10/24/1984
Evaluation lead agency :	State
Evaluation date :	06/14/1999
Evaluation :	NON-FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	01/31/1989
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - General
Date achieved compliance :	07/12/1989
Evaluation lead agency :	State

Map Id: C16
Direction: WSW
Distance: 0.178 mi.
Actual: 941.521 ft.
Elevation: 0.095 mi. / 500.656 ft.
Relative: Lower

Site Name : LYNCHBURG PLANT
GARNETT ST AT CONCORD RD
LYNCHBURG, VA 24505
Database(s) : [LPT - VA]

Envirosite ID: 30477516
EPA ID: N/R

LPT - VA

Release Reported :	08/09/1991
PC Number :	19920288
CEDS Facility ID :	200000081685
Case Status :	Closed
Case Closed Date :	02/20/2004
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	Y
Regulated Petroleum UST (1) :	Y
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	2
Suspect Confirm Indicator :	Confirmed

Latitude : 37.4067829342687
Longitude : -79.1322138156266

Map Id: D17
Direction: SW
Distance: 0.184 mi.
Actual: 971.638 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : MEAD PUMP STATION
CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [LPT - VA]

Envirosite ID: 30477211
EPA ID: N/R

LPT - VA

Release Reported :	04/20/1994
PC Number :	19943518
CEDS Facility ID :	200000206464
Case Status :	Closed
Case Closed Date :	09/29/1995
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N

Map Id: D17
Direction: SW
Distance: 0.184 mi.
Actual: 971.638 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : MEAD PUMP STATION
CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [LPT - VA] (*cont.*)

Envirosite ID: 30477211
EPA ID: N/R

LPT - VA (*cont.*)

Small Heating Oil AST (2) : N
Regulated AST (3) : N
Unregulated AST (3) : Y
Other (Y/N) : N
Other Description : N/R
Unknown (Y/N) : N
Priority : 3
Suspect Confirm Indicator : Confirmed

Latitude : 37.4010789757418
Longitude : -79.1250065278975

Map Id: 18
Direction: NNE
Distance: 0.185 mi.
Actual: 974.991 ft.
Elevation: 0.142 mi. / 747.277 ft.
Relative: Higher

Site Name : TRI COUNTY BROADCASTING INC
239 RAGLAND RD
MADISON HEIGHTS, VA 24572

Envirosite ID: 24832395
EPA ID: N/R

Database(s) : [LPT - VA]

LPT - VA

Release Reported : 12/09/2013
PC Number : 20142237
CEDS Facility ID : 200000873444
Case Status : Closed
Case Closed Date : 06/24/2014
Region : WCRO
Program : RP Lead
Heating Oil Category : Category 2
Federally Regulated UST : N
Regulated Petroleum UST (1) : N
Excluded UST (1) : N
Deferred UST (1) : N
Partially Deferred UST (1) : N
Exempt 1 UST (2) : N
Exempt 2 Heating Oil UST (2) : Y
Small Heating Oil AST (2) : N
Regulated AST (3) : N
Unregulated AST (3) : N
Other (Y/N) : N
Other Description : N/R
Unknown (Y/N) : N
Priority : 3
Suspect Confirm Indicator : Confirmed

Latitude : 37.4205790002384
Longitude : -79.1158479996584

Map Id: E19
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : ROCK-TENN COMPANY
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [RCRA_NONGEN]

Envirosite ID: 14570763
EPA ID: VAD980713150

RCRA_NONGEN

Date form received by agency :	02/19/2004
Facility name :	ROCK-TENN COMPANY
Facility address :	1801 CONCORD TURNPIKE, LYNCHBURG VA 24505
EPA ID :	VAD980713150
Mailing address :	1801 CONCORD TURNPIKE, LYNCHBURG VA 24505
Contact :	BURNELL T WOODSON, JR.
Contact address :	N/R
Contact country :	US
Contact telephone :	434-528-6428
Contact email :	N/R
EPA Region :	03
Land type :	Municipal
Source type :	Notification
Classification :	Not a generator, verified
Description :	Not a generator, verified

Owner/Operator Summary :	
Owner Operator name :	OPERNAME
Owner Operator address :	OPERSTREET, OPERCITY AK 99999
Owner Operator country :	N/R
Owner Operator telephone :	215-555-1212
Owner Operator Email :	N/R
Owner Operator Fax :	N/R
Legal status :	Private
Owner Operator Type :	Operator
Owner/Op start date :	N/R
Owner/Op end date :	N/R

Owner Operator name :	EDWARD M. MELTON
Owner Operator address :	N/R
Owner Operator country :	US
Owner Operator telephone :	N/R
Owner Operator Email :	N/R
Owner Operator Fax :	N/R
Legal status :	Municipal
Owner Operator Type :	Operator
Owner/Op start date :	06/07/1999
Owner/Op end date :	N/R

Owner Operator name :	ROCK-TENN CO.
Owner Operator address :	N/R
Owner Operator country :	US
Owner Operator telephone :	N/R
Owner Operator Email :	N/R
Owner Operator Fax :	N/R
Legal status :	Municipal
Owner Operator Type :	Owner
Owner/Op start date :	01/04/1988
Owner/Op end date :	N/R

Handler Activities Summary :	
U.S. importer of hazardous waste :	No
Mixed waste (haz. and radioactive) :	No
Recycler of hazardous waste :	No
Transporter of hazardous waste :	No

Map Id: E19
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : ROCK-TENN COMPANY
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [RCRA_NONGEN] (*cont.*)

Envirosite ID: 14570763
EPA ID: VAD980713150

RCRA_NONGEN (*cont.*)

Treater storer or disposer of HW : No
Underground injection activity : No
On-site burner exemption : No
Furnace exemption : No
Used oil fuel burner : No
Used oil processor : No
Used oil refiner : No
Used oil fuel marketer to burner : No
Used oil Specification marketer : No
Used oil transfer facility : No
Used oil transporter : No

Historical Generators :

Date form received by agency : 03/15/2001
Facility name : ROCK-TENN COMPANY
Classification : Large Quantity Generator

Date form received by agency : 07/01/1998
Facility name : ROCK-TENN CO
Classification : Large Quantity Generator

Date form received by agency : 05/20/1998
Facility name : ROCK-TENN PAPERBOARD
Classification : Large Quantity Generator

Date form received by agency : 05/30/1986
Facility name : ROCK-TENN PAPERBOARD
Classification : Small Quantity Generator

Facility has No violations / inspections reported.

Map Id: E20
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : SEVEN HILLS PAPERBOARD PROCESS
WATER OVERFLOW
1801 CONCORD TPK
LYNCHBURG, VA 24504
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 25031838
EPA ID: N/R

PCD - VA

Incident Date : 05/29/2015
Call Received Date : 06/01/2015
Closure Date : 09/17/2015
Closure Comments : Written documentation received. No further PREP action.

Map Id: E20
 Direction: SW
 Distance: 0.185 mi.
 Actual: 976.425 ft.
 Elevation: 0.095 mi. / 500.984 ft.
 Relative: Lower

Site Name : SEVEN HILLS PAPERBOARD PROCESS
 WATER OVERFLOW
 1801 CONCORD TPK
 LYNCHBURG, VA 24504
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 25031838
EPA ID: N/R

PCD - VA (*cont.*)

Site Summary :

R/P REPORTS SPILL OF APPROXIMATELY 2000-3000 GALLONS OF PROCESS WATER FROM A PAPER MACHINE; EFFLUENT WAS DISCHARGED INTO THE JAMES RIVER FOR APPROXIMATELY 15 MINUTES; THE PAPER PLANT IS UP RIVER FROM THE LYNCHBURG WATER TREATMENT, WATER TREATMENT AUTHORITY WAS NOTIFIED OF THE DISHCARGE. LEAK IS SECURED, PLANT PERSONNEL HAVE CLEANED UP REMAINDER. DILUTED CHEMICAL INCLUDE TRIPHENALMETHANE, VERONA BASIC GREEN CAS# 569-64-2, ACETIC ACID CAS#64-19-7,

Reference ID :	38782
IR Number :	2015-L-2938
Facility Name :	SEVEN HILLS PAPERBOARD
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Drinking Water Supply
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Incident Type :	N/R
Incident Subtype :	N/R
Materials :	Industrial Process Waste Water (2000-3000 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	2000
High Quantity to Water :	3000
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	Seven Hills Paperboard
RP Name :	Woodson, Burnell
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	Report Recevied by DEM; Lynchburg Water Treatment Plant Notified
Call Reported by Name :	BURNELL WOODSON
Call Reported by Company Name :	SEVEN HILLS PAPERBOARD
Call RP Company Name :	SEVEN HILLS PAPERBOARD
Call RP Name :	BURNELL WOODSON
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	Process Waste water

Map Id: E20
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : SEVEN HILLS PAPERBOARD PROCESS
WATER OVERFLOW
1801 CONCORD TPK
LYNCHBURG, VA 24504
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 25031838
EPA ID: N/R

PCD - VA (*cont.*)

Original Call Location Description : 1801 CONCORD TPK, LYNCHBURG VA

Original Call Incident Description :

R/P REPORTS SPILL OF APPROXIMATELY 2000-3000 GALLONS OF PROCESS WATER FROM A PAPER MACHINE; EFFLUENT WAS DISCHARGED INTO THE JAMES RIVER FOR APPROXIMATELY 15 MINUTES; THE PAPER PLANT IS UP RIVER FROM THE LYNCHBURG WATER TREATMENT, WATER TREATMENT AUTHORITY WAS NOTIFIED OF THE DISCHARGE. No Fish Kill.LEAK IS SECURED, PLANT PERSONNEL HAVE CLEANED UP REMAINDER. DILUTED CHEMICAL INCLUDE TRIPHENALMETHANE, VERONA BASIC GREEN CAS# 569-64-2, ACETIC ACID CAS#64-19-7,

SPILLS - VA

Incident Date :	05/29/2015
Call Received Date :	06/01/2015
Closure Date :	09/17/2015
IR Number :	2015-L-2938
Associated IR :	N/R
Reference ID :	38782
Status :	Closed
Facility Name :	SEVEN HILLS PAPERBOARD
Region :	South Central
Incident Type :	N/R
Incident Subtype :	N/R
Threat to :	Drinking Water Supply
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Materials :	Industrial Process Waste Water (2000-3000 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	2000
High Quantity to Water :	3000
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	Seven Hills Paperboard
RP Name :	Woodson, Burnell
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N

Map Id: E20
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : SEVEN HILLS PAPERBOARD PROCESS
WATER OVERFLOW
1801 CONCORD TPK
LYNCHBURG, VA 24504
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 25031838
EPA ID: N/R

SPILLS - VA (*cont.*)

Original Call Incident Description :

R/P REPORTS SPILL OF APPROXIMATELY 2000-3000 GALLONS OF PROCESS WATER FROM A PAPER MACHINE; EFFLUENT WAS DISCHARGED INTO THE JAMES RIVER FOR APPROXIMATELY 15 MINUTES; THE PAPER PLANT IS UP RIVER FROM THE LYNCHBURG WATER TREATMENT, WATER TREATMENT AUTHORITY WAS NOTIFIED OF THE DISCHARGE. No Fish Kill.LEAK IS SECURED, PLANT PERSONNEL HAVE CLEANED UP REMAINDER. DILUTED CHEMICAL INCLUDE TRIPHENALMETHANE, VERONA BASIC GREEN CAS# 569-64-2, ACETIC ACID CAS#64-19-7,

Original Call Material Description :	Process Waste water
Original Call Location Description :	1801 CONCORD TPK, LYNCHBURG VA
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	Report Recevied by DEM; Lynchburg Water Treatment Plant Notified
Permitted (Y/N) :	Y
Call Reported by Name :	BURNELL WOODSON
Call Reported by Company Name :	SEVEN HILLS PAPERBOARD
Call RP Company Name :	SEVEN HILLS PAPERBOARD
Call RP Name :	BURNELL WOODSON
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	Written documentation received. No further PREP action.

Site Summary :

R/P REPORTS SPILL OF APPROXIMATELY 2000-3000 GALLONS OF PROCESS WATER FROM A PAPER MACHINE; EFFLUENT WAS DISCHARGED INTO THE JAMES RIVER FOR APPROXIMATELY 15 MINUTES; THE PAPER PLANT IS UP RIVER FROM THE LYNCHBURG WATER TREATMENT, WATER TREATMENT AUTHORITY WAS NOTIFIED OF THE DISCHARGE. LEAK IS SECURED, PLANT PERSONNEL HAVE CLEANED UP REMAINDER. DILUTED CHEMICAL INCLUDE TRIPHENALMETHANE, VERONA BASIC GREEN CAS# 569-64-2, ACETIC ACID CAS#64-19-7,

Map Id: E21
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : ROCK-TENN COMPANY - TYREEANNA SITE
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [ENF - VA, SWF/LF - VA]

Envirosite ID: 25053291
EPA ID: N/R

ENF - VA

Effective Date :	05/26/2010
Entered Date :	N/R
Terminated Date :	08/29/2010
Superseded Date :	N/R
Amendment Effective Date :	N/R
Issued Date :	N/R
Final Orders :	Final Orders - Blue Ridge
Name :	Rock-Tenn Converting Company
EPA ID :	N/R
Registration Number :	N/R

Map Id: E21
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : ROCK-TENN COMPANY - TYREEANNA SITE
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [ENF - VA, SWF/LF - VA] (*cont.*)

Envirosite ID: 25053291
EPA ID: N/R

ENF - VA (*cont.*)

Permit Number :	511
Facility ID :	N/R
Issued to :	ROCK-TENN CONVERTING COMPANY
For :	N/R
AIR Registration Number :	N/R
Incident Report Number :	N/R
PDF Link :	Click here for hyperlink provided by the agency.

SWF/LF - VA

Facility Operation Effective Date :	12/20/1996
Facility Operation Status :	Post Closure
Landfill Type :	CLOSED INDUSTRIAL LANDFILL [SW]
Unit Effective Date :	12/20/1996
Unit Name :	Rock-Tenn-Tyreeanna ILF
Unit Status :	Post-Closure
Permit Number :	SWP511
Regional Office :	South Central Regional Offi
Contact Name :	Burnell Woodson
Telephone :	(434) 528-6428

Facility Operation Effective Date :	10/13/1991
Facility Operation Status :	Closed
Landfill Type :	CLOSED INDUSTRIAL LANDFILL [SW]
Unit Effective Date :	10/13/1991
Unit Name :	Rock-Tenn ILF
Unit Status :	Closed
Permit Number :	SWP232
Regional Office :	South Central Regional Offi
Contact Name :	Burnell Woodson
Telephone :	(434) 528-6428

Map Id: E22
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : 1801 CONCORD TURNPIKE - 160 GAL
ETHOSYLADE
1801 CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 31115754
EPA ID: N/R

PCD - VA

Incident Date :	09/01/2015
Call Received Date :	09/02/2015
Closure Date :	09/02/2015
Closure Comments :	No further PREP action is required.

Map Id: E22
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : 1801 CONCORD TURNPIKE - 160 GAL ETHOSYLAPDE
1801 CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 31115754
EPA ID: N/R

PCD - VA (*cont.*)

Site Summary :	CALLER STATED THAT AN ALCOHOL BASED PRODUCT 160 GAL ETHOSYLAPDE WAS RELEASED FROM A TOUT ON BOARD A TT.. PRODUCT ON GROUND PRODUCT CONTAINED WEL ON SCENE...EVENT AT 1801 CONCORD TURNPIKE...
Reference ID :	43649
IR Number :	2016-L-0652
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	N/R
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Waste
Incident Subtype :	Hazardous Waste
Materials :	N/R
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	Report received via EOC and City of Lynchburg
Call Reported by Name :	Todd Styles
Call Reported by Company Name :	Lynchburg
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	160 GAL ETHOSYLAPDE
Original Call Location Description :	1801 CONCORD TURNPIKE LYNCHBURG VA

Map Id: E22
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : 1801 CONCORD TURNPIKE - 160 GAL ETHOSYLPDE
1801 CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 31115754
EPA ID: N/R

PCD - VA (*cont.*)

Original Call Incident Description : 160 GAL ETHOSYLPDE WAS RELEASED FROM A TOUT ON BOARD A TT.. PRODUCT ON GROUND PRODUCT CONTAINED WEL ON SCENE

SPILLS - VA

Incident Date :	09/01/2015
Call Received Date :	09/02/2015
Closure Date :	09/02/2015
IR Number :	2016-L-0652
Associated IR :	N/R
Reference ID :	43649
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Waste
Incident Subtype :	Hazardous Waste
Threat to :	N/R
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	N/R
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N

Original Call Incident Description : 160 GAL ETHOSYLPDE WAS RELEASED FROM A TOUT ON BOARD A TT.. PRODUCT ON GROUND PRODUCT CONTAINED WEL ON SCENE

Original Call Material Description :	160 GAL ETHOSYLPDE
Original Call Location Description :	1801 CONCORD TURNPIKE LYNCHBURG VA
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	Report received via EOC and City of Lynchburg
Permitted (Y/N) :	N

Map Id: E22
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : 1801 CONCORD TURNPIKE - 160 GAL
ETHOSY LAPDE
1801 CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 31115754
EPA ID: N/R

SPILLS - VA (*cont.*)

Call Reported by Name : Todd Styles
Call Reported by Company Name : Lynchburg
Call RP Company Name : N/R
Call RP Name : N/R
Call Property Owner Company Name : N/R
Call Property Owner Name : N/R
Closure Comments : No further PREP action is required.

Site Summary : CALLER STATED THAT AN ALCOHOL BASED PRODUCT 160 GAL ETHOSY LAPDE WAS RELEASED FROM A TOUT ON BOARD A TT.. PRODUCT ON GROUND PRODUCT CONTAINED WEL ON SCENE...EVENT AT 1801 CONCORD TURNPIKE...

Map Id: E23
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : WESTROCK CONVERTING CO
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [AST - VA, UST - VA]

Envirosite ID: 340100520
EPA ID: N/R

AST - VA

Facility ID : 7001946
Facility Type : INDUSTRIAL
CEDS Facility ID : 200000083108
Region Code : BRROL

Tank Information

Install Date : 04/01/2001
Date Closed : N/R
Tank Number : 2-Jul
Tank Status : CURR IN USE
Tank Owner ID : 40201
Tank Type : AST
Capacity : 2000
Federally Regulated Tank : N
Contents : LUBE OIL
Other Contents : N/R

Tank Material Information

Tank Number : 2-Jul
Tank Owner ID : 40201
Tank Material Bare Steel : Y
Tank Material Insulated Steel : N
Tank Material Concrete Coated/Concrete
Vault: N

Map Id: E23
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : WESTROCK CONVERTING CO
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [AST - VA, UST - VA] (**cont.**)

Envirosite ID: 340100520
EPA ID: N/R

AST - VA (**cont.**)

Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N
Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N
Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

Tank Information

Install Date :	04/01/2001
Date Closed :	N/R
Tank Number :	5-Jul
Tank Status :	CURR IN USE
Tank Owner ID :	40201
Tank Type :	AST
Capacity :	5000
Federally Regulated Tank :	N
Contents :	LUBE OIL
Other Contents :	N/R

Tank Material Information

Tank Number :	5-Jul
Tank Owner ID :	40201
Tank Material Bare Steel :	Y
Tank Material Insulated Steel :	N
Tank Material Concrete Coated/Concrete	
Vault:	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N
Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N
Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

Map Id: E23
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : WESTROCK CONVERTING CO
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [AST - VA, UST - VA] (*cont.*)

Envirosite ID: 340100520
EPA ID: N/R

AST - VA (*cont.*)

Tank Information

Install Date :	01/01/1975
Date Closed :	N/R
Tank Number :	6
Tank Status :	DISMANTLED
Tank Owner ID :	40201
Tank Type :	AST
Capacity :	30000
Federally Regulated Tank :	N
Contents :	FUEL OIL
Other Contents :	N/R

Tank Material Information

Tank Number :	6
Tank Owner ID :	40201
Tank Material Bare Steel :	Y
Tank Material Insulated Steel :	N
Tank Material Concrete Coated/Concrete	
Vault:	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N
Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N
Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

Tank Information

Install Date :	01/01/1955
Date Closed :	N/R
Tank Number :	5CA
Tank Status :	DISMANTLED
Tank Owner ID :	40201
Tank Type :	AST
Capacity :	3000
Federally Regulated Tank :	N
Contents :	LUBE OIL
Other Contents :	N/R

Map Id: E23
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : WESTROCK CONVERTING CO
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [AST - VA, UST - VA] (*cont.*)

Envirosite ID: 340100520
EPA ID: N/R

AST - VA (*cont.*)

Tank Material Information

Tank Number :	5CA
Tank Owner ID :	40201
Tank Material Bare Steel :	Y
Tank Material Insulated Steel :	N
Tank Material Concrete Coated/Concrete	
Vault:	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N
Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N
Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

Tank Information

Install Date :	01/01/1955
Date Closed :	N/R
Tank Number :	5CB
Tank Status :	DISMANTLED
Tank Owner ID :	40201
Tank Type :	AST
Capacity :	3000
Federally Regulated Tank :	N
Contents :	LUBE OIL
Other Contents :	N/R

Tank Material Information

Tank Number :	5CB
Tank Owner ID :	40201
Tank Material Bare Steel :	Y
Tank Material Insulated Steel :	N
Tank Material Concrete Coated/Concrete	
Vault:	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N
Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N

Map Id: E23
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : WESTROCK CONVERTING CO
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [AST - VA, UST - VA] (**cont.**)

Envirosite ID: 340100520
EPA ID: N/R

AST - VA (**cont.**)

Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

UST - VA

Facility ID :	7001946
Facility Type :	INDUSTRIAL
CEDS Facility ID :	200000083108
Region Code :	BRROL

Tank Information

Install Date :	03/17/1995
Date Closed :	N/R
Tank Number :	1
Tank Status :	CURR IN USE
Tank Owner ID :	49204
Tank Type :	UST
Capacity :	500
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	1
Tank Owner ID :	36297
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Number :	1
Tank Owner ID :	49204
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	Y
Tank Material Composite :	N
Tank Material Fiberglass :	N

Map Id: E23
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : WESTROCK CONVERTING CO
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [AST - VA, UST - VA] (**cont.**)

Envirosite ID: 340100520
EPA ID: N/R

UST - VA (**cont.**)

Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	Y
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	06/26/1970
Date Closed :	05/01/1981
Tank Number :	1
Tank Status :	CLS IN GRD
Tank Owner ID :	36297
Tank Type :	UST
Capacity :	550
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	1
Tank Owner ID :	36297
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Number :	1
Tank Owner ID :	49204
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	Y
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	Y

Map Id: E23
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : WESTROCK CONVERTING CO
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [AST - VA, UST - VA] (*cont.*)

Envirosite ID: 340100520
EPA ID: N/R

UST - VA (*cont.*)

Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Map Id: E24
Direction: SW
Distance: 0.185 mi.
Actual: 976.425 ft.
Elevation: 0.095 mi. / 500.984 ft.
Relative: Lower

Site Name : ROCK TENN LYNCHBURG MILL
1801 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [LPT - VA]

Envirosite ID: 342395762
EPA ID: N/R

LPT - VA

Release Reported :	04/26/2005
PC Number :	20057079
CEDS Facility ID :	200000083108
Case Status :	Closed
Case Closed Date :	10/19/2010
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	N
Regulated AST (3) :	Y
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	2
Suspect Confirm Indicator :	Confirmed

Latitude :	37.402089175804
Longitude :	-79.1264612479905

Map Id: D25
 Direction: SW
 Distance: 0.187 mi.
 Actual: 986.962 ft.
 Elevation: 0.095 mi. / 501.312 ft.
 Relative: Lower

Site Name : LUBE OIL LEAKING FROM LOCOMOTIVE -
 CSX YARD
 2000 CONCORD TPK
 LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816435
EPA ID: N/R

PCD - VA

Incident Date : 04/15/2014
 Call Received Date : 04/15/2014
 Closure Date : 04/15/2014

Closure Comments : Leak contained, cleanup contractor enroute. No waters affected.
 Notification only - NFAReopened to add info from NRC report.

Site Summary : A CSX LOCOMOTIVE DRIPPED LUBE OIL ONTO THE BALLAST AT THE RAIL YARD....APPROXIMATELY 2 TO 3 GALLONS DRIPPED...W.E.L. ENROUTE FOR CLEAN UP AND TO PUMP REMAINING LUBE OIL FROM LOCOMOTIVE... NO WATER WAYS OR DRAINS IMPACTED.... NRC#1079810HMVA--5769*** NO HARD COPY ***

Reference ID :	26210
IR Number :	2014-L-2781
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Petroleum
Incident Subtype :	Petroleum, Surface Spill
Materials :	Oil (2-3 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	N
Other Agencies :	N/R
Call Reported by Name :	Edward Cook
Call Reported by Company Name :	CSX TRANSPORTATION

Map Id: D25
Direction: SW
Distance: 0.187 mi.
Actual: 986.962 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : LUBE OIL LEAKING FROM LOCOMOTIVE -
CSX YARD
2000 CONCORD TPK
LYNCHBURG, VA

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816435
EPA ID: N/R

PCD - VA (*cont.*)

Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	lube oil
Original Call Location Description :	Lube oil leaking from locomotive - CSX Yard2000 Concord TpkLynchburg
Original Call Incident Description :	A CSX LOCOMOTIVE DRIPPED LUBE OIL ONTO THE BALLAST AT THE RAIL YARD,...APPROXIMATELY 1 TO 2 GALLONS DRIPPED...W.E.L. ENROUTE FOR CLEAN UP AND TO PUMP REMAINING LUBE OIL FROM LOCOMOTIVE... NO WATER WAYS OR DRAINS IMPACTED....

SPILLS - VA

Incident Date :	04/15/2014
Call Received Date :	04/15/2014
Closure Date :	04/15/2014
IR Number :	2014-L-2781
Associated IR :	N/R
Reference ID :	26210
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Petroleum
Incident Subtype :	Petroleum * Surface Spill
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Oil (2-3 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N

Map Id: D25
 Direction: SW
 Distance: 0.187 mi.
 Actual: 986.962 ft.
 Elevation: 0.095 mi. / 501.312 ft.
 Relative: Lower

Site Name : LUBE OIL LEAKING FROM LOCOMOTIVE -
 CSX YARD
 2000 CONCORD TPK
 LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816435
EPA ID: N/R

SPILLS - VA (*cont.*)

Original Call Incident Description : A CSX LOCOMOTIVE DRIPPED LUBE OIL ONTO THE BALLAST AT THE RAIL YARD....APPROXIMATELY 1 TO 2 GALLONS DRIPPED...W.E.L. ENROUTE FOR CLEAN UP AND TO PUMP REMAINING LUBE OIL FROM LOCOMOTIVE... NO WATER WAYS OR DRAINS IMPACTED....

Original Call Material Description : lube oil
Original Call Location Description : Lube oil leaking from locomotive - CSX Yard2000 Concord TpkLynchburg
Incident Ongoing at Time of Call : N
Agencies Notified (Y/N) : N
Other Agencies : N/R
Permitted (Y/N) : N
Call Reported by Name : Edward Cook
Call Reported by Company Name : CSX TRANSPORTATION
Call RP Company Name : N/R
Call RP Name : N/R
Call Property Owner Company Name : N/R
Call Property Owner Name : N/R

Closure Comments : Leak contained, cleanup contractor enroute. No waters affected.
 Notification only - NFAReopened to add info from NRC report.

Site Summary : A CSX LOCOMOTIVE DRIPPED LUBE OIL ONTO THE BALLAST AT THE RAIL YARD....APPROXIMATELY 2 TO 3 GALLONS DRIPPED...W.E.L. ENROUTE FOR CLEAN UP AND TO PUMP REMAINING LUBE OIL FROM LOCOMOTIVE... NO WATER WAYS OR DRAINS IMPACTED.... NRC#1079810HMVA--5769*** NO HARD COPY ***

Map Id: D26
 Direction: SW
 Distance: 0.187 mi.
 Actual: 986.962 ft.
 Elevation: 0.095 mi. / 501.312 ft.
 Relative: Lower

Site Name : LUBE OIL LEAKING FROM LOCOMOTIVE -
 CSX YARD MP 172
 2000 CONCORD TPK
 LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816436
EPA ID: N/R

PCD - VA

Incident Date : 04/15/2014
Call Received Date : 04/15/2014
Closure Date : 06/05/2014
Closure Comments : Cleanup contractor enroute. No state waters affected. Notification only.

Site Summary : A CSX LOCOMOTIVE DRIPPED LUBE OIL ONTO THE BALLAST AT THE RAIL YARD....APPROXIMATELY 1 TO 2 GALLONS DRIPPED...W.E.L. ENROUTE FOR CLEAN UP AND TO PUMP REMAINING LUBE OIL FROM LOCOMOTIVE... NO WATER WAYS OR DRAINS IMPACTED.... NRC # 1076997; VDEM HMVA-5263

Map Id: D26
Direction: SW
Distance: 0.187 mi.
Actual: 986.962 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : LUBE OIL LEAKING FROM LOCOMOTIVE -
CSX YARD MP 172
2000 CONCORD TPK
LYNCHBURG, VA

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816436
EPA ID: N/R

PCD - VA (*cont.*)

Reference ID :	26209
IR Number :	2014-L-3298
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Petroleum
Incident Subtype :	Petroleum, Surface Spill
Materials :	Diesel (-1--1 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	N
Other Agencies :	N/R
Call Reported by Name :	Edward Cook
Call Reported by Company Name :	CSX TRANSPORTATION
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	lube oil
Original Call Location Description :	Lube oil leaking from locomotive - CSX Yard2000 Concord TpkLynchburg
Original Call Incident Description :	A CSX LOCOMOTIVE DRIPPED LUBE OIL ONTO THE BALLAST AT THE RAIL YARD....APPROXIMATELY 1 TO 2 GALLONS DRIPPED...W.E.L. ENROUTE FOR CLEAN UP AND TO PUMP REMAINING LUBE OIL FROM LOCOMOTIVE... NO WATER WAYS OR DRAINS IMPACTED....

Map Id: D26
 Direction: SW
 Distance: 0.187 mi.
 Actual: 986.962 ft.
 Elevation: 0.095 mi. / 501.312 ft.
 Relative: Lower

Site Name : LUBE OIL LEAKING FROM LOCOMOTIVE -
 CSX YARD MP 172
 2000 CONCORD TPK
 LYNCHBURG, VA

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816436
EPA ID: N/R

SPILLS - VA

Incident Date :	04/15/2014
Call Received Date :	04/15/2014
Closure Date :	06/05/2014
IR Number :	2014-L-3298
Associated IR :	N/R
Reference ID :	26209
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Petroleum
Incident Subtype :	Petroleum * Surface Spill
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Diesel (-1--1 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	A CSX LOCOMOTIVE DRIPPED LUBE OIL ONTO THE BALLAST AT THE RAIL YARD....APPROXIMATELY 1 TO 2 GALLONS DRIPPED...W.E.L. ENROUTE FOR CLEAN UP AND TO PUMP REMAINING LUBE OIL FROM LOCOMOTIVE... NO WATER WAYS OR DRAINS IMPACTED....
Original Call Material Description :	lube oil
Original Call Location Description :	Lube oil leaking from locomotive - CSX Yard2000 Concord TpkLynchburg
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	N
Other Agencies :	N/R
Permitted (Y/N) :	N
Call Reported by Name :	Edward Cook
Call Reported by Company Name :	CSX TRANSPORTATION
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R

Map Id: D26
Direction: SW
Distance: 0.187 mi.
Actual: 986.962 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : LUBE OIL LEAKING FROM LOCOMOTIVE -
CSX YARD MP 172
2000 CONCORD TPK
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816436
EPA ID: N/R

SPILLS - VA (*cont.*)

Call Property Owner Name : N/R
Closure Comments : Cleanup contractor enroute. No state waters affected. Notification only.

Site Summary : A CSX LOCOMOTIVE DRIPPED LUBE OIL ONTO THE BALLAST AT THE RAIL YARD....APPROXIMATELY 1 TO 2 GALLONS DRIPPED...W.E.L. ENROUTE FOR CLEAN UP AND TO PUMP REMAINING LUBE OIL FROM LOCOMOTIVE... NO WATER WAYS OR DRAINS IMPACTED.... NRC # 1076997; VDEM HMVA-5263

Map Id: D27
Direction: SW
Distance: 0.187 mi.
Actual: 986.962 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : LUBE OIL LEAK - CSX YARD
2000 CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816563
EPA ID: N/R

PCD - VA

Incident Date : 05/16/2011
Call Received Date : 06/06/2011
Closure Date : 06/06/2011
Closure Comments : Notification. No waterways involved. Clean up contractor in enroute. NFA

Site Summary : THEY HAVE UNK AMOUNT OF LUBE OIL LEAKING FROM OVERFLOW PIPE FROM ENGINE SUMP. OIL HAS LEAKED ONTO BALLAST. NO WATERWAYS INVOLVED. WEL IS ENRT FOR CLEANUP. BUCKET HAS BEEN PLACED UNDER THE DRIP.

Reference ID : 9893
IR Number : 2011-L-3347
Facility Name : N/R
Region : South Central
Status : Closed
Associated IR : N/R
Threat to : Ground Water
Terrorism (Y/N) : N
Characterize Incident : Accidental
Incident Type : Petroleum
Incident Subtype : Petroleum, Surface Spill
Materials : Oil (Lubricating) (-1--1 Gallons)
Effect to Receptor : N/R
Water Body : N/R
Low Quantity to Water : N/R
High Quantity to Water : N/R
Quantity Units : N/R
Other Receptors : N/R
RP Company : N/R
RP Name : N/R
Property Owner : N/R
Property Company : N/R

Map Id: D27
 Direction: SW
 Distance: 0.187 mi.
 Actual: 986.962 ft.
 Elevation: 0.095 mi. / 501.312 ft.
 Relative: Lower

Site Name : LUBE OIL LEAK - CSX YARD
 2000 CONCORD TURNPIKE
 LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816563
EPA ID: N/R

PCD - VA (*cont.*)

Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDEM HMVA-12158, NRC Incident Report # 976438
Call Reported by Name :	Ed Cook
Call Reported by Company Name :	CSX Transportation
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	lube oil
Original Call Location Description :	CSX Yard2000 Concord TurnpikeLynchburg
Original Call Incident Description :	THEY HAVE UNK AMOUNT OF LUBE OIL LEAKING FROM OVERFLOW PIPE FROM ENGINE SUMP. NO WATERWAYS INVOLVED. WEL IS ENRT FOR CLEANUP.

SPILLS - VA

Incident Date :	05/16/2011
Call Received Date :	06/06/2011
Closure Date :	06/06/2011
IR Number :	2011-L-3347
Associated IR :	N/R
Reference ID :	9893
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Petroleum
Incident Subtype :	Petroleum * Surface Spill
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Materials :	Oil (Lubricating) (-1--1 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R

Map Id: D27
Direction: SW
Distance: 0.187 mi.
Actual: 986.962 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : LUBE OIL LEAK - CSX YARD
2000 CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816563
EPA ID: N/R

SPILLS - VA (*cont.*)

Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	THEY HAVE UNK AMOUNT OF LUBE OIL LEAKING FROM OVERFLOW PIPE FROM ENGINE SUMP. NO WATERWAYS INVOLVED. WEL IS ENRT FOR CLEANUP.
Original Call Material Description :	lube oil
Original Call Location Description :	CSX Yard2000 Concord TurnpikeLynchburg
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDEM HMVA-12158, NRC Incident Report # 976438
Permitted (Y/N) :	N
Call Reported by Name :	Ed Cook
Call Reported by Company Name :	CSX Transportation
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	Notification. No waterways involved. Clean up contractor in enroute. NFA
Site Summary :	THEY HAVE UNK AMOUNT OF LUBE OIL LEAKING FROM OVERFLOW PIPE FROM ENGINE SUMP. OIL HAS LEAKED ONTO BALLAST. NO WATERWAYS INVOLVED. WEL IS ENRT FOR CLEANUP. BUCKET HAS BEEN PLACED UNDER THE DRIP.

Map Id: D28
Direction: SW
Distance: 0.187 mi.
Actual: 986.962 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : DIESEL SPILL - CSX YARD LYNCHBURG
2000 CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816577
EPA ID: N/R

PCD - VA

Incident Date :	03/19/2011
Call Received Date :	03/23/2011

Map Id: D28
Direction: SW
Distance: 0.187 mi.
Actual: 986.962 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : DIESEL SPILL - CSX YARD LYNCHBURG
2000 CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816577
EPA ID: N/R

PCD - VA (*cont.*)

Closure Date : 10/31/2011
Closure Comments : Report documenting cleanup was received from AMEC. Site returned to compliance.

Site Summary : CALLER STATES THAT THERE WAS A RELEASE OF APPROX 55 GALS OF DIESEL FROM A LOCOMOTIVE ONTO THE BALLAST DUE TO MECHANICAL FAILURE (CAUSE WAS A BLOWN FUEL LINE). NO FIRES, INJURIES OR FATALITIES, NO DERAILMENTS. W.E.L. RESPONDING REFERENCE CLEAN UP. CALLED IN ALSO BY MICHAEL BETHGE FROM CSX 716-861-0269. NRC # 970540

Reference ID : 8596
IR Number : 2011-L-2511
Facility Name : N/R
Region : South Central
Status : Closed
Associated IR : N/R
Threat to : Ground Water
Terrorism (Y/N) : N
Characterize Incident : Accidental
Incident Type : Petroleum
Incident Subtype : Petroleum, Surface Spill
Materials : Diesel (50-100 Gallons)
Effect to Receptor : Threatened
Water Body : James River
Low Quantity to Water : 50
High Quantity to Water : 100
Quantity Units : Gallons
Other Receptors : N/R
RP Company : N/R
RP Name : N/R
Property Owner : Bethge, Michael
Property Company : CSX Transportation
Duration of Event (Hours) : 0
Impacts : N/R
Other Impacts : N/R
Steps Taken : N/R
Steps Taken Description : N/R
System Components : N/R
Other System Components : N/R
Cause of Event : N/R
Corrective Action Taken : N/R
Weather Status : N/R
Precipitation (Wet) : 0
Discharge Type : N/R
Discharge Volume : 0
Unknown Discharge (Y/N) : N
Incident Ongoing at Time of Call : N
Permitted (Y/N) : N
Agencies Notified (Y/N) : Y
Other Agencies : VDEM HMVA-11311, NRC #970538 (report from NS) & 970540 (report from CSX)
Call Reported by Name : Joe Lord
Call Reported by Company Name : Norfolk Southern
Call RP Company Name : CSX Transportation

Map Id: D28
Direction: SW
Distance: 0.187 mi.
Actual: 986.962 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : DIESEL SPILL - CSX YARD LYNCHBURG
2000 CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816577
EPA ID: N/R

PCD - VA (*cont.*)

Call RP Name :	Michael Bethge
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	diesel
Original Call Location Description :	CSX Yard2000 Concord TurnpikeLynchburg
Original Call Incident Description :	CALLER STATES THAT THERE WAS A RELEASE OF APPROX 55 GALS OF DIESEL FROM A LOCOMOTIVE ONTO THE BALLAST DUE TO MECHANICAL FAILURE. CALLED IN ALSO BY MICHAEL BETHGE FROM CSX 716-861-0269, W.E.L. RESPONDING REFERENCE CLEAN UP.

SPILLS - VA

Incident Date :	03/19/2011
Call Received Date :	03/23/2011
Closure Date :	10/31/2011
IR Number :	2011-L-2511
Associated IR :	N/R
Reference ID :	8596
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Petroleum
Incident Subtype :	Petroleum * Surface Spill
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Materials :	Diesel (50-100 Gallons)
Effect to Receptor :	Threatened
Water Body :	James River
Low Quantity to Water :	50
High Quantity to Water :	100
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	Bethge, Michael
Property Company :	CSX Transportation
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N

Map Id: D28
Direction: SW
Distance: 0.187 mi.
Actual: 986.962 ft.
Elevation: 0.095 mi. / 501.312 ft.
Relative: Lower

Site Name : DIESEL SPILL - CSX YARD LYNCHBURG
2000 CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816577
EPA ID: N/R

SPILLS - VA (*cont.*)

Original Call Incident Description :

CALLER STATES THAT THERE WAS A RELEASE OF APPROX 55 GALS OF DIESEL FROM A LOCOMOTIVE ONTO THE BALLAST DUE TO MECHANICAL FAILURE. CALLED IN ALSO BY MICHAEL BETHGE FROM CSX 716-861-0269, W.E.L. RESPONDING REFERENCE CLEAN UP.

Original Call Material Description :

diesel

Original Call Location Description :

CSX Yard2000 Concord TurnpikeLynchburg

Incident Ongoing at Time of Call :

N

Agencies Notified (Y/N) :

Y

Other Agencies :

VDEM HMVA-11311, NRC #970538 (report from NS) & 970540 (report from CSX)

Permitted (Y/N) :

N

Call Reported by Name :

Joe Lord

Call Reported by Company Name :

Norfolk Southern

Call RP Company Name :

CSX Transportation

Call RP Name :

Michael Bethge

Call Property Owner Company Name :

N/R

Call Property Owner Name :

N/R

Closure Comments :

Report documenting cleanup was received from AMEC. Site returned to compliance.

Site Summary :

CALLER STATES THAT THERE WAS A RELEASE OF APPROX 55 GALS OF DIESEL FROM A LOCOMOTIVE ONTO THE BALLAST DUE TO MECHANICAL FAILURE (CAUSE WAS A BLOWN FUEL LINE). NO FIRES, INJURIES OR FATALITIES, NO DERAILMENTS. W.E.L. RESPONDING REFERENCE CLEAN UP. CALLED IN ALSO BY MICHAEL BETHGE FROM CSX 716-861-0269. NRC # 970540

Map Id: 29
Direction: SW
Distance: 0.188 mi.
Actual: 993.018 ft.
Elevation: 0.095 mi. / 501.969 ft.
Relative: Lower

Site Name : CSX EXCAVATION SITE
1900 BLOCK CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816653
EPA ID: N/R

PCD - VA

Incident Date :

07/13/2010

Call Received Date :

07/19/2010

Closure Date :

07/19/2010

Closure Comments :

FD on scene. Diesel release went to concrete and some of free product was burned off in fire. Remainder was contained with booms and pads. WEL on scene for clean up.

Map Id: 29
Direction: SW
Distance: 0.188 mi.
Actual: 993.018 ft.
Elevation: 0.095 mi. / 501.969 ft.
Relative: Lower

Site Name : CSX EXCAVATION SITE
1900 BLOCK CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816653
EPA ID: N/R

PCD - VA (*cont.*)

Site Summary :

CALLER REPORTS TEMPORARY SEWER PUMP ASSEMBLY CAUGHT FIRE WHILE FUELING...APPROX 40 GAL DIESEL RELEASED...SOME PRODUCT BURNED OFF AND 90% WAS CAPTURED WITH BOOMS AND PADS...WEL WAS ON SCENE FOR CLEAN UP...INCIDENT OCCURRED ON CSX RAILROAD PROPERTY IN THE 1900 BLOCK OF CONCORD TURNPIKE AND RELEASED MOSTLY TO CONCRETE...NO OTHER ADDRESS SPECIFICS AVAILABLE...CSX WAS NOTIFIED.

Reference ID :	5038
IR Number :	2011-L-0145
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Incident Type :	Petroleum
Incident Subtype :	Petroleum, Surface Spill
Materials :	Diesel (1-40 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDEM
Call Reported by Name :	Keith Johnson
Call Reported by Company Name :	Lynchburg FD
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	diesel fuel
Original Call Location Description :	CSX Excavation site1900 Block Concord TurnpikeLynchburg

Map Id: 29
Direction: SW
Distance: 0.188 mi.
Actual: 993.018 ft.
Elevation: 0.095 mi. / 501.969 ft.
Relative: Lower

Site Name : CSX EXCAVATION SITE
1900 BLOCK CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816653
EPA ID: N/R

PCD - VA (*cont.*)

Original Call Incident Description : CALLER REPORTS TEMPORARY SEWER PUMP ASSEMBLY CAUGHT FIRE WHILE FUELING...APPROX 40 GAL DIESEL RELEASED...SOME PRODUCT BURNED OFF AND 90% WAS CAPTURED WITH BOOMS AND PADS...WEL WAS ON SCENE FOR CLEAN UP...INCIDENT OCCURRED ON CSX RAILROAD PROPERTY IN THE 1900 BLOCK OF CONCORD TURNPIKE AND RELEASED MOSTLY TO CONCRETE...NO OTHER ADDRESS SPECIFICS AVAILABLE...CSX WAS NOTIFIED.

SPILLS - VA

Incident Date :	07/13/2010
Call Received Date :	07/19/2010
Closure Date :	07/19/2010
IR Number :	2011-L-0145
Associated IR :	N/R
Reference ID :	5038
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Petroleum
Incident Subtype :	Petroleum * Surface Spill
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Materials :	Diesel (1-40 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N

Map Id: 29
Direction: SW
Distance: 0.188 mi.
Actual: 993.018 ft.
Elevation: 0.095 mi. / 501.969 ft.
Relative: Lower

Site Name : CSX EXCAVATION SITE
1900 BLOCK CONCORD TURNPIKE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816653
EPA ID: N/R

SPILLS - VA (*cont.*)

Original Call Incident Description :

CALLER REPORTS TEMPORARY SEWER PUMP ASSEMBLY CAUGHT FIRE WHILE FUELING...APPROX 40 GAL DIESEL RELEASED...SOME PRODUCT BURNED OFF AND 90% WAS CAPTURED WITH BOOMS AND PADS...WEL WAS ON SCENE FOR CLEAN UP...INCIDENT OCCURRED ON CSX RAILROAD PROPERTY IN THE 1900 BLOCK OF CONCORD TURNPIKE AND RELEASED MOSTLY TO CONCRETE...NO OTHER ADDRESS SPECIFICS AVAILABLE...CSX WAS NOTIFIED.

Original Call Material Description :

diesel fuel

Original Call Location Description :

CSX Excavation site1900 Block Concord TurnpikeLynchburg

Incident Ongoing at Time of Call :

N

Agencies Notified (Y/N) :

Y

Other Agencies :

VDEM

Permitted (Y/N) :

N

Call Reported by Name :

Keith Johnson

Call Reported by Company Name :

Lynchburg FD

Call RP Company Name :

N/R

Call RP Name :

N/R

Call Property Owner Company Name :

N/R

Call Property Owner Name :

N/R

Closure Comments :

FD on scene. Diesel release went to concrete and some of free product was burned off in fire. Remainder was contained with booms and pads. WEL on scene for clean up.

Site Summary :

CALLER REPORTS TEMPORARY SEWER PUMP ASSEMBLY CAUGHT FIRE WHILE FUELING...APPROX 40 GAL DIESEL RELEASED...SOME PRODUCT BURNED OFF AND 90% WAS CAPTURED WITH BOOMS AND PADS...WEL WAS ON SCENE FOR CLEAN UP...INCIDENT OCCURRED ON CSX RAILROAD PROPERTY IN THE 1900 BLOCK OF CONCORD TURNPIKE AND RELEASED MOSTLY TO CONCRETE...NO OTHER ADDRESS SPECIFICS AVAILABLE...CSX WAS NOTIFIED.

Map Id: 30
Direction: ESE
Distance: 0.262 mi.
Actual: 1382.637 ft.
Elevation: 0.099 mi. / 523.819 ft.
Relative: Lower

Site Name : DUMP SITE - VOLK, LLC, KAVANAUGH ROAD
107 KAVANAUGH ROAD
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816579
EPA ID: N/R

PCD - VA

Incident Date : 02/22/2011
Call Received Date : 03/14/2011
Closure Date : 05/15/2012

Map Id: 30
Direction: ESE
Distance: 0.262 mi.
Actual: 1382.637 ft.
Elevation: 0.099 mi. / 523.819 ft.
Relative: Lower

Site Name : DUMP SITE - VOLK, LLC, KAVANAUGH ROAD
107 KAVANAUGH ROAD
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816579
EPA ID: N/R

PCD - VA (*cont.*)

Closure Comments : Site referred to Enforcement (M. Booth). RE-OPENED to add copy of Enforcement Case Closure Memo to file.

Site Summary :

There is an area immediately inside the gate where a number of loads of inert fill material co-mingled with CDD had been deposited. This area was approximately 50 ft. x 125 ft. and appears to vary in depth from current grade to 10 ft. to 15 ft. in depth on working face. Dumped materials observed included structural timbers, framing lumber, metal scrap, plywood & particle board scraps, off-site vegetative debris and broken electronic components.

Reference ID :	8438
IR Number :	2011-L-2413
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Waste
Incident Subtype :	Solid Waste, Waste
Materials :	Construction/Demolition Debris (-1--1 Ton), Vegetative Waste (-1--1 Ton)
Effect to Receptor :	Threatened
Water Body :	James River
Low Quantity to Water :	-1
High Quantity to Water :	-1
Quantity Units :	Ton
Other Receptors :	N/R
RP Company :	Volk, LLC
RP Name :	Jonas, Ben
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	Y
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	City of Lynchburg, CSX Railroad
Call Reported by Name :	Larry Hall
Call Reported by Company Name :	Region 2000 Landfill
Call RP Company Name :	Volk, LLC
Call RP Name :	Ben Jonas

Map Id: 30
Direction: ESE
Distance: 0.262 mi.
Actual: 1382.637 ft.
Elevation: 0.099 mi. / 523.819 ft.
Relative: Lower

Site Name : DUMP SITE - VOLK, LLC, KAVANAUGH ROAD
107 KAVANAUGH ROAD
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816579
EPA ID: N/R

PCD - VA (*cont.*)

Call Property Owner Company Name : N/R
Call Property Owner Name : N/R
Original Call Material Description : CDD, vegetative debris, electronics, furniture, floor coverings
Original Call Location Description : Dump Site - 107 Kavanaugh Road Lynchburg

Original Call Incident Description :

There is an area immediately inside the gate where a number of loads of inert fill material co-mingled with CDD had been deposited. This area was approximately 50? x 125? and appears to vary in depth from current grade to 10? to 15? in depth on working face. Dumped materials observed included structural timbers, framing lumber, metal scrap, plywood & particle board scraps, off-site vegetative debris and broken electronic components.

SPILLS - VA

Incident Date :	02/22/2011
Call Received Date :	03/14/2011
Closure Date :	05/15/2012
IR Number :	2011-L-2413
Associated IR :	N/R
Reference ID :	8438
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Waste
Incident Subtype :	Solid Waste * Waste
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Construction/Demolition Debris (-1--1 Ton) * Vegetative Waste (-1--1 Ton)
Effect to Receptor :	Threatened
Water Body :	James River
Low Quantity to Water :	-1
High Quantity to Water :	-1
Quantity Units :	Ton
Other Receptors :	N/R
RP Company :	Volk, LLC
RP Name :	Jonas, Ben
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N

Map Id: 30
Direction: ESE
Distance: 0.262 mi.
Actual: 1382.637 ft.
Elevation: 0.099 mi. / 523.819 ft.
Relative: Lower

Site Name : DUMP SITE - VOLK, LLC, KAVANAUGH ROAD
107 KAVANAUGH ROAD
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816579
EPA ID: N/R

SPILLS - VA (*cont.*)

Original Call Incident Description :

There is an area immediately inside the gate where a number of loads of inert fill material co-mingled with CDD had been deposited. This area was approximately 50? x 125? and appears to vary in depth from current grade to 10? to 15? in depth on working face. Dumped materials observed included structural timbers, framing lumber, metal scrap, plywood & particle board scraps, off-site vegetative debris and broken electronic components.

Original Call Material Description : CDD, vegetative debris, electronics, furniture, floor coverings
Original Call Location Description : Dump Site - 107 Kavanaugh Road Lynchburg
Incident Ongoing at Time of Call : Y
Agencies Notified (Y/N) : Y
Other Agencies : City of Lynchburg, CSX Railroad
Permitted (Y/N) : N
Call Reported by Name : Larry Hall
Call Reported by Company Name : Region 2000 Landfill
Call RP Company Name : Volk, LLC
Call RP Name : Ben Jonas
Call Property Owner Company Name : N/R
Call Property Owner Name : N/R

Closure Comments :

Site referred to Enforcement (M. Booth). RE-OPENED to add copy of Enforcement Case Closure Memo to file.

Site Summary :

There is an area immediately inside the gate where a number of loads of inert fill material co-mingled with CDD had been deposited. This area was approximately 50 ft. x 125 ft. and appears to vary in depth from current grade to 10 ft. to 15 ft. in depth on working face. Dumped materials observed included structural timbers, framing lumber, metal scrap, plywood & particle board scraps, off-site vegetative debris and broken electronic components.

Map Id: F31
Direction: W
Distance: 0.282 mi.
Actual: 1489.399 ft.
Elevation: 0.102 mi. / 536.089 ft.
Relative: Lower

Site Name : SANITARY SEWER LINE CONNECTED TO STORM DRAIN
50 WASHINGTON ST
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816503
EPA ID: N/R

PCD - VA

Incident Date : 01/02/2013
Call Received Date : 01/10/2013
Closure Date : 10/30/2013

Map Id: F31
Direction: W
Distance: 0.282 mi.
Actual: 1489.399 ft.
Elevation: 0.102 mi. / 536.089 ft.
Relative: Lower

Site Name : SANITARY SEWER LINE CONNECTED TO STORM DRAIN
50 WASHINGTON ST
LYNCHBURG, VA

Envirosite ID: 21816503
EPA ID: N/R

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

PCD - VA (*cont.*)

Closure Comments :

Rec'd email notification that the permanent sanitary sewer lateral reinstatement for 50 Washington Street (The Lofts) was made on 10/28/13. The temporary connection has been abandoned. NFA

Site Summary :

On January 2, 2013, during construction of the CSO - James River Interceptor Division 3A Replacement project, the contractor, Thalle Construction, found and confirmed that #50 Washington Street, a recently renovated 10 unit loft apartment building, has a sanitary sewer lateral connected directly into a separated storm sewer system discharging into the Horseford Road Storm culvert which then discharges into the James River. The connection was confirmed by dye testing and direct observation. The building was built in 1900 as a warehouse. Not until 12/29/2011 when the loft apartments were constructed and occupied has there been any significant usage of the building in the last two decades. Thalle is devising a plan to make a temporary connection of the lateral into a sanitary sewer with a permanent connection planned as the project proceeds in the next several months. From water usage billings for the period from 12/2011 to present; 239 hcf (178,772 gallons) have been used by the occupants. No observable impact on the James River was noted.

Reference ID :	17432
IR Number :	2013-L-1669
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Water
Incident Subtype :	SSO, Water
Materials :	Sewage (178772--1 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	178772
High Quantity to Water :	-1
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	Y

Map Id: F31
 Direction: W
 Distance: 0.282 mi.
 Actual: 1489.399 ft.
 Elevation: 0.102 mi. / 536.089 ft.
 Relative: Lower

Site Name : SANITARY SEWER LINE CONNECTED TO STORM DRAIN
 50 WASHINGTON ST
 LYNCHBURG, VA

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816503
EPA ID: N/R

PCD - VA (*cont.*)

Permitted (Y/N) :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Call Reported by Name :	Greg Poff
Call Reported by Company Name :	City of Lynchburg
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	sewage
Original Call Location Description :	Sanitary sewer line connected to storm drain50 Washington StLynchburg

Original Call Incident Description :

On January 2, 2013, during construction of the CSO - James River Interceptor Division 3A Replacement project, the contractor, Thalle Construction, found and confirmed that #50 Washington Street, a recently renovated 10 unit loft apartment building, has a sanitary sewer lateral connected directly into a separated storm sewer system discharging into the Horseford Road Storm culvert which then discharges into the James River. The connection was confirmed by dye testing and direct observation. The building was built in 1900 as a warehouse. Not until 12/29/2011 when the loft apartments were constructed and occupied has there been any significant usage of the building in the last two decades. Thalle is devising a plan to make a temporary connection of the lateral into a sanitary sewer with a permanent connection planned as the project proceeds in the next several months. From water usage billings for the period from 12/2011 to present; 239 hcf (178,772 gallons) have been used by the occupants. No observable impact on the James River was noted.

SPILLS - VA

Incident Date :	01/02/2013
Call Received Date :	01/10/2013
Closure Date :	10/30/2013
IR Number :	2013-L-1669
Associated IR :	N/R
Reference ID :	17432
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Water
Incident Subtype :	SSO * Water
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Sewage (178772--1 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	178772
High Quantity to Water :	-1
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R

Map Id: F31
Direction: W
Distance: 0.282 mi.
Actual: 1489.399 ft.
Elevation: 0.102 mi. / 536.089 ft.
Relative: Lower

Site Name : SANITARY SEWER LINE CONNECTED TO STORM DRAIN
50 WASHINGTON ST
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816503
EPA ID: N/R

SPILLS - VA (*cont.*)

Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N

Original Call Incident Description :

On January 2, 2013, during construction of the CSO - James River Interceptor Division 3A Replacement project, the contractor, Thalle Construction, found and confirmed that #50 Washington Street, a recently renovated 10 unit loft apartment building, has a sanitary sewer lateral connected directly into a separated storm sewer system discharging into the Horseford Road Storm culvert which then discharges into the James River. The connection was confirmed by dye testing and direct observation. The building was built in 1900 as a warehouse. Not until 12/29/2011 when the loft apartments were constructed and occupied has there been any significant usage of the building in the last two decades. Thalle is devising a plan to make a temporary connection of the lateral into a sanitary sewer with a permanent connection planned as the project proceeds in the next several months. From water usage billings for the period from 12/2011 to present; 239 hcf (178,772 gallons) have been used by the occupants. No observable impact on the James River was noted.

Original Call Material Description :	sewage
Original Call Location Description :	Sanitary sewer line connected to storm drain 50 Washington St Lynchburg
Incident Ongoing at Time of Call :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Permitted (Y/N) :	N
Call Reported by Name :	Greg Poff
Call Reported by Company Name :	City of Lynchburg
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R

Closure Comments :

Rec'd email notification that the permanent sanitary sewer lateral reinstatement for 50 Washington Street (The Lofts) was made on 10/28/13. The temporary connection has been abandoned. NFA

Map Id: F31
Direction: W
Distance: 0.282 mi.
Actual: 1489.399 ft.
Elevation: 0.102 mi. / 536.089 ft.
Relative: Lower

Site Name : SANITARY SEWER LINE CONNECTED TO STORM DRAIN
50 WASHINGTON ST
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816503
EPA ID: N/R

SPILLS - VA (*cont.*)

Site Summary :

On January 2, 2013, during construction of the CSO - James River Interceptor Division 3A Replacement project, the contractor, Thalle Construction, found and confirmed that #50 Washington Street, a recently renovated 10 unit loft apartment building, has a sanitary sewer lateral connected directly into a separated storm sewer system discharging into the Horseford Road Storm culvert which then discharges into the James River. The connection was confirmed by dye testing and direct observation. The building was built in 1900 as a warehouse. Not until 12/29/2011 when the loft apartments were constructed and occupied has there been any significant usage of the building in the last two decades. Thalle is devising a plan to make a temporary connection of the lateral into a sanitary sewer with a permanent connection planned as the project proceeds in the next several months. From water usage billings for the period from 12/2011 to present; 239 hcf (178,772 gallons) have been used by the occupants. No observable impact on the James River was noted.

Map Id: G32
Direction: SSW
Distance: 0.287 mi.
Actual: 1515.895 ft.
Elevation: 0.096 mi. / 504.528 ft.
Relative: Lower

Site Name : LYNCHBURG CSO AT GARNET ST
2151 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [LPT - VA]

Envirosite ID: 30475965
EPA ID: N/R

LPT - VA

Release Reported :	05/20/2010
PC Number :	20102241
CEDS Facility ID :	200000853558
Case Status :	Closed
Case Closed Date :	02/16/2012
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	Y
Priority :	2
Suspect Confirm Indicator :	Confirmed

Latitude :	37.4058900000259
Longitude :	-79.131699999047

Map Id: G33
Direction: SSW
Distance: 0.304 mi.
Actual: 1607.439 ft.
Elevation: 0.097 mi. / 510.236 ft.
Relative: Lower

Site Name : WILLIAMS OIL COMPANY
2200 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [AST - VA, LPT - VA, UST - VA]

Envirosite ID: 13221296
EPA ID: N/R

AST - VA

Facility ID :	7011664
Facility Type :	PETROLEUM DISTRIBUTOR
CEDS Facility ID :	200000196463
Region Code :	BRROL

Tank Information

Install Date :	01/01/1955
Date Closed :	12/08/2005
Tank Number :	1
Tank Status :	DISMANTLED
Tank Owner ID :	35420
Tank Type :	AST
Capacity :	25936
Federally Regulated Tank :	N
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	1
Tank Owner ID :	35420
Tank Material Bare Steel :	Y
Tank Material Insulated Steel :	N
Tank Material Concrete Coated/Concrete Vault:	N
Tank Material Unknown :	N
Tank Material Other :	Y
Tank Material Other Notes :	Riveted
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N
Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N
Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

Tank Information

Install Date :	01/01/1955
Date Closed :	12/08/2005
Tank Number :	2
Tank Status :	DISMANTLED
Tank Owner ID :	35420
Tank Type :	AST
Capacity :	15358
Federally Regulated Tank :	N
Contents :	FUEL OIL

Map Id: G33
Direction: SSW
Distance: 0.304 mi.
Actual: 1607.439 ft.
Elevation: 0.097 mi. / 510.236 ft.
Relative: Lower

Site Name : WILLIAMS OIL COMPANY
2200 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [AST - VA, LPT - VA, UST - VA] (**cont.**)

Envirosite ID: 13221296
EPA ID: N/R

AST - VA (**cont.**)

Other Contents : N/R

Tank Material Information

Tank Number :	2
Tank Owner ID :	35420
Tank Material Bare Steel :	Y
Tank Material Insulated Steel :	N
Tank Material Concrete Coated/Concrete	
Vault:	N
Tank Material Unknown :	N
Tank Material Other :	Y
Tank Material Other Notes :	Riveted
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N
Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N
Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

Tank Information

Install Date :	01/01/1955
Date Closed :	12/08/2005
Tank Number :	3
Tank Status :	DISMANTLED
Tank Owner ID :	35420
Tank Type :	AST
Capacity :	10377
Federally Regulated Tank :	N
Contents :	KEROSENE
Other Contents :	N/R

Tank Material Information

Tank Number :	3
Tank Owner ID :	35420
Tank Material Bare Steel :	Y
Tank Material Insulated Steel :	N
Tank Material Concrete Coated/Concrete	
Vault:	N
Tank Material Unknown :	N
Tank Material Other :	Y
Tank Material Other Notes :	Riveted
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N

Map Id: G33
Direction: SSW
Distance: 0.304 mi.
Actual: 1607.439 ft.
Elevation: 0.097 mi. / 510.236 ft.
Relative: Lower

Site Name : WILLIAMS OIL COMPANY
2200 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [AST - VA, LPT - VA, UST - VA] (*cont.*)

Envirosite ID: 13221296
EPA ID: N/R

AST - VA (*cont.*)

Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N
Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

Tank Information

Install Date :	01/01/1955
Date Closed :	12/08/2005
Tank Number :	4
Tank Status :	DISMANTLED
Tank Owner ID :	35420
Tank Type :	AST
Capacity :	11518
Federally Regulated Tank :	N
Contents :	FUEL OIL
Other Contents :	N/R

Tank Material Information

Tank Number :	4
Tank Owner ID :	35420
Tank Material Bare Steel :	Y
Tank Material Insulated Steel :	N
Tank Material Concrete Coated/Concrete	
Vault:	N
Tank Material Unknown :	N
Tank Material Other :	Y
Tank Material Other Notes :	Riveted
Tank Type Cathodic/CP :	N
Tank Type Single Wall :	N
Tank Type Double Wall :	N
Tank Type Lined Interior :	N
Tank Type Double Bottom :	N
Tank Type Portable/Skid :	N
Tank Type Shop Fabricated/Built :	N
Tank Type Vaulted Below Grade :	N
Tank Type Vertical :	N
Tank Type Horizontal :	N
Tank Type Unknown :	N
Tank Type Other :	N
Tank Type Other Notes :	N/R

LPT - VA

Release Reported :	09/28/1994
PC Number :	19951033
CEDS Facility ID :	200000196463
Case Status :	Closed

Map Id: G33
Direction: SSW
Distance: 0.304 mi.
Actual: 1607.439 ft.
Elevation: 0.097 mi. / 510.236 ft.
Relative: Lower

Site Name : WILLIAMS OIL COMPANY
2200 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [AST - VA, LPT - VA, UST - VA] (**cont.**)

Envirosite ID: 13221296
EPA ID: N/R

LPT - VA (**cont.**)

Case Closed Date :	02/08/1995
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	N
Regulated AST (3) :	Y
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	N/R
Suspect Confirm Indicator :	Confirmed

Latitude :	37.3967772842384
Longitude :	-79.1182722202335

UST - VA

Facility ID :	7011664
Facility Type :	PETROLEUM DISTRIBUTOR
CEDS Facility ID :	200000196463
Region Code :	BRROL

Tank Information

Install Date :	05/01/1981
Date Closed :	10/01/1987
Tank Number :	R4
Tank Status :	REM FROM GRD
Tank Owner ID :	35420
Tank Type :	UST
Capacity :	1000
Federally Regulated Tank :	Y
Contents :	DIESEL
Other Contents :	N/R

Tank Material Information

Tank Number :	R4
Tank Owner ID :	35420
Tank Material Asphalt/Bare Steel :	Y
Tank Material CCP/STI-P3 :	N
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N

Map Id: G33
Direction: SSW
Distance: 0.304 mi.
Actual: 1607.439 ft.
Elevation: 0.097 mi. / 510.236 ft.
Relative: Lower

Site Name : WILLIAMS OIL COMPANY
2200 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [AST - VA, LPT - VA, UST - VA] (*cont.*)

Envirosite ID: 13221296
EPA ID: N/R

UST - VA (*cont.*)

Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	05/02/1979
Date Closed :	N/R
Tank Number :	1
Tank Status :	REM FROM GRD
Tank Owner ID :	35420
Tank Type :	UST
Capacity :	4000
Federally Regulated Tank :	Y
Contents :	GASOLINE
Other Contents :	N/R

Tank Material Information

Tank Number :	1
Tank Owner ID :	35420
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	Y
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	05/02/1979
Date Closed :	N/R
Tank Number :	2
Tank Status :	REM FROM GRD
Tank Owner ID :	35420
Tank Type :	UST
Capacity :	4000
Federally Regulated Tank :	Y
Contents :	GASOLINE
Other Contents :	N/R

Map Id: G33
Direction: SSW
Distance: 0.304 mi.
Actual: 1607.439 ft.
Elevation: 0.097 mi. / 510.236 ft.
Relative: Lower

Site Name : WILLIAMS OIL COMPANY
2200 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [AST - VA, LPT - VA, UST - VA] (**cont.**)

Envirosite ID: 13221296
EPA ID: N/R

UST - VA (**cont.**)

Tank Material Information

Tank Number :	2
Tank Owner ID :	35420
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	Y
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Tank Information

Install Date :	05/02/1979
Date Closed :	N/R
Tank Number :	3
Tank Status :	REM FROM GRD
Tank Owner ID :	35420
Tank Type :	UST
Capacity :	4000
Federally Regulated Tank :	Y
Contents :	GASOLINE
Other Contents :	N/R

Tank Material Information

Tank Number :	3
Tank Owner ID :	35420
Tank Material Asphalt/Bare Steel :	N
Tank Material CCP/STI-P3 :	Y
Tank Material Composite :	N
Tank Material Fiberglass :	N
Tank Material Concrete :	N
Tank Material Impressed Current :	N
Tank Material Double Walled :	N
Tank Material Lined Interior :	N
Tank Material Excavation Liner :	N
Tank Material Polyethylene Tank Jacket:	N
Tank Material Secondary Containment :	N
Tank Material Repaired :	N
Tank Material Unknown :	N
Tank Material Other :	N
Tank Material Other Notes :	N/R

Map Id: G34
Direction: SSW
Distance: 0.304 mi.
Actual: 1607.439 ft.
Elevation: 0.097 mi. / 510.236 ft.
Relative: Lower

Site Name : WILLIAMS OIL CO - LOWER BASIN
2200 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [LPT - VA]

Envirosite ID: 30476201
EPA ID: N/R

LPT - VA

Release Reported :	01/09/2006
PC Number :	20067026
CEDS Facility ID :	200000196463
Case Status :	Closed
Case Closed Date :	05/03/2006
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	N
Regulated AST (3) :	Y
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	2
Suspect Confirm Indicator :	Confirmed

Latitude : 37.3967755471766
Longitude : -79.1180054915611

Release Reported :	07/20/1998
PC Number :	19991008
CEDS Facility ID :	200000196463
Case Status :	Closed
Case Closed Date :	04/15/2002
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	Y
Regulated Petroleum UST (1) :	N/R
Excluded UST (1) :	N/R
Deferred UST (1) :	N/R
Partially Deferred UST (1) :	N/R
Exempt 1 UST (2) :	N/R
Exempt 2 Heating Oil UST (2) :	N/R
Small Heating Oil AST (2) :	N/R
Regulated AST (3) :	N/R
Unregulated AST (3) :	N/R
Other (Y/N) :	N/R
Other Description :	N/R
Unknown (Y/N) :	N/R
Priority :	N/R
Suspect Confirm Indicator :	Suspected

Latitude : 37.3988676069813
Longitude : -79.122568952069

Map Id: G34
Direction: SSW
Distance: 0.304 mi.
Actual: 1607.439 ft.
Elevation: 0.097 mi. / 510.236 ft.
Relative: Lower

Site Name : WILLIAMS OIL CO - LOWER BASIN
2200 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [LPT - VA] (*cont.*)

Envirosite ID: 30476201
EPA ID: N/R

LPT - VA (*cont.*)

Release Reported :	02/16/1995
PC Number :	19951088
CEDS Facility ID :	200000196463
Case Status :	Closed
Case Closed Date :	04/13/2005
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	Y
Regulated Petroleum UST (1) :	Y
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	3
Suspect Confirm Indicator :	Confirmed

Latitude : 37.3968885089215
Longitude : -79.1186799062522

Map Id: G35
Direction: SSW
Distance: 0.304 mi.
Actual: 1607.439 ft.
Elevation: 0.097 mi. / 510.236 ft.
Relative: Lower

Site Name : WILLIAMS OIL CO. - LOWER BASIN
2200 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [LPT - VA]

Envirosite ID: 30476626
EPA ID: N/R

LPT - VA

Release Reported :	07/20/2000
PC Number :	20012023
CEDS Facility ID :	200000196463
Case Status :	Closed
Case Closed Date :	11/15/2006
Region :	WCRO
Program :	State Lead
Heating Oil Category :	N/R
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N

Map Id: G35
Direction: SSW
Distance: 0.304 mi.
Actual: 1607.439 ft.
Elevation: 0.097 mi. / 510.236 ft.
Relative: Lower

Site Name : WILLIAMS OIL CO. - LOWER BASIN
2200 CONCORD TURNPIKE
LYNCHBURG, VA 24505
Database(s) : [LPT - VA] (*cont.*)

Envirosite ID: 30476626
EPA ID: N/R

LPT - VA (*cont.*)

Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	Y
Other Description :	Oil water separator
Unknown (Y/N) :	N
Priority :	N/R
Suspect Confirm Indicator :	Confirmed

Latitude : 37.3968706066473
Longitude : -79.1183254220579

Map Id: F36
Direction: W
Distance: 0.315 mi.
Actual: 1663.413 ft.
Elevation: 0.101 mi. / 533.465 ft.
Relative: Lower

Site Name : FISH KILL & SSO - 1312 JEFFERSON STREET
1312 JEFFERSON STREET
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816628
EPA ID: N/R

PCD - VA

Incident Date :	09/24/2010
Call Received Date :	10/04/2010
Closure Date :	01/21/2015
Closure Comments :	Fish Kill investigated. Lynchburg City replaced pumps. Full abatement report is included in documents.

Site Summary :

Caller (Security Guard at Rock-Tenn) contacts DGIF reporting a fish kill in James River at Percival's Island. Saw " hundreds " of dead fish fetched up against their water intake dam in the James. Regional Biologist, M. Shaver, was dispatched and went first to Madison Heights/Amherst Co. Boat Ramp. He next went to Rock-Tenn, arriving approximately 1900, and noted sewage odor was present. Shaver rode with FD personnel, stopping at various spots upstream of Rock-Tenn and they localized sewage odor to somewhere upstream of 13th and Jefferson and downstream of Blackwater Creek. Darkness and river side access prevented fish counting. Approximately 2000-2015, Shaver is attempting to contact Lynchburg Public Works. Approximately 2045, Harry Doss, Utility Line Maintenance Supervisor, arrives on scene. Approximately 2200, Doss calls Shaver and tells him sewage is entering river from CSO Outfall #057, located in 1300 block of Jefferson Street. SSO traced to clogged bypass pumps at CSO repair site upstream of WWTP. Pump intakes were clogged/fouled with sediment and debris washed into sewer lines during a brief but heavy rain event on Wednesday (9/22/2010). Sewage apparently backed up into pipes and discharged from a CSO outfall line into river. 9/25/2010 - Shaver returns to conduct DO measurements at various sites between Mt. Athos Boat Ramp and Blackwater Creek. Finds no sewage odor downstream and minimal odor at Rock-Tenn. He also tries to estimate fish mortalities with binoculars from various bridge vantage points. Stopped at WWTP and was told contractor had pumps back up and pumping by approx. 2400. Shaver found some dead fish, mostly shad. Noted there were numerous buzzards flying above river and dead fish had been washing away and/or been eaten by scavengers overnight.

Map Id: F36
 Direction: W
 Distance: 0.315 mi.
 Actual: 1663.413 ft.
 Elevation: 0.101 mi. / 533.465 ft.
 Relative: Lower

Site Name :	FISH KILL & SSO - 1312 JEFFERSON STREET 1312 JEFFERSON STREET LYNCHBURG, VA
Database(s) :	[PCD - VA, SPILLS - VA] (<i>cont.</i>)

Envirosite ID: 21816628
EPA ID: N/R

PCD - VA (*cont.*)

Reference ID :	6036
IR Number :	2011-L-0913
Facility Name :	Lynchburg City STP
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Incident Type :	Fish Kill
Incident Subtype :	Fish Kill
Materials :	Sewage (-1--1 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	-1
High Quantity to Water :	-1
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	DGIF, VDEM, VDH, City of Lynchburg
Call Reported by Name :	N/R
Call Reported by Company Name :	DGIF Dispatcher
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	sewage
Original Call Location Description :	Percival's Island in James RiverLynchburg
Original Call Incident Description :	Caller to DGIF reporting a fish kill in James River at Percival's Island

SPILLS - VA

Incident Date :	09/24/2010
Call Received Date :	10/04/2010
Closure Date :	01/21/2015
IR Number :	2011-L-0913

Map Id: F36
Direction: W
Distance: 0.315 mi.
Actual: 1663.413 ft.
Elevation: 0.101 mi. / 533.465 ft.
Relative: Lower

Site Name : FISH KILL & SSO - 1312 JEFFERSON STREET
1312 JEFFERSON STREET
LYNCHBURG, VA

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816628
EPA ID: N/R

SPILLS - VA (*cont.*)

Associated IR :	N/R
Reference ID :	6036
Status :	Closed
Facility Name :	Lynchburg City STP
Region :	South Central
Incident Type :	Fish Kill
Incident Subtype :	Fish Kill
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Materials :	Sewage (-1--1 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	-1
High Quantity to Water :	-1
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	Caller to DGIF reporting a fish kill in James River at Percival's Island sewage
Original Call Material Description :	
Original Call Location Description :	Percival's Island in James RiverLynchburg
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	DGIF, VDEM, VDH, City of Lynchburg
Permitted (Y/N) :	Y
Call Reported by Name :	N/R
Call Reported by Company Name :	DGIF Dispatcher
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R

Closure Comments :

Fish Kill investigated. Lynchburg City replaced pumps. Full abatement report is included in documents.

Site Summary :

Map Id: F36
Direction: W
Distance: 0.315 mi.
Actual: 1663.413 ft.
Elevation: 0.101 mi. / 533.465 ft.
Relative: Lower

Site Name : FISH KILL & SSO - 1312 JEFFERSON STREET
1312 JEFFERSON STREET
LYNCHBURG, VA

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816628
EPA ID: N/R

SPILLS - VA (*cont.*)

Caller (Security Guard at Rock-Tenn) contacts DGIF reporting a fish kill in James River at Percival's Island. Saw " hundreds " of dead fish fetched up against their water intake dam in the James. Regional Biologist, M. Shaver, was dispatched and went first to Madison Heights/Amherst Co. Boat Ramp. He next went to Rock-Tenn, arriving approximately 1900, and noted sewage odor was present. Shaver rode with FD personnel, stopping at various spots upstream of Rock-Tenn and they localized sewage odor to somewhere upstream of 13th and Jefferson and downstream of Blackwater Creek. Darkness and river side access prevented fish counting. Approximately 2000-2015, Shaver is attempting to contact Lynchburg Public Works. Approximately 2045, Harry Doss, Utility Line Maintenance Supervisor, arrives on scene. Approximately 2200, Doss calls Shaver and tells him sewage is entering river from CSO Outfall #057, located in 1300 block of Jefferson Street. SSO traced to clogged bypass pumps at CSO repair site upstream of WWTP. Pump intakes were clogged/fouled with sediment and debris washed into sewer lines during a brief but heavy rain event on Wednesday (9/22/2010). Sewage apparently backed up into pipes and discharged from a CSO outfall line into river. 9/25/2010 - Shaver returns to conduct DO measurements at various sites between Mt. Athos Boat Ramp and Blackwater Creek. Finds no sewage odor downstream and minimal odor at Rock-Tenn. He also tries to estimate fish mortalities with binoculars from various bridge vantage points. Stopped at WWTP and was told contractor had pumps back up and pumping by approx. 2400. Shaver found some dead fish, mostly shad. Noted there were numerous buzzards flying above river and dead fish had been washing away and/or been eaten by scavengers overnight.

Map Id: G37
Direction: SSW
Distance: 0.317 mi.
Actual: 1674.547 ft.
Elevation: 0.097 mi. / 512.927 ft.
Relative: Lower

Site Name : JACKSON GEORGE RESIDENCE
2205 CONCORD TPKE
LYNCHBURG, VA 24501

Envirosite ID: 30475895
EPA ID: N/R

Database(s) : [LPT - VA]

LPT - VA

Release Reported :	11/29/2010
PC Number :	20112109
CEDS Facility ID :	200000854562
Case Status :	Closed
Case Closed Date :	04/12/2011
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	Category 2
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	Y
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	N/R
Suspect Confirm Indicator :	Confirmed

Map Id: G37
Direction: SSW
Distance: 0.317 mi.
Actual: 1674.547 ft.
Elevation: 0.097 mi. / 512.927 ft.
Relative: Lower

Site Name : JACKSON GEORGE RESIDENCE
2205 CONCORD TPKE
LYNCHBURG, VA 24501
Database(s) : [LPT - VA] (*cont.*)

Envirosite ID: 30475895
EPA ID: N/R

LPT - VA (*cont.*)

Latitude : 37.3957380202279
Longitude : -79.1174439699483

Map Id: F38
Direction: W
Distance: 0.329 mi.
Actual: 1739.568 ft.
Elevation: 0.102 mi. / 539.37 ft.
Relative: Lower

Site Name : 18 HORSEFORD RD OVERFLOW
18 HORSEFORD RD
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 31115758
EPA ID: N/R

PCD - VA

Incident Date :	07/01/2015
Call Received Date :	07/06/2015
Closure Date :	07/06/2015
Closure Comments :	Incident was thought to be overflow, but no overflow occurred. 5 day letter received.

Site Summary : A potential overflow was reported, but subsequent investigation revealed no overflow occurred. The material cleaned up was construction debris and sediment, but no sanitary waste was observed.

Reference ID :	40524
IR Number :	2016-L-0051
Facility Name :	City of Lynchburg
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	N/R
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	N/R
Incident Subtype :	N/R
Materials :	N/R
Effect to Receptor :	Impacted
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	Other
Other Impacts :	N/R
Steps Taken :	N/R

Map Id: F38
 Direction: W
 Distance: 0.329 mi.
 Actual: 1739.568 ft.
 Elevation: 0.102 mi. / 539.37 ft.
 Relative: Lower

Site Name : 18 HORSEFORD RD OVERFLOW
 18 HORSEFORD RD
 LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 31115758
EPA ID: N/R

PCD - VA (*cont.*)

Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	A potential overflow was reported, but subsequent investigation revealed no overflow occurred. The material cleaned up was construction debris and sediment, but no sanitary waste was observed.
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	Y
Permitted (Y/N) :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	City of Lynchburg reported; VDH notified
Call Reported by Name :	Jeanette Kitts
Call Reported by Company Name :	N/R
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	Sewage
Original Call Location Description :	18 Horseford Rd
Original Call Incident Description :	The contractor has a pump around set up at 4100 Murray place and pump around has failed and is overflowing into creek.

SPILLS - VA

Incident Date :	07/01/2015
Call Received Date :	07/06/2015
Closure Date :	07/06/2015
IR Number :	2016-L-0051
Associated IR :	N/R
Reference ID :	40524
Status :	Closed
Facility Name :	City of Lynchburg
Region :	South Central
Incident Type :	N/R
Incident Subtype :	N/R
Threat to :	N/R
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	N/R
Effect to Receptor :	Impacted
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R

Map Id: F38
Direction: W
Distance: 0.329 mi.
Actual: 1739.568 ft.
Elevation: 0.102 mi. / 539.37 ft.
Relative: Lower

Site Name : 18 HORSEFORD RD OVERFLOW
18 HORSEFORD RD
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 31115758
EPA ID: N/R

SPILLS - VA (*cont.*)

Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	Other
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	A potential overflow was reported, but subsequent investigation revealed no overflow occurred. The material cleaned up was construction debris and sediment, but no sanitary waste was observed.
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	The contractor has a pump around set up at 4100 Murray place and pump around has failed and is overflowing into creek.
Original Call Material Description :	Sewage
Original Call Location Description :	18 Horseford Rd
Incident Ongoing at Time of Call :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	City of Lynchburg reported; VDH notified
Permitted (Y/N) :	Y
Call Reported by Name :	Jeanette Kitts
Call Reported by Company Name :	N/R
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	Incident was thought to be overflow, but no overflow occurred. 5 day letter received.
Site Summary :	A potential overflow was reported, but subsequent investigation revealed no overflow occurred. The material cleaned up was construction debris and sediment, but no sanitary waste was observed.

Map Id: H39
Direction: WNW
Distance: 0.333 mi.
Actual: 1757.044 ft.
Elevation: 0.131 mi. / 689.633 ft.
Relative: Lower

Site Name : BANTON OWEN RESIDENCE
605 MAIN ST.
MADISON HEIGHTS, VA 24572
Database(s) : [LPT - VA]

Envirosite ID: 24849297
EPA ID: N/R

LPT - VA

Release Reported :	03/09/1994
PC Number :	19942725
CEDS Facility ID :	200000206462
Case Status :	Closed
Case Closed Date :	07/26/1995
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	N/R
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	Y
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	3
Suspect Confirm Indicator :	Confirmed

Latitude : 37.420215836902
Longitude : -79.1296904120609

Map Id: I40
Direction: W
Distance: 0.337 mi.
Actual: 1777.535 ft.
Elevation: 0.101 mi. / 535.433 ft.
Relative: Lower

Site Name : SSO - FROM CSO 057
1300 BLOCK OF JEFFERSON STREET
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816621
EPA ID: N/R

PCD - VA

Incident Date :	09/27/2010
Call Received Date :	10/05/2010
Closure Date :	10/05/2010
Closure Comments :	Duplicate of 2011-L-0821

Site Summary :
CSO repair contractor's bypass pumps were not pumping properly, sewage was backing up in lines and overflowing from CSO outfall. Same outfall and circumstances that caused overflow and fish kill on Friday (9/24/10).

Reference ID :	6049
IR Number :	2011-L-0931
Facility Name :	Lynchburg WWTP
Region :	South Central
Status :	Closed

Map Id: I40
 Direction: W
 Distance: 0.337 mi.
 Actual: 1777.535 ft.
 Elevation: 0.101 mi. / 535.433 ft.
 Relative: Lower

Site Name : SSO - FROM CSO 057
 1300 BLOCK OF JEFFERSON STREET
 LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816621
EPA ID: N/R

PCD - VA (*cont.*)

Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Incident Type :	Water
Incident Subtype :	SSO, Water
Materials :	Sewage (-1--1 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	-1
High Quantity to Water :	-1
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	SSO Reached Receiving Waters
Other Impacts :	N/R
Steps Taken :	Removed Blockage
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	fouling of sewage bypass pumps at CSO repair site
Corrective Action Taken :	N/R
Weather Status :	Wet
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	0
Unknown Discharge (Y/N) :	Y
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Call Reported by Name :	Bob Goode
Call Reported by Company Name :	Lynchburg WWTP
Call RP Company Name :	Thalle Construction Company
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	sewage
Original Call Location Description :	CSO 0571300 Block of Jefferson Street Lynchburg
Original Call Incident Description :	CSO repair contractor's bypass pumps were not pumping properly, sewage was backing up in lines and overflowing from CSO outfall. Same outfall and circumstances that caused overflow and fish kill on Friday (9/24/10).

SPILLS - VA

Incident Date :	09/27/2010
Call Received Date :	10/05/2010
Closure Date :	10/05/2010
IR Number :	2011-L-0931
Associated IR :	N/R

Map Id: I40
Direction: W
Distance: 0.337 mi.
Actual: 1777.535 ft.
Elevation: 0.101 mi. / 535.433 ft.
Relative: Lower

Site Name : SSO - FROM CSO 057
1300 BLOCK OF JEFFERSON STREET
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816621
EPA ID: N/R

SPILLS - VA (*cont.*)

Reference ID :	6049
Status :	Closed
Facility Name :	Lynchburg WWTP
Region :	South Central
Incident Type :	Water
Incident Subtype :	SSO * Water
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Materials :	Sewage (-1--1 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	-1
High Quantity to Water :	-1
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	SSO Reached Receiving Waters
Other Impacts :	N/R
Steps Taken :	Removed Blockage
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	fouling of sewage bypass pumps at CSO repair site
Corrective Action Taken :	N/R
Weather Status :	Wet
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	0
Unknown Discharge (Y/N) :	Y
Original Call Incident Description :	CSO repair contractor's bypass pumps were not pumping properly, sewage was backing up in lines and overflowing from CSO outfall. Same outfall and circumstances that caused overflow and fish kill on Friday (9/24/10).
Original Call Material Description :	sewage
Original Call Location Description :	CSO 0571300 Block of Jefferson Street Lynchburg
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Permitted (Y/N) :	Y
Call Reported by Name :	Bob Goode
Call Reported by Company Name :	Lynchburg WWTP
Call RP Company Name :	Thalle Construction Company
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	Duplicate of 2011-L-0821

Map Id: I40
Direction: W
Distance: 0.337 mi.
Actual: 1777.535 ft.
Elevation: 0.101 mi. / 535.433 ft.
Relative: Lower

Site Name : SSO - FROM CSO 057
1300 BLOCK OF JEFFERSON STREET
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816621
EPA ID: N/R

SPILLS - VA (*cont.*)

Site Summary :

CSO repair contractor's bypass pumps were not pumping properly, sewage was backing up in lines and overflowing from CSO outfall. Same outfall and circumstances that caused overflow and fish kill on Friday (9/24/10).

Map Id: H41
Direction: WNW
Distance: 0.337 mi.
Actual: 1779.736 ft.
Elevation: 0.125 mi. / 657.48 ft.
Relative: Lower

Site Name : POSSIBLE ACM AT RESIDENTIAL DEMO SITE
240 ROCKY HILL RD
MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21815860
EPA ID: N/R

PCD - VA

Incident Date : 08/07/2013
Call Received Date : 08/21/2013
Closure Date : 08/21/2013

Closure Comments : DEQ and VDOLI reps met at demo site with the various parties involved in this community development grant project. Discussion directed at making sure all involved were aware of their responsibilities regarding proper removal and disposal of ACM. This grant project will involve renovation and demo of several older homes in the neighborhood. NFA

Site Summary : During on site inspection of heating oil tank release reported 8/2/2013, M. Cholko observed possible ACM (transite siding debris and sheets of whitish-gray fibrous material) commingled in CDD at a residential demolition site.

Reference ID : 21047
IR Number : 2014-L-0720
Facility Name : N/R
Region : South Central
Status : Closed
Associated IR : N/R
Threat to : Human Health
Terrorism (Y/N) : N
Characterize Incident : Unknown
Incident Type : Waste
Incident Subtype : Solid Waste, Waste
Materials : Asbestos Containing Materials (ACM) (-1-1 Ton)
Effect to Receptor : N/R
Water Body : N/R
Low Quantity to Water : N/R
High Quantity to Water : N/R
Quantity Units : N/R
Other Receptors : N/R

Map Id: H41
 Direction: WNW
 Distance: 0.337 mi.
 Actual: 1779.736 ft.
 Elevation: 0.125 mi. / 657.48 ft.
 Relative: Lower

Site Name : POSSIBLE ACM AT RESIDENTIAL DEMO SITE
 240 ROCKY HILL RD
 MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815860
EPA ID: N/R

PCD - VA (*cont.*)

RP Company :	Dixon's Home Improvement
RP Name :	Dixon, Artemus
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	Y
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDOLI
Call Reported by Name :	Mike Cholko
Call Reported by Company Name :	DEQ BRRO-L
Call RP Company Name :	Dixon's Home Improvements
Call RP Name :	Artemus Dixon
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	ACM
Original Call Location Description :	Possible ACM at residential demo site240 Rocky Hill RdMadison Heights
Original Call Incident Description :	During on site inspection of heating oil tank release reported 8/2/2013, M. Cholko observed possible ACM (transite siding debris and sheets of whitish-gray fibrous material) commingled in CDD at a residential demolition site.

SPILLS - VA

Incident Date :	08/07/2013
Call Received Date :	08/21/2013
Closure Date :	08/21/2013
IR Number :	2014-L-0720
Associated IR :	N/R
Reference ID :	21047
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Waste
Incident Subtype :	Solid Waste * Waste
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Asbestos Containing Materials (ACM) (-1--1 Ton)
Effect to Receptor :	N/R
Water Body :	N/R

Map Id: H41
Direction: WNW
Distance: 0.337 mi.
Actual: 1779.736 ft.
Elevation: 0.125 mi. / 657.48 ft.
Relative: Lower

Site Name : POSSIBLE ACM AT RESIDENTIAL DEMO SITE
240 ROCKY HILL RD
MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815860
EPA ID: N/R

SPILLS - VA (*cont.*)

Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	Dixon's Home Improvement
RP Name :	Dixon, Artemus
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	During on site inspection of heating oil tank release reported 8/2/2013, M. Cholko observed possible ACM (transite siding debris and sheets of whitish-gray fibrous material) commingled in CDD at a residential demolition site.
Original Call Material Description :	ACM
Original Call Location Description :	Possible ACM at residential demo site 240 Rocky Hill Rd Madison Heights
Incident Ongoing at Time of Call :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	VDOLI
Permitted (Y/N) :	N
Call Reported by Name :	Mike Cholko
Call Reported by Company Name :	DEQ BRRO-L
Call RP Company Name :	Dixon's Home Improvements
Call RP Name :	Artemus Dixon
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R

Closure Comments :

DEQ and VDOLI reps met at demo site with the various parties involved in this community development grant project. Discussion directed at making sure all involved were aware of their responsibilities regarding proper removal and disposal of ACM. This grant project will involve renovation and demo of several older homes in the neighborhood. NFA

Site Summary :

During on site inspection of heating oil tank release reported 8/2/2013, M. Cholko observed possible ACM (transite siding debris and sheets of whitish-gray fibrous material) commingled in CDD at a residential demolition site.

Map Id: H42
Direction: WNW
Distance: 0.337 mi.
Actual: 1779.736 ft.
Elevation: 0.125 mi. / 657.48 ft.
Relative: Lower

Site Name : DEMO SITE - ACM
240 ROCKY HILL RD
MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21815861
EPA ID: N/R

PCD - VA

Incident Date :	08/07/2013
Call Received Date :	08/13/2013
Closure Date :	01/21/2015
Closure Comments :	Site referred to Doug Wiggins VDOLI
Site Summary :	While looking into a heating oil release at demo site, potential ACM issues were observed. See also IR 2014-L-0652.
Reference ID :	20969
IR Number :	2014-L-0658
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Waste
Incident Subtype :	Hazardous Waste, Solid Waste, Waste
Materials :	Asbestos Containing Materials (ACM) (-1--1 Ton)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	Dixon's Home Improvement
RP Name :	Dixon, Artemus
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	Y
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	N
Other Agencies :	N/R
Call Reported by Name :	Mike Cholko
Call Reported by Company Name :	DEQ BRRO-L
Call RP Company Name :	Dixon's Home Improvements
Call RP Name :	Artemus Dixon
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	ACM solid waste
Original Call Location Description :	Demo site - ACM240 Rocky Hill RdMadison Heights

Map Id: H42
Direction: WNW
Distance: 0.337 mi.
Actual: 1779.736 ft.
Elevation: 0.125 mi. / 657.48 ft.
Relative: Lower

Site Name : DEMO SITE - ACM
240 ROCKY HILL RD
MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815861
EPA ID: N/R

PCD - VA (*cont.*)

Original Call Incident Description : While looking into a heating oil release at demo site, potential ACM issues were observed. See also IR 2014-L-0652.

SPILLS - VA

Incident Date :	08/07/2013
Call Received Date :	08/13/2013
Closure Date :	01/21/2015
IR Number :	2014-L-0658
Associated IR :	N/R
Reference ID :	20969
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Waste
Incident Subtype :	Hazardous Waste * Solid Waste * Waste
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Asbestos Containing Materials (ACM) (-1--1 Ton)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	Dixon's Home Improvement
RP Name :	Dixon, Artemus
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/A
Precipitation (Wet) :	0
Discharge Type :	N/A
Discharge Volume :	0
Unknown Discharge (Y/N) :	N

Original Call Incident Description : While looking into a heating oil release at demo site, potential ACM issues were observed. See also IR 2014-L-0652.

Original Call Material Description :	ACM solid waste
Original Call Location Description :	Demo site - ACM240 Rocky Hill RdMadison Heights
Incident Ongoing at Time of Call :	Y
Agencies Notified (Y/N) :	N
Other Agencies :	N/R
Permitted (Y/N) :	N
Call Reported by Name :	Mike Cholko

Map Id: H42
Direction: WNW
Distance: 0.337 mi.
Actual: 1779.736 ft.
Elevation: 0.125 mi. / 657.48 ft.
Relative: Lower

Site Name : DEMO SITE - ACM
240 ROCKY HILL RD
MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815861
EPA ID: N/R

SPILLS - VA (*cont.*)

Call Reported by Company Name :	DEQ BRRO-L
Call RP Company Name :	Dixon's Home Improvements
Call RP Name :	Artemus Dixon
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	Site referred to Doug Wiggins VDOLI
Site Summary :	While looking into a heating oil release at demo site, potential ACM issues were observed. See also IR 2014-L-0652.

Map Id: H43
Direction: WNW
Distance: 0.337 mi.
Actual: 1779.736 ft.
Elevation: 0.125 mi. / 657.48 ft.
Relative: Lower

Site Name : HEATING OIL RELEASE - DEMO SITE
240 ROCKY HILL RD
MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21815862
EPA ID: N/R

PCD - VA

Incident Date :	08/02/2013
Call Received Date :	08/13/2013
Closure Date :	08/13/2013
Closure Comments :	Complaint to be handled as PC # 2014-2046N, D. Kirby will be Project Manager. This will transition from State Lead to RP lead as discharge appears to be result of negligence. NFA

Site Summary :

Per D. Foran - Ms. Qualls reported an oil spill of approximately 250 gallons from a home heating oil tank that occurred 3-4 days ago from a demolition project taking place next door to her aunt's home. Oil ran down an embankment from where the spill took place and is now creating an odor nuisance for her relative who resides at 236 Rocking Hill Rd. The resident at 236 is complaining of her eyes burning due to fumes from the spill. The caller explained she only became aware of the incident today and did not know the name of the contractor. She has reported the incident to Lee Day of Amherst Co. Emergency Services who referred her to DEQ. I contacted Mike Cholko at 1:50 who suggested contacting Lee Day to see if plastic could be applied over the area to prevent additional run-off (rain expected over weekend). I contacted and left a voice mail requesting a call back from Mr. Day's office at 2:00 PM, but have received no response. A voice mail was also left for Rob Howard, DEQ BRRO-Ro Tanks Team Leader.

Reference ID :	20961
IR Number :	2014-L-0652
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Petroleum

Map Id: H43
 Direction: WNW
 Distance: 0.337 mi.
 Actual: 1779.736 ft.
 Elevation: 0.125 mi. / 657.48 ft.
 Relative: Lower

Site Name : HEATING OIL RELEASE - DEMO SITE
 240 ROCKY HILL RD
 MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815862
EPA ID: N/R

PCD - VA (*cont.*)

Incident Subtype :	Petroleum, Surface Spill
Materials :	Heating oil (1-250 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	crawl space
RP Company :	Dixon's Home Improvement
RP Name :	Dixon, Artemus
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	Y
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	N
Other Agencies :	N/R
Call Reported by Name :	Teresa Qualls
Call Reported by Company Name :	N/R
Call RP Company Name :	Dixon's Home Improvement
Call RP Name :	Artemus Dixon
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	heating oil
Original Call Location Description :	Heating oil release - Demo site 240 Rocky Hill Rd Madison Heights
Original Call Incident Description :	Per D. Foran - Ms. Qualls reported an oil spill of approximately 250 gallons from a home heating oil tank that occurred 3-4 days ago from a demolition project taking place next door to her aunt's home. Oil ran down an embankment from where the spill took place and is now creating an odor nuisance for her relative who resides at 236 Rocking Hill Rd. The resident at 236 is complaining of her eyes burning due to fumes from the spill. The caller explained she only became aware of the incident today and did not know the name of the contractor. She has reported the incident to Lee Day of Amherst Co. Emergency Services who referred her to DEQ. I contacted Mike Cholko at 1:50 who suggested contacting Lee Day to see if plastic could be applied over the area to prevent additional run-off. I contacted and left a voice mail requesting a call back from Mr. Day's office at 2:00 PM, but have received no response. A voice mail was also left for Rob Howard, DEQ BRRO-Ro Tanks Team Leader.

SPILLS - VA

Incident Date :	08/02/2013
Call Received Date :	08/13/2013
Closure Date :	08/13/2013

Map Id: H43
 Direction: WNW
 Distance: 0.337 mi.
 Actual: 1779.736 ft.
 Elevation: 0.125 mi. / 657.48 ft.
 Relative: Lower

Site Name : HEATING OIL RELEASE - DEMO SITE
 240 ROCKY HILL RD
 MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815862
EPA ID: N/R

SPILLS - VA (*cont.*)

IR Number :	2014-L-0652
Associated IR :	N/R
Reference ID :	20961
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Petroleum
Incident Subtype :	Petroleum * Surface Spill
Threat to :	Ground Water
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Heating oil (1-250 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	crawl space
RP Company :	Dixon's Home Improvement
RP Name :	Dixon, Artemus
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N

Original Call Incident Description :

Per D. Foran - Ms. Qualls reported an oil spill of approximately 250 gallons from a home heating oil tank that occurred 3-4 days ago from a demolition project taking place next door to her aunt's home. Oil ran down an embankment from where the spill took place and is now creating an odor nuisance for her relative who resides at 236 Rocking Hill Rd. The resident at 236 is complaining of her eyes burning due to fumes from the spill. The caller explained she only became aware of the incident today and did not know the name of the contractor. She has reported the incident to Lee Day of Amherst Co. Emergency Services who referred her to DEQ. I contacted Mike Cholko at 1:50 who suggested contacting Lee Day to see if plastic could be applied over the area to prevent additional run-off. I contacted and left a voice mail requesting a call back from Mr. Day's office at 2:00 PM, but have received no response. A voice mail was also left for Rob Howard, DEQ BRRO-Ro Tanks Team Leader.

Original Call Material Description :	heating oil
Original Call Location Description :	Heating oil release - Demo site 240 Rocky Hill Rd Madison Heights
Incident Ongoing at Time of Call :	Y
Agencies Notified (Y/N) :	N
Other Agencies :	N/R
Permitted (Y/N) :	N
Call Reported by Name :	Teresa Qualls
Call Reported by Company Name :	N/R

Map Id: H43
Direction: WNW
Distance: 0.337 mi.
Actual: 1779.736 ft.
Elevation: 0.125 mi. / 657.48 ft.
Relative: Lower

Site Name : HEATING OIL RELEASE - DEMO SITE
240 ROCKY HILL RD
MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815862
EPA ID: N/R

SPILLS - VA (*cont.*)

Call RP Company Name : Dixon's Home Improvement
Call RP Name : Artemus Dixon
Call Property Owner Company Name : N/R
Call Property Owner Name : N/R

Closure Comments :

Complaint to be handled as PC # 2014-2046N, D. Kirby will be Project Manager. This will transition from State Lead to RP lead as discharge appears to be result of negligence. NFA

Site Summary :

Per D. Foran - Ms. Qualls reported an oil spill of approximately 250 gallons from a home heating oil tank that occurred 3-4 days ago from a demolition project taking place next door to her aunt's home. Oil ran down an embankment from where the spill took place and is now creating an odor nuisance for her relative who resides at 236 Rocking Hill Rd. The resident at 236 is complaining of her eyes burning due to fumes from the spill. The caller explained she only became aware of the incident today and did not know the name of the contractor. She has reported the incident to Lee Day of Amherst Co. Emergency Services who referred her to DEQ. I contacted Mike Cholko at 1:50 who suggested contacting Lee Day to see if plastic could be applied over the area to prevent additional run-off (rain expected over weekend). I contacted and left a voice mail requesting a call back from Mr. Day's office at 2:00 PM, but have received no response. A voice mail was also left for Rob Howard, DEQ BRRO-Ro Tanks Team Leader.

Map Id: I44
Direction: W
Distance: 0.346 mi.
Actual: 1825.255 ft.
Elevation: 0.101 mi. / 533.136 ft.
Relative: Lower

Site Name : CSO 057
1312/1348 JEFFERSON STREET
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816614
EPA ID: N/R

PCD - VA

Incident Date :	10/27/2010
Call Received Date :	11/04/2010
Closure Date :	01/15/2015
Closure Comments :	5 day letter received.
Site Summary :	See document attached
Reference ID :	6509
IR Number :	2011-L-1282
Facility Name :	City of Lynchburg WWTP
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Water
Incident Subtype :	Overflow, Water
Materials :	Sewage (311400-311400 Gallons)
Effect to Receptor :	Impacted

Map Id: I44
Direction: W
Distance: 0.346 mi.
Actual: 1825.255 ft.
Elevation: 0.101 mi. / 533.136 ft.
Relative: Lower

Site Name : CSO 057
1312/1348 JEFFERSON STREET
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816614
EPA ID: N/R

PCD - VA (*cont.*)

Water Body :	James River
Low Quantity to Water :	311400
High Quantity to Water :	311400
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	3
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	Overflow of CSO 057
Corrective Action Taken :	N/R
Weather Status :	Dry
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	311400
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Call Reported by Name :	Alvin Rucker
Call Reported by Company Name :	City of Lynchburg
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	sewage
Original Call Location Description :	CSO outfall 057 (1312/1348 Jefferson Street)
Original Call Incident Description :	overflow
Incident Date :	10/22/2010
Call Received Date :	11/01/2010
Closure Date :	01/15/2015
Closure Comments :	Five day letter received.
Site Summary :	During a routine check on the sensor calibration depth readings indicated that the level was high and an overflow may be occurring
Reference ID :	6434
IR Number :	2011-L-1228
Facility Name :	City of Lynchburg WWTP
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Incident Type :	Water
Incident Subtype :	Overflow, Water

Map Id: I44
Direction: W
Distance: 0.346 mi.
Actual: 1825.255 ft.
Elevation: 0.101 mi. / 533.136 ft.
Relative: Lower

Site Name : CSO 057
1312/1348 JEFFERSON STREET
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816614
EPA ID: N/R

PCD - VA (*cont.*)

Materials :	Sewage (27600-27600 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	27600
High Quantity to Water :	27600
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	1
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	Dry
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	27600
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Call Reported by Name :	Alvin Rucker
Call Reported by Company Name :	City of Lynchburg
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	sewage
Original Call Location Description :	CSO 057 Outfall
Original Call Incident Description :	Overflow

SPILLS - VA

Incident Date :	10/27/2010
Call Received Date :	11/04/2010
Closure Date :	01/15/2015
IR Number :	2011-L-1282
Associated IR :	N/R
Reference ID :	6509
Status :	Closed
Facility Name :	City of Lynchburg WWTP
Region :	South Central
Incident Type :	Water
Incident Subtype :	Overflow * Water
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Sewage (311400-311400 Gallons)
Effect to Receptor :	Impacted

Map Id: I44
Direction: W
Distance: 0.346 mi.
Actual: 1825.255 ft.
Elevation: 0.101 mi. / 533.136 ft.
Relative: Lower

Site Name : CSO 057
1312/1348 JEFFERSON STREET
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816614
EPA ID: N/R

SPILLS - VA (*cont.*)

Water Body :	James River
Low Quantity to Water :	311400
High Quantity to Water :	311400
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	3
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	Overflow of CSO 057
Corrective Action Taken :	N/R
Weather Status :	Dry
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	311400
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	overflow
Original Call Material Description :	sewage
Original Call Location Description :	CSO outfall 057 (1312/1348 Jefferson Street)
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Permitted (Y/N) :	Y
Call Reported by Name :	Alvin Rucker
Call Reported by Company Name :	City of Lynchburg
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	5 day letter received.
Site Summary :	See document attached
Incident Date :	10/22/2010
Call Received Date :	11/01/2010
Closure Date :	01/15/2015
IR Number :	2011-L-1228
Associated IR :	N/R
Reference ID :	6434
Status :	Closed
Facility Name :	City of Lynchburg WWTP
Region :	South Central
Incident Type :	Water
Incident Subtype :	Overflow * Water
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Sewage (27600-27600 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River

Map Id: I44
Direction: W
Distance: 0.346 mi.
Actual: 1825.255 ft.
Elevation: 0.101 mi. / 533.136 ft.
Relative: Lower

Site Name : CSO 057
1312/1348 JEFFERSON STREET
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816614
EPA ID: N/R

SPILLS - VA (*cont.*)

Low Quantity to Water :	27600
High Quantity to Water :	27600
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	1
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	Dry
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	27600
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	Overflow
Original Call Material Description :	sewage
Original Call Location Description :	CSO 057 Outfall
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Permitted (Y/N) :	Y
Call Reported by Name :	Alvin Rucker
Call Reported by Company Name :	City of Lynchburg
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	Five day letter received.
Site Summary :	During a routine check on the sensor calibration depth readings indicated that the level was high and an overflow may be occurring

Map Id: I45
Direction: W
Distance: 0.346 mi.
Actual: 1825.255 ft.
Elevation: 0.101 mi. / 533.136 ft.
Relative: Lower

Site Name : FISH KILL - JEFFERSON STREET ACROSS FROM ROCK TENN
1312/1348 JEFFERSON STREET ACROSS FROM ROCK TENN
LYNCHBURG, VA

Envirosite ID: 21816633
EPA ID: N/R

Database(s) : [PCD - VA, SPILLS - VA]

PCD - VA

Incident Date :	09/24/2010
Call Received Date :	09/29/2010
Closure Date :	01/22/2015
Closure Comments :	5 day letter received.
Site Summary :	Overflow at 1312/1348 Jefferson Street across from Rock Tenn. CSO contractor pump failure caused overflow. Fish kill was reported to DEQ.
Reference ID :	5928
IR Number :	2011-L-0821
Facility Name :	City of Lynchburg WWTP
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Incident Type :	Fish Kill, Water
Incident Subtype :	Fish Kill, SSO, Water
Materials :	Fish (dead) (1000-5000 Each), Sewage (270000-270000 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	270000
High Quantity to Water :	270000
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	5
Impacts :	SSO Reached Receiving Waters
Other Impacts :	CSO outfall
Steps Taken :	Other
Steps Taken Description :	repaired bypass operation
System Components :	N/R
Other System Components :	bypass pump failure
Cause of Event :	Overflow at 1312/1348 Jefferson Street across from Rock Tenn. CSO contractor pump failure caused overflow from CSO outfall into James River causing fish kill. Fish kill was reported to DEQ.
Corrective Action Taken :	N/R
Weather Status :	Dry
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	270000
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	Y
Agencies Notified (Y/N) :	N
Other Agencies :	VDH
Call Reported by Name :	William Swain
Call Reported by Company Name :	City of Lynchburg WWTP
Call RP Company Name :	N/R

Map Id: I45
 Direction: W
 Distance: 0.346 mi.
 Actual: 1825.255 ft.
 Elevation: 0.101 mi. / 533.136 ft.
 Relative: Lower

Site Name : FISH KILL - JEFFERSON STREET ACROSS FROM ROCK TENN
 1312/1348 JEFFERSON STREET ACROSS FROM ROCK TENN
 LYNCHBURG, VA

Envirosite ID: 21816633
EPA ID: N/R

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

PCD - VA (*cont.*)

Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	Sewage
Original Call Location Description :	1312/1348 Jefferson Street - across from Rock Tenn CSO 057
Original Call Incident Description :	CSO work - contractor pump failure causing overFish kill

SPILLS - VA

Incident Date :	09/24/2010
Call Received Date :	09/29/2010
Closure Date :	01/22/2015
IR Number :	2011-L-0821
Associated IR :	N/R
Reference ID :	5928
Status :	Closed
Facility Name :	City of Lynchburg WWTP
Region :	South Central
Incident Type :	Fish Kill * Water
Incident Subtype :	Fish Kill * SSO * Water
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Materials :	Fish (dead) (1000-5000 Each) * Sewage (270000-270000 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	270000
High Quantity to Water :	270000
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	5
Impacts :	SSO Reached Receiving Waters
Other Impacts :	CSO outfall
Steps Taken :	Other
Steps Taken Description :	repaired bypass operation
System Components :	N/R
Other System Components :	bypass pump failure
Cause of Event :	Overflow at 1312/1348 Jefferson Street across from Rock Tenn. CSO contractor pump failure caused overflow from CSO outfall into James River causing fish kill. Fish kill was reported to DEQ.
Corrective Action Taken :	N/R
Weather Status :	Dry
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	270000
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	CSO work - contractor pump failure causing overFish kill
Original Call Material Description :	Sewage
Original Call Location Description :	1312/1348 Jefferson Street - across from Rock Tenn CSO 057

Map Id: I45
Direction: W
Distance: 0.346 mi.
Actual: 1825.255 ft.
Elevation: 0.101 mi. / 533.136 ft.
Relative: Lower

Site Name : FISH KILL - JEFFERSON STREET ACROSS FROM ROCK TENN
1312/1348 JEFFERSON STREET ACROSS FROM ROCK TENN
LYNCHBURG, VA

Envirosite ID: 21816633
EPA ID: N/R

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

SPILLS - VA (*cont.*)

Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	N
Other Agencies :	VDH
Permitted (Y/N) :	Y
Call Reported by Name :	William Swain
Call Reported by Company Name :	City of Lynchburg WWTP
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	5 day letter received.
Site Summary :	Overflow at 1312/1348 Jefferson Street across from Rock Tenn. CSO contractor pump failure caused overflow. Fish kill was reported to DEQ.

Map Id: 46
Direction: WNW
Distance: 0.396 mi.
Actual: 2092.768 ft.
Elevation: 0.139 mi. / 734.908 ft.
Relative: Higher

Site Name : BURNING FECES IN A BUCKET - 450 MAIN STREET
450 MAIN STREET
MADISON HEIGHTS, VA

Envirosite ID: 21815891
EPA ID: N/R

Database(s) : [PCD - VA, SPILLS - VA]

PCD - VA

Incident Date :	03/22/2011
Call Received Date :	04/05/2011
Closure Date :	04/05/2011
Closure Comments :	Referred to Sarah Lewis, Amherst County Health Dept. by phone. Never heard back from Ms. Lewis so did drive-by with D. Foran while in the neighborhood. Did not find any signs of burning or other debris in front yard. NFA
Site Summary :	Anon caller alleges her neighbor is burning buckets with human feces, in addition to burning other household remodeling debris in her front yard. Caller claims neighbor's are trying to renovate an older home while they live in it and the plumbing does not work. Said they most recently burned a bucket full of feces underneath a piece of carpet.
Reference ID :	8858
IR Number :	2011-L-2642
Facility Name :	N/R
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Ground Water, Human Health
Terrorism (Y/N) :	N

Map Id: 46
 Direction: WNW
 Distance: 0.396 mi.
 Actual: 2092.768 ft.
 Elevation: 0.139 mi. / 734.908 ft.
 Relative: Higher

Site Name : BURNING FECES IN A BUCKET - 450 MAIN STREET
 450 MAIN STREET
 MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815891
EPA ID: N/R

PCD - VA (*cont.*)

Characterize Incident :	Unknown
Incident Type :	Air, Waste
Incident Subtype :	Air, Open Burning, Solid Waste, Waste
Materials :	Household Waste (-1--1 Pound), Open Burning (-1--1 Pound), Sewage (-1--1 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	Y
Permitted (Y/N) :	N
Agencies Notified (Y/N) :	N
Other Agencies :	N/R
Call Reported by Name :	N/R
Call Reported by Company Name :	N/R
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	burning trash, carpet, human feces
Original Call Location Description :	450 Main StreetMadison Heights
Original Call Incident Description :	Anon caller alleges her neighbor is burning buckets with human feces, in addition to burning other household remodeling debris in her front yard. Caller claims neighbor's are trying to renovate an older home while they live in it and the plumbing does not work. Said they most recently burned a bucket full of feces underneath a piece of carpet.

SPILLS - VA

Incident Date :	03/22/2011
Call Received Date :	04/05/2011
Closure Date :	04/05/2011

Map Id: 46
 Direction: WNW
 Distance: 0.396 mi.
 Actual: 2092.768 ft.
 Elevation: 0.139 mi. / 734.908 ft.
 Relative: Higher

Site Name : BURNING FECES IN A BUCKET - 450 MAIN STREET
 450 MAIN STREET
 MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815891
EPA ID: N/R

SPILLS - VA (*cont.*)

IR Number :	2011-L-2642
Associated IR :	N/R
Reference ID :	8858
Status :	Closed
Facility Name :	N/R
Region :	South Central
Incident Type :	Air * Waste
Incident Subtype :	Air * Open Burning * Solid Waste * Waste
Threat to :	Ground Water, Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Unknown
Materials :	Household Waste (-1--1 Pound) * Open Burning (-1--1 Pound) * Sewage (-1--1 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	0
Impacts :	N/R
Other Impacts :	N/R
Steps Taken :	N/R
Steps Taken Description :	N/R
System Components :	N/R
Other System Components :	N/R
Cause of Event :	N/R
Corrective Action Taken :	N/R
Weather Status :	N/R
Precipitation (Wet) :	0
Discharge Type :	N/R
Discharge Volume :	0
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	Anon caller alleges her neighbor is burning buckets with human feces, in addition to burning other household remodeling debris in her front yard. Caller claims neighbor's are trying to renovate an older home while they live in it and the plumbing does not work. Said they most recently burned a bucket full of feces underneath a piece of carpet.
Original Call Material Description :	burning trash, carpet, human feces
Original Call Location Description :	450 Main StreetMadison Heights
Incident Ongoing at Time of Call :	Y
Agencies Notified (Y/N) :	N
Other Agencies :	N/R
Permitted (Y/N) :	N
Call Reported by Name :	N/R
Call Reported by Company Name :	N/R
Call RP Company Name :	N/R
Call RP Name :	N/R

Map Id: 46
Direction: WNW
Distance: 0.396 mi.
Actual: 2092.768 ft.
Elevation: 0.139 mi. / 734.908 ft.
Relative: Higher

Site Name : BURNING FECES IN A BUCKET - 450 MAIN STREET
450 MAIN STREET
MADISON HEIGHTS, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21815891
EPA ID: N/R

SPILLS - VA (*cont.*)

Call Property Owner Company Name : N/R
Call Property Owner Name : N/R

Closure Comments :

Referred to Sarah Lewis, Amherst County Health Dept. by phone. Never heard back from Ms. Lewis so did drive-by with D. Foran while in the neighborhood. Did not find any signs of burning or other debris in front yard. NFA

Site Summary :

Anon caller alleges her neighbor is burning buckets with human feces, in addition to burning other household remodeling debris in her front yard. Caller claims neighbor's are trying to renovate an older home while they live in it and the plumbing does not work. Said they most recently burned a bucket full of feces underneath a piece of carpet.

Map Id: 47
Direction: W
Distance: 0.415 mi.
Actual: 2190.221 ft.
Elevation: 0.111 mi. / 585.302 ft.
Relative: Lower

Site Name : CITYSCAPE LLC 1220 COMMERCE ST
1220 COMMERCE ST
LYNCHBURG, VA 24504
Database(s) : [LPT - VA]

Envirosite ID: 30475260
EPA ID: N/R

LPT - VA

Release Reported :	07/30/2014
PC Number :	20152033
CEDS Facility ID :	200000878639
Case Status :	Closed
Case Closed Date :	08/05/2014
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	NFA
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	Y
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	3
Suspect Confirm Indicator :	Confirmed

Map Id: 47
Direction: W
Distance: 0.415 mi.
Actual: 2190.221 ft.
Elevation: 0.111 mi. / 585.302 ft.
Relative: Lower

Site Name : CITYSCAPE LLC 1220 COMMERCE ST
1220 COMMERCE ST
LYNCHBURG, VA 24504
Database(s) : [LPT - VA] (*cont.*)

Envirosite ID: 30475260
EPA ID: N/R

LPT - VA (*cont.*)

Latitude : 37.412419846127
Longitude : -79.1385854743087

Map Id: 48
Direction: WNW
Distance: 0.437 mi.
Actual: 2309.643 ft.
Elevation: 0.114 mi. / 604.331 ft.
Relative: Lower

Site Name : HUD DEMOLITION PROJECT
234 ROCKY HILL RD
MADISON HEIGHTS, VA 24572
Database(s) : [LPT - VA]

Envirosite ID: 345734233
EPA ID: N/R

LPT - VA

Release Reported :	08/02/2013
PC Number :	20142046
CEDS Facility ID :	200000860050
Case Status :	Closed
Case Closed Date :	09/16/2013
Region :	WCRO
Program :	State Lead
Heating Oil Category :	Category 3
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	N
Small Heating Oil AST (2) :	Y
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	3
Suspect Confirm Indicator :	Confirmed

Latitude : 37.4165512710344
Longitude : -79.133412565271

Map Id: J49
 Direction: WSW
 Distance: 0.452 mi.
 Actual: 2387.609 ft.
 Elevation: 0.119 mi. / 626.312 ft.
 Relative: Lower

Site Name : SSO - FROM MANHOLE IN WOODS
 BEHIND 314 FLORIDA AVENUE
 BEHIND 314 FLORIDA AVENUE
 LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816681
EPA ID: N/R

PCD - VA

Incident Date :	03/12/2010
Call Received Date :	03/16/2010
Closure Date :	04/21/2010
Closure Comments :	5 day letter rec'd - NFA
Site Summary :	Reported to city 3-12-10 at 10:00am; has not been contained; contractor to start working on repair 3-15-10. Received updated report 3-23-10: Overflow contained 3-16-10 at 4:00pm; Sewage flowed 341 feet and re-entered city sewer system. Repair completed 3-18-10. This did not reach state waters which were reported on original report.
Reference ID :	3101
IR Number :	2010-S-2535
Facility Name :	City of Lynchburg WWTP
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Incident Type :	Water
Incident Subtype :	Overflow, SSO, Water
Materials :	Sewage (306000-306000 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	Overflow did not reach state waters as originally reported; overflow re-entered sewer system
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	102
Impacts :	SSO Affected Private Property
Other Impacts :	N/R
Steps Taken :	Repaired Pipe
Steps Taken Description :	N/R
System Components :	Pipe Failure
Other System Components :	N/R
Cause of Event :	Blockage from collapsed pipe
Corrective Action Taken :	Contractor to start working on repair 3-15-10; Work complete 3-18-10
Weather Status :	Wet
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	306000
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	Y
Agencies Notified (Y/N) :	N
Other Agencies :	VDH
Call Reported by Name :	Brenda Woody
Call Reported by Company Name :	City of Lynchburg

Map Id: J49
 Direction: WSW
 Distance: 0.452 mi.
 Actual: 2387.609 ft.
 Elevation: 0.119 mi. / 626.312 ft.
 Relative: Lower

Site Name : SSO - FROM MANHOLE IN WOODS
 BEHIND 314 FLORIDA AVENUE
 BEHIND 314 FLORIDA AVENUE
 LYNCHBURG, VA

Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816681
EPA ID: N/R

PCD - VA (*cont.*)

Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	sewage
Original Call Location Description :	Behind 314 Florida Avenue
Original Call Incident Description :	reported sewage was coming out of the manhole in the woods

SPILLS - VA

Incident Date :	03/12/2010
Call Received Date :	03/16/2010
Closure Date :	04/21/2010
IR Number :	2010-S-2535
Associated IR :	N/R
Reference ID :	3101
Status :	Closed
Facility Name :	City of Lynchburg WWTP
Region :	South Central
Incident Type :	Water
Incident Subtype :	Overflow * SSO * Water
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Materials :	Sewage (306000-306000 Gallons)
Effect to Receptor :	N/R
Water Body :	N/R
Low Quantity to Water :	N/R
High Quantity to Water :	N/R
Quantity Units :	N/R
Other Receptors :	Overflow did not reach state waters as originally reported; overflow re-entered sewer system
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	102
Impacts :	SSO Affected Private Property
Other Impacts :	N/R
Steps Taken :	Repaired Pipe
Steps Taken Description :	N/R
System Components :	Pipe Failure
Other System Components :	N/R
Cause of Event :	Blockage from collapsed pipe
Corrective Action Taken :	Contractor to start working on repair 3-15-10; Work complete 3-18-10
Weather Status :	Wet
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	306000
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	reported sewage was coming out of the manhole in the woods
Original Call Material Description :	sewage
Original Call Location Description :	Behind 314 Florida Avenue
Incident Ongoing at Time of Call :	N

Map Id: J49
Direction: WSW
Distance: 0.452 mi.
Actual: 2387.609 ft.
Elevation: 0.119 mi. / 626.312 ft.
Relative: Lower

Site Name : SSO - FROM MANHOLE IN WOODS
BEHIND 314 FLORIDA AVENUE
BEHIND 314 FLORIDA AVENUE
LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816681
EPA ID: N/R

SPILLS - VA (*cont.*)

Agencies Notified (Y/N) :	N
Other Agencies :	VDH
Permitted (Y/N) :	Y
Call Reported by Name :	Brenda Woody
Call Reported by Company Name :	City of Lynchburg
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	5 day letter rec'd - NFA
Site Summary :	Reported to city 3-12-10 at 10:00am; has not been contained; contractor to start working on repair 3-15-10. Received updated report 3-23-10: Overflow contained 3-16-10 at 4:00pm; Sewage flowed 341 feet and re-entered city sewer system. Repair completed 3-18-10. This did not reach state waters which were reported on original report.

Map Id: 50
Direction: WSW
Distance: 0.467 mi.
Actual: 2464.366 ft.
Elevation: 0.138 mi. / 728.675 ft.
Relative: Higher

Site Name : VARNEY FOSTER RESIDENCE
2222 TULIP ST
LYNCHBURG, VA 24504
Database(s) : [LPT - VA]

Envirosite ID: 342396515
EPA ID: N/R

LPT - VA

Release Reported :	02/28/2014
PC Number :	20142321
CEDS Facility ID :	200000874307
Case Status :	Closed
Case Closed Date :	10/02/2014
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	Category 2
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N
Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	Y
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	2
Suspect Confirm Indicator :	Confirmed

Map Id: 50
 Direction: WSW
 Distance: 0.467 mi.
 Actual: 2464.366 ft.
 Elevation: 0.138 mi. / 728.675 ft.
 Relative: Higher

Site Name : VARNEY FOSTER RESIDENCE
 2222 TULIP ST
 LYNCHBURG, VA 24504
Database(s) : [LPT - VA] (*cont.*)

Envirosite ID: 342396515
EPA ID: N/R

LPT - VA (*cont.*)

Latitude : 37.4020109542931
 Longitude : -79.1327271381328

Map Id: J51
 Direction: WSW
 Distance: 0.484 mi.
 Actual: 2557.509 ft.
 Elevation: 0.119 mi. / 630.577 ft.
 Relative: Lower

Site Name : SSO - 318 FLORIDA AVENUE
 318 FLORIDA AVENUE
 LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA]

Envirosite ID: 21816654
EPA ID: N/R

PCD - VA

Incident Date :	07/13/2010
Call Received Date :	07/19/2010
Closure Date :	07/19/2010
Closure Comments :	5 day letter rec'd - returned to compliance

Site Summary :	SSO - Sewage observed leaking from ground approximately 75 feet from downstream manhole. City crew was dispatched and rodded sewer line to remove blockage of rocks, bricks. Discharge DID REACH state waters - NO fish kill observed.
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Reference ID :	5037
IR Number :	2011-L-0144
Facility Name :	Lynchburg City STP
Region :	South Central
Status :	Closed
Associated IR :	N/R
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Incident Type :	Water
Incident Subtype :	Overflow, SSO, Water
Materials :	Sewage (1-3600 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	1
High Quantity to Water :	3600
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	4
Impacts :	SSO Reached Receiving Waters
Other Impacts :	N/R
Steps Taken :	Removed Blockage
Steps Taken Description :	N/R
System Components :	N/R

Map Id: J51
 Direction: WSW
 Distance: 0.484 mi.
 Actual: 2557.509 ft.
 Elevation: 0.119 mi. / 630.577 ft.
 Relative: Lower

Site Name :	SSO - 318 FLORIDA AVENUE 318 FLORIDA AVENUE LYNCHBURG, VA
Database(s) :	[PCD - VA, SPILLS - VA] (cont.)

Envirosite ID: 21816654
EPA ID: N/R

PCD - VA (**cont.**)

Other System Components :	N/R
Cause of Event :	sewer line blockage caused by rocks, bricks and cobblestones
Corrective Action Taken :	sewer line was unblocked
Weather Status :	Dry
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	3600
Unknown Discharge (Y/N) :	N
Incident Ongoing at Time of Call :	N
Permitted (Y/N) :	Y
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Call Reported by Name :	Wiley Wilson
Call Reported by Company Name :	N/R
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Original Call Material Description :	sewage
Original Call Location Description :	318 Florida Avenue Lynchburg
Original Call Incident Description :	SSO - Sewage observed leaking from ground approximately 75 feet from downstream manhole

SPILLS - VA

Incident Date :	07/13/2010
Call Received Date :	07/19/2010
Closure Date :	07/19/2010
IR Number :	2011-L-0144
Associated IR :	N/R
Reference ID :	5037
Status :	Closed
Facility Name :	Lynchburg City STP
Region :	South Central
Incident Type :	Water
Incident Subtype :	Overflow * SSO * Water
Threat to :	Human Health
Terrorism (Y/N) :	N
Characterize Incident :	Accidental
Materials :	Sewage (1-3600 Gallons)
Effect to Receptor :	Impacted
Water Body :	James River
Low Quantity to Water :	1
High Quantity to Water :	3600
Quantity Units :	Gallons
Other Receptors :	N/R
RP Company :	N/R
RP Name :	N/R
Property Owner :	N/R
Property Company :	N/R
Duration of Event (Hours) :	4
Impacts :	SSO Reached Receiving Waters
Other Impacts :	N/R
Steps Taken :	Removed Blockage
Steps Taken Description :	N/R

Map Id: J51
 Direction: WSW
 Distance: 0.484 mi.
 Actual: 2557.509 ft.
 Elevation: 0.119 mi. / 630.577 ft.
 Relative: Lower

Site Name : SSO - 318 FLORIDA AVENUE
 318 FLORIDA AVENUE
 LYNCHBURG, VA
Database(s) : [PCD - VA, SPILLS - VA] (*cont.*)

Envirosite ID: 21816654
EPA ID: N/R

SPILLS - VA (*cont.*)

System Components :	N/R
Other System Components :	N/R
Cause of Event :	sewer line blockage caused by rocks, bricks and cobblestones
Corrective Action Taken :	sewer line was unblocked
Weather Status :	Dry
Precipitation (Wet) :	0
Discharge Type :	Untreated
Discharge Volume :	3600
Unknown Discharge (Y/N) :	N
Original Call Incident Description :	SSO - Sewage obserevd leaking from ground approximately 75 feet from downstream manhole
Original Call Material Description :	sewage
Original Call Location Description :	318 Florida AvenueLynchburg
Incident Ongoing at Time of Call :	N
Agencies Notified (Y/N) :	Y
Other Agencies :	VDH
Permitted (Y/N) :	Y
Call Reported by Name :	Wiley Wilson
Call Reported by Company Name :	N/R
Call RP Company Name :	N/R
Call RP Name :	N/R
Call Property Owner Company Name :	N/R
Call Property Owner Name :	N/R
Closure Comments :	5 day letter rec'd - returned to compliance
Site Summary :	SSO - Sewage observed leaking from ground approximately 75 feet from downstream manhole. City crew was dispatched and rodded sewer line to remove blockage of rocks, bricks. Discharge DID REACH state waters - NO fish kill observed.

Map Id: 52
 Direction: NW
 Distance: 0.495 mi.
 Actual: 2614.397 ft.
 Elevation: 0.142 mi. / 751.64 ft.
 Relative: Higher

Site Name : AUDREY TYREE RESIDENCE
 98 CHURCH ST
 MADISON HEIGHTS, VA 24572
Database(s) : [LPT - VA]

Envirosite ID: 321819830
EPA ID: N/R

LPT - VA

Release Reported :	10/28/2015
PC Number :	20162133
CEDS Facility ID :	200000881451
Case Status :	Closed
Case Closed Date :	05/23/2016
Region :	WCRO
Program :	RP Lead
Heating Oil Category :	Category 2
Federally Regulated UST :	N
Regulated Petroleum UST (1) :	N

Map Id: 52
Direction: NW
Distance: 0.495 mi.
Actual: 2614.397 ft.
Elevation: 0.142 mi. / 751.64 ft.
Relative: Higher

Site Name : AUDREY TYREE RESIDENCE
98 CHURCH ST
MADISON HEIGHTS, VA 24572
Database(s) : [LPT - VA] (*cont.*)

Envirosite ID: 321819830
EPA ID: N/R

LPT - VA (*cont.*)

Excluded UST (1) :	N
Deferred UST (1) :	N
Partially Deferred UST (1) :	N
Exempt 1 UST (2) :	N
Exempt 2 Heating Oil UST (2) :	Y
Small Heating Oil AST (2) :	N
Regulated AST (3) :	N
Unregulated AST (3) :	N
Other (Y/N) :	N
Other Description :	N/R
Unknown (Y/N) :	N
Priority :	3
Suspect Confirm Indicator :	Confirmed

Latitude : 37.4208599997032
Longitude : -79.1314699997916

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG]

Envirosite ID: 337145373
EPA ID: VAD065417008

BRS

Date form received by agency :	02/24/2016
Facility name :	GRIFFIN PIPE PRODUCTS CO.
Facility address :	10 ADAMS STREET, LYNCHBURG VA 24504
EPA ID :	VAD065417008
Mailing address :	10 ADAMS STREET, LYNCHBURG VA 24504
Contact :	J. NICOLE PAYNOTTA
Contact address :	10 ADAMS STREET, LYNCHBURG VA 24504
Contact country :	US
Contact telephone :	434-522-4753
Contact email :	NPAYNOTTA@USPIPE.COM
EPA Region :	03
Land type :	Private
Source type :	Annual/Biennial Report updated with Notification
Classification :	Large Quantity Generator

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

BRS (*cont.*)

Description :

Handlers that generate 1,000 kg or more of hazardous waste during any calendar month; or generate more than 1 kg of acutely hazardous waste during any calendar month; or generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1 kg of acutely hazardous waste at any time; or generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Owner/Operator Summary :

Owner Operator name :	GRIFFIN PIPE PRODUCTS COMPANY
Owner Operator address :	N/R
Owner Operator country :	N/R
Owner Operator telephone :	N/R
Owner Operator Email :	N/R
Owner Operator Fax :	N/R
Legal status :	Private
Owner Operator Type :	Operator
Owner/Op start date :	01/27/2014
Owner/Op end date :	N/R

Owner Operator name :	GRIFFIN PIPE PRODUCTS CO., LLC
Owner Operator address :	1011 WARRENVILLE ROAD, LISLE IL 60532
Owner Operator country :	US
Owner Operator telephone :	630-719-6506
Owner Operator Email :	N/R
Owner Operator Fax :	N/R
Legal status :	Private
Owner Operator Type :	Owner
Owner/Op start date :	01/27/2014
Owner/Op end date :	N/R

Waste Activity Monitoring

Report Cycle :	2015
Hazardous Waste Page Number :	1
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	BAGHOUSE DUST
Primary NAICS :	331511
Source Code :	G21
Source Code Description :	Air pollution control devices (baghouse dust or ash from stack scrubbers or precipitators; vapor collection, etc.)
Form Code :	W504
Form Code Description :	Other sludges from wastewater treatment or air pollution control
Management Method :	H132
Management Method Description :	Landfill or surface impoundment that will be closed as landfill (to include prior treatment and/or stabilization)
Generation Tons :	32.06
Managed Tons :	0

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

BRS (*cont.*)

Shipped Tons :	32.06
Received Tons :	0
Receiver ID :	OHD045243706
Receiver State :	OH
Shipper ID :	VAD065417008
Shipper State :	VA
Waste Minimization Code :	A
Waste Minimization Code Description :	Description not provided in the BRS system
Waste Code List :	D006, D008
Waste Code Group :	TCMT
Waste Code Group Description :	Description not provided in the BRS system
Waste Generation Type :	LANDFILL
Report Cycle :	2015
Hazardous Waste Page Number :	1
Hazardous Waste Sub-Page Number :	2
BR Form :	GM
Waste Description :	BAGHOUSE DUST
Primary NAICS :	331511
Source Code :	G21
Source Code Description :	Air pollution control devices (baghouse dust or ash from stack scrubbers or precipitators; vapor collection, etc.)
Form Code :	W504
Form Code Description :	Other sludges from wastewater treatment or air pollution control
Management Method :	H110
Management Method Description :	Description not provided in the BRS system
Generation Tons :	6.8
Managed Tons :	0
Shipped Tons :	6.8
Received Tons :	0
Receiver ID :	MID980991566
Receiver State :	MI
Shipper ID :	VAD065417008
Shipper State :	VA
Waste Minimization Code :	A
Waste Minimization Code Description :	Description not provided in the BRS system
Waste Code List :	D006, D008
Waste Code Group :	TCMT
Waste Code Group Description :	Description not provided in the BRS system
Waste Generation Type :	SLUDGE TRTMNT / STAB / ENCAP
Report Cycle :	2015
Hazardous Waste Page Number :	2
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	MIXED PAINT
Primary NAICS :	331511
Source Code :	G13
Source Code Description :	Cleaning out process equipment (periodic sludge or residual removal from enclosed processes including internal scrubbing or cleaning)
Form Code :	W209

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

BRS (*cont.*)

Form Code Description :	Paint, ink, lacquer, or varnish (fluid - not dried out or sludge)
Management Method :	H061
Management Method Description :	Fuel blending prior to energy recovery at another site (waste generated either on-site or received from off-site)
Generation Tons :	10.8573692
Managed Tons :	0
Shipped Tons :	10.8573692
Received Tons :	0
Receiver ID :	OHD066060609
Receiver State :	OH
Shipper ID :	VAD065417008
Shipper State :	VA
Waste Minimization Code :	X
Waste Minimization Code Description :	No waste minimization efforts were implemented for this waste
Waste Code List :	D001
Waste Code Group :	D001
Waste Code Group Description :	IGNITABLE WASTE
Waste Generation Type :	FUEL BLENDING
Report Cycle :	2015
Hazardous Waste Page Number :	2
Hazardous Waste Sub-Page Number :	2
BR Form :	GM
Waste Description :	MIXED PAINT
Primary NAICS :	331511
Source Code :	G13
Source Code Description :	Cleaning out process equipment (periodic sludge or residual removal from enclosed processes including internal scrubbing or cleaning)
Form Code :	W209
Form Code Description :	Paint, ink, lacquer, or varnish (fluid - not dried out or sludge)
Management Method :	H141
Management Method Description :	The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	11.2980091
Managed Tons :	0
Shipped Tons :	11.2980091
Received Tons :	0
Receiver ID :	SCD036275626
Receiver State :	SC
Shipper ID :	VAD065417008
Shipper State :	VA
Waste Minimization Code :	X
Waste Minimization Code Description :	No waste minimization efforts were implemented for this waste
Waste Code List :	D001
Waste Code Group :	D001
Waste Code Group Description :	IGNITABLE WASTE
Waste Generation Type :	N/R

Map Id: 53
 Direction: WNW
 Distance: 0.707 mi.
 Actual: 3735.402 ft.
 Elevation: 0.096 mi. / 506.89 ft.
 Relative: Lower

Site Name :	GRIFFIN PIPE PRODUCTS CO. 10 ADAMS STREET LYNCHBURG, VA 24504
Database(s) :	[BRS, CORRACTS, RCRA_LQG] (<i>cont.</i>)

Envirosite ID: 337145373
EPA ID: VAD065417008

BRS (*cont.*)

Report Cycle :	2015
Hazardous Waste Page Number :	3
Hazardous Waste Sub-Page Number :	2
BR Form :	GM
Waste Description :	LOOSE PACK PAINT
Primary NAICS :	331511
Source Code :	G06
Source Code Description :	Painting and coating (manufacturing, building, or maintenance)
Form Code :	W209
Form Code Description :	Paint, ink, lacquer, or varnish (fluid - not dried out or sludge)
Management Method :	H141
Management Method Description :	The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	.05
Managed Tons :	0
Shipped Tons :	.05
Received Tons :	0
Receiver ID :	SCD036275626
Receiver State :	SC
Shipper ID :	VAD065417008
Shipper State :	VA
Waste Minimization Code :	X
Waste Minimization Code Description :	No waste minimization efforts were implemented for this waste
Waste Code List :	D001, D018, D035
Waste Code Group :	TCORICR
Waste Code Group Description :	Description not provided in the BRS system
Waste Generation Type :	N/R
Report Cycle :	2015
Hazardous Waste Page Number :	3
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	LOOSE PACK PAINT
Primary NAICS :	331511
Source Code :	G06
Source Code Description :	Painting and coating (manufacturing, building, or maintenance)
Form Code :	W209
Form Code Description :	Paint, ink, lacquer, or varnish (fluid - not dried out or sludge)
Management Method :	H061
Management Method Description :	Fuel blending prior to energy recovery at another site (waste generated either on-site or received from off-site)
Generation Tons :	.0375
Managed Tons :	0
Shipped Tons :	.0375
Received Tons :	0
Receiver ID :	OHD083377010
Receiver State :	OH
Shipper ID :	VAD065417008
Shipper State :	VA
Waste Minimization Code :	X
Waste Minimization Code Description :	No waste minimization efforts were implemented for this waste

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

BRS (*cont.*)

Waste Code List :	D001, D018, D035
Waste Code Group :	TCORICR
Waste Code Group Description :	Description not provided in the BRS system
Waste Generation Type :	FUEL BLENDING
Report Cycle :	2015
Hazardous Waste Page Number :	4
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	AEROSOL CANS
Primary NAICS :	331511
Source Code :	G09
Source Code Description :	Other production or service-related processes from which the waste is a direct outflow or result (specify in comments)
Form Code :	W209
Form Code Description :	Paint, ink, lacquer, or varnish (fluid - not dried out or sludge)
Management Method :	H141
Management Method Description :	The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	1.01795
Managed Tons :	0
Shipped Tons :	1.01795
Received Tons :	0
Receiver ID :	SCD036275626
Receiver State :	SC
Shipper ID :	VAD065417008
Shipper State :	VA
Waste Minimization Code :	X
Waste Minimization Code Description :	No waste minimization efforts were implemented for this waste
Waste Code List :	D001
Waste Code Group :	D001
Waste Code Group Description :	IGNITABLE WASTE
Waste Generation Type :	N/R
Report Cycle :	2015
Hazardous Waste Page Number :	5
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	WASTE PAINT RELATED MATERIAL
Primary NAICS :	331511
Source Code :	G13
Source Code Description :	Cleaning out process equipment (periodic sludge or residual removal from enclosed processes including internal scrubbing or cleaning)
Form Code :	W209
Form Code Description :	Paint, ink, lacquer, or varnish (fluid - not dried out or sludge)
Management Method :	H141

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

BRS (*cont.*)

Management Method Description :	The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	.0375
Managed Tons :	0
Shipped Tons :	.0375
Received Tons :	0
Receiver ID :	OHD083377010
Receiver State :	OH
Shipper ID :	VAD065417008
Shipper State :	VA
Waste Minimization Code :	X
Waste Minimization Code Description :	No waste minimization efforts were implemented for this waste
Waste Code List :	D001
Waste Code Group :	D001
Waste Code Group Description :	IGNITABLE WASTE
Waste Generation Type :	N/R
Report Cycle :	2015
Hazardous Waste Page Number :	6
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	WASTE VM&P NAPHTHA (PETROLEUM DISTILLATE)
Primary NAICS :	331511
Source Code :	G11
Source Code Description :	Discarding off-specification, out-of-date, and/or unused chemicals or products
Form Code :	W219
Form Code Description :	Other organic liquid (specify in comments)
Management Method :	H061
Management Method Description :	Fuel blending prior to energy recovery at another site (waste generated either on-site or received from off-site)
Generation Tons :	.5091743
Managed Tons :	0
Shipped Tons :	.5091743
Received Tons :	0
Receiver ID :	OHD066060609
Receiver State :	OH
Shipper ID :	VAD065417008
Shipper State :	VA
Waste Minimization Code :	X
Waste Minimization Code Description :	No waste minimization efforts were implemented for this waste
Waste Code List :	D010, D018
Waste Code Group :	DMIX
Waste Code Group Description :	Description not provided in the BRS system
Waste Generation Type :	FUEL BLENDING

CORRACTS

EPA ID : VAD065417008

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

CORRACTS (*cont.*)

EPA Region : N/R

HNAICS Code : 0
HNAICS Code Description : N/R

Area Name : N/R
Actual Date : 09/09/2011
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 08/03/2009
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 01/09/2009
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 12/12/2008
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 11/09/2008
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 10/09/2008
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 08/08/2008
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

CORRACTS (*cont.*)

Actual Date : 07/02/2008
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 06/05/2008
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 05/05/2008
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 05/02/2008
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 02/04/2008
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 01/04/2008
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 11/12/2007
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 06/12/2007
Action : N/R
Original Schedule Date : N/R
Schedule End Date : N/R

Area Name : N/R
Actual Date : 01/12/1991

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

CORRACTS (*cont.*)

Action :	N/R
Original Schedule Date :	N/R
Schedule End Date :	N/R
Area Name :	N/R
Actual Date :	07/10/1985
Action :	N/R
Original Schedule Date :	N/R
Schedule End Date :	N/R
Area Name :	ENTIRE FACILITY
Actual Date :	N/R
Action :	N/R
Original Schedule Date :	N/R
Schedule End Date :	N/R

RCRA_LQG

Date form received by agency :	02/24/2016
Facility name :	GRIFFIN PIPE PRODUCTS CO.
Facility address :	10 ADAMS STREET, LYNCHBURG VA 24504
EPA ID :	VAD065417008
Mailing address :	10 ADAMS STREET, LYNCHBURG VA 24504
Contact :	J. NICOLE PAYNOTTA
Contact address :	10 ADAMS STREET, LYNCHBURG VA 24504
Contact country :	US
Contact telephone :	434-522-4753
Contact email :	NPAYNOTTA@USPIPE.COM
EPA Region :	03
Land type :	Private
Source type :	Annual/Biennial Report updated with Notification
Classification :	Large Quantity Generator

Description :

Handlers that generate 1,000 kg or more of hazardous waste during any calendar month; or generate more than 1 kg of acutely hazardous waste during any calendar month; or generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1 kg of acutely hazardous waste at any time; or generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Owner/Operator Summary :

Owner Operator name :	GRIFFIN PIPE PRODUCTS COMPANY
Owner Operator address :	N/R
Owner Operator country :	N/R
Owner Operator telephone :	N/R
Owner Operator Email :	N/R
Owner Operator Fax :	N/R
Legal status :	Private
Owner Operator Type :	Operator
Owner/Op start date :	01/27/2014
Owner/Op end date :	N/R

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Owner Operator name :	GRIFFIN PIPE PRODUCTS CO., LLC
Owner Operator address :	1011 WARRENVILLE ROAD, LISLE IL 60532
Owner Operator country :	US
Owner Operator telephone :	630-719-6506
Owner Operator Email :	N/R
Owner Operator Fax :	N/R
Legal status :	Private
Owner Operator Type :	Owner
Owner/Op start date :	01/27/2014
Owner/Op end date :	N/R

Handler Activities Summary :

U.S. importer of hazardous waste :	No
Mixed waste (haz. and radioactive) :	No
Recycler of hazardous waste :	No
Transporter of hazardous waste :	No
Treater storer or disposer of HW :	No
Underground injection activity :	No
On-site burner exemption :	No
Furnace exemption :	No
Used oil fuel burner :	No
Used oil processor :	No
Used oil refiner :	No
Used oil fuel marketer to burner :	No
Used oil Specification marketer :	No
Used oil transfer facility :	No
Used oil transporter :	No

Historical Generators :

Date form received by agency :	04/04/2014
Facility name :	GRIFFIN PIPE PRODUCTS CO, LLC
Classification :	Large Quantity Generator

Date form received by agency :	02/26/2014
Facility name :	GRIFFIN PIPE PRODUCTS CO., LLC
Classification :	Large Quantity Generator

Date form received by agency :	03/12/2012
Facility name :	GRIFFIN PIPE PRODUCTS
Classification :	Large Quantity Generator

Date form received by agency :	03/11/2010
Facility name :	GRIFFIN PIPE PRODUCTS
Classification :	Large Quantity Generator

Date form received by agency :	02/29/2008
Facility name :	GRIFFIN PIPE PRODUCTS
Classification :	Large Quantity Generator

Date form received by agency :	02/10/2006
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Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Facility name : GRIFFIN PIPE PRODUCTS CO. INC.
Classification : Large Quantity Generator

Date form received by agency : 02/04/2004
Facility name : GRIFFIN PIPE PRODUCTS CO.
Classification : Large Quantity Generator

Date form received by agency : 03/15/2001
Facility name : GRIFFIN PIPE PRODUCTS CO.
Classification : Large Quantity Generator

Date form received by agency : 07/01/1998
Facility name : GRIFFIN PIPE PRODUCTS CO.
Classification : Large Quantity Generator

Date form received by agency : 02/22/1996
Facility name : GRIFFIN PIPE PRODUCTS CO
Classification : Large Quantity Generator

Date form received by agency : 02/02/1994
Facility name : GRIFFIN PIPE PRODUCTS CO
Classification : Large Quantity Generator

Date form received by agency : 02/20/1992
Facility name : GRIFFIN PIPE PRODUCTS COMPANY
Classification : Large Quantity Generator

Date form received by agency : 03/01/1990
Facility name : GRIFFIN PIPE PRODUCTS
Classification : Large Quantity Generator

Date form received by agency : 11/19/1980
Facility name : GRIFFIN PIPE PRODUCTS CO
Classification : Not a generator, verified

Date form received by agency : 08/18/1980
Facility name : GRIFFIN PIPE PRODUCTS CO
Classification : Large Quantity Generator

Hazardous Waste Summary :
Waste code : D001
Waste name : IGNITABLE WASTE

Waste code : D006
Waste name : CADMIUM

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Waste code :	D008
Waste name :	LEAD
Waste code :	D010
Waste name :	SELENIUM
Waste code :	D018
Waste name :	BENZENE
Waste code :	D035
Waste name :	METHYL ETHYL KETONE
Corrective Action Summary :	
Event date :	10/07/1985
Event :	CA050
Event date :	12/01/1991
Event :	CA075LO
Event date :	12/06/2007
Event :	CA141RQ
Event date :	12/11/2007
Event :	CA141AP
Event date :	02/05/2008
Event :	CA080
Event date :	02/07/2008
Event :	CA020
Event date :	04/01/2008
Event :	CA141RQ
Event date :	04/02/2008
Event :	CA141AP
Event date :	05/05/2008
Event :	CA110
Event date :	05/06/2008
Event :	CA020
Event date :	08/08/2008

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Event :	CA160
Event date :	08/08/2008
Event :	CA140
Event date :	09/10/2008
Event :	CA100
Event date :	09/11/2008
Event :	CA750IN
Event date :	09/11/2008
Event :	CA725IN
Event date :	09/22/2008
Event :	CA141RQ
Event date :	09/24/2008
Event :	CA141AP
Event date :	10/29/2008
Event :	CA160
Event date :	10/30/2008
Event :	CA020
Event date :	11/21/2008
Event :	CA160
Event date :	11/25/2008
Event :	CA020
Event date :	12/12/2008
Event :	CA155
Event date :	03/08/2009
Event :	CA020
Event date :	03/17/2009
Event :	CA160
Event date :	03/18/2009
Event :	CA020

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Event date : 07/14/2009
Event : CA160

Event date : 07/23/2009
Event : CA170

Event date : 08/14/2009
Event : CA110

Event date : 08/20/2009
Event : CA020

Event date : 09/01/2009
Event : CA150

Event date : 07/19/2011
Event : CA193

Event date : 09/09/2011
Event : CA725YE

Event date : 09/26/2011
Event : CA750YE

Event date : 02/23/2012
Event : CA150

Facility Has Received Notices of Violations :

Regulation violated : Yes
Area of violation : TSD - Tank System Standards
Date violation : 07/10/2002
Date achieved compliance : 01/05/2005
Violation lead agency : EPA
Enforcement action : FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date : 01/05/2005
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : EPA
Proposed penalty amount : N/R
Final penalty amount : 48730
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - Pre-transport
Date violation : 07/10/2002
Date achieved compliance : 01/05/2005

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Violation lead agency :	EPA
Enforcement action :	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date :	01/05/2005
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	EPA
Proposed penalty amount :	N/R
Final penalty amount :	48730
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	TSD - General
Date violation :	03/31/1988
Date achieved compliance :	12/29/1988
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	06/23/1988
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - Pre-transport
Date violation :	04/12/2012
Date achieved compliance :	04/12/2012
Violation lead agency :	State
Enforcement action :	VERBAL INFORMAL
Enforcement action date :	05/07/2012
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	State Statute or Regulation
Date violation :	04/12/2012
Date achieved compliance :	04/12/2012
Violation lead agency :	State
Enforcement action :	VERBAL INFORMAL
Enforcement action date :	05/07/2012
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated : Yes

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Area of violation :	LDR - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	Referral to Enforcement
Enforcement action date :	05/03/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date :	11/02/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	8000
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	05/03/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	TSD IS-Chemical, Physical, AND Treatment
Date violation :	03/09/1995
Date achieved compliance :	03/13/1995
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	04/17/1995
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	REVISED PROPOSED CONSENT ORDER
Enforcement action date :	09/17/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	8000
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	05/03/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - Pre-transport
Date violation :	03/09/1995
Date achieved compliance :	05/11/1995
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	04/17/1995
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	Referral to Enforcement
Enforcement action date :	05/03/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - General
Date violation : 03/05/2010
Date achieved compliance : 11/02/2010
Violation lead agency : State
Enforcement action : INITIAL PROPOSED CONSENT ORDER
Enforcement action date : 06/30/2010
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : 10200
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - General
Date violation : 03/05/2010
Date achieved compliance : 11/02/2010
Violation lead agency : State
Enforcement action : REVISED PROPOSED CONSENT ORDER
Enforcement action date : 09/17/2010
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : 8000
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : TSD - Tank System Standards
Date violation : 07/10/2002
Date achieved compliance : 01/05/2005
Violation lead agency : EPA
Enforcement action : INITIAL 3008(A) COMPLIANCE
Enforcement action date : 06/30/2003
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : EPA
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - Pre-transport
Date violation : 07/10/2002
Date achieved compliance : 01/05/2005
Violation lead agency : EPA
Enforcement action : INITIAL 3008(A) COMPLIANCE
Enforcement action date : 06/30/2003

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : EPA
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - Pre-transport
Date violation : 07/10/2002
Date achieved compliance : 01/05/2005
Violation lead agency : EPA
Enforcement action : FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date : 01/05/2005
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : EPA
Proposed penalty amount : N/R
Final penalty amount : 48730
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : TSD - Tank System Standards
Date violation : 07/10/2002
Date achieved compliance : 01/05/2005
Violation lead agency : EPA
Enforcement action : FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date : 01/05/2005
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : EPA
Proposed penalty amount : N/R
Final penalty amount : 48730
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : TSD - General
Date violation : 03/31/1988
Date achieved compliance : 12/29/1988
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 06/23/1988
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : TSD - Contingency Plan and Emergency Procedures
Date violation : 03/09/1995
Date achieved compliance : 05/11/1995

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	04/17/1995
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R
Regulation violated :	Yes
Area of violation :	TSD - Contingency Plan and Emergency Procedures
Date violation :	04/09/1992
Date achieved compliance :	05/14/1992
Violation lead agency :	State
Enforcement action :	N/R
Enforcement action date :	N/R
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	N/R
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R
Regulation violated :	Yes
Area of violation :	State Statute or Regulation
Date violation :	08/15/2007
Date achieved compliance :	09/17/2007
Violation lead agency :	State
Enforcement action :	INSPECTOR FACT FINDING LETTER - Warning letter
Enforcement action date :	08/28/2007
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R
Regulation violated :	Yes
Area of violation :	LDR - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	Referral to Enforcement
Enforcement action date :	05/03/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R
Regulation violated :	Yes

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Area of violation :	LDR - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	05/03/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	LDR - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	05/03/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	LDR - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date :	11/02/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	8000
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - Pre-transport
Date violation :	03/09/1995
Date achieved compliance :	04/21/1995
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	04/17/1995
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Regulation violated :	Yes
Area of violation :	Generators - Pre-transport
Date violation :	07/10/2002
Date achieved compliance :	01/05/2005
Violation lead agency :	EPA
Enforcement action :	INITIAL 3008(A) COMPLIANCE
Enforcement action date :	06/30/2003
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	EPA
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	TSD - Tank System Standards
Date violation :	07/10/2002
Date achieved compliance :	01/05/2005
Violation lead agency :	EPA
Enforcement action :	INITIAL 3008(A) COMPLIANCE
Enforcement action date :	06/30/2003
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	EPA
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	LDR - General
Date violation :	02/18/1998
Date achieved compliance :	04/17/1998
Violation lead agency :	EPA
Enforcement action :	N/R
Enforcement action date :	N/R
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	N/R
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	02/18/1998
Date achieved compliance :	03/03/1998
Violation lead agency :	EPA
Enforcement action :	N/R
Enforcement action date :	08/14/1998
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	EPA

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - Pre-transport
Date violation : 01/05/2005
Date achieved compliance : 01/05/2005
Violation lead agency : EPA
Enforcement action : FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date : 01/05/2005
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : EPA
Proposed penalty amount : N/R
Final penalty amount : 48730
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : TSD - Financial Requirements
Date violation : 10/26/1987
Date achieved compliance : 12/29/1988
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 10/29/1987
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : TSD - Tank System Standards
Date violation : 01/05/2005
Date achieved compliance : 01/05/2005
Violation lead agency : EPA
Enforcement action : FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date : 01/05/2005
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : EPA
Proposed penalty amount : N/R
Final penalty amount : 48730
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - Pre-transport
Date violation : 01/05/2005
Date achieved compliance : 01/05/2005
Violation lead agency : EPA
Enforcement action : INITIAL 3008(A) COMPLIANCE
Enforcement action date : 06/30/2003

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : EPA
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : TSD - Tank System Standards
Date violation : 01/05/2005
Date achieved compliance : 01/05/2005
Violation lead agency : EPA
Enforcement action : INITIAL 3008(A) COMPLIANCE
Enforcement action date : 06/30/2003
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : EPA
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - Pre-transport
Date violation : 02/18/1998
Date achieved compliance : 03/03/1998
Violation lead agency : EPA
Enforcement action : N/R
Enforcement action date : N/R
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : N/R
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : TSD - Contingency Plan and Emergency Procedures
Date violation : 08/17/1993
Date achieved compliance : 12/17/1993
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 08/17/1993
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - Pre-transport
Date violation : 02/18/1998
Date achieved compliance : 03/03/1998

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Violation lead agency :	EPA
Enforcement action :	N/R
Enforcement action date :	08/14/1998
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	EPA
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R
Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	Referral to Enforcement
Enforcement action date :	05/03/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R
Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date :	11/02/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	8000
Paid penalty amount :	N/R
Regulation violated :	Yes
Area of violation :	Generators - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	INITIAL PROPOSED CONSENT ORDER
Enforcement action date :	06/30/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	10200
Final penalty amount :	N/R
Paid penalty amount :	N/R
Regulation violated :	Yes

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Area of violation :	LDR - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	REVISED PROPOSED CONSENT ORDER
Enforcement action date :	09/17/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	8000
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	LDR - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	INITIAL PROPOSED CONSENT ORDER
Enforcement action date :	06/30/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	10200
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	TSD - General Facility Standards
Date violation :	02/18/1998
Date achieved compliance :	03/03/1998
Violation lead agency :	EPA
Enforcement action :	N/R
Enforcement action date :	08/14/1998
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	EPA
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	LDR - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	INITIAL PROPOSED CONSENT ORDER
Enforcement action date :	06/30/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	10200
Final penalty amount :	N/R
Paid penalty amount :	N/R

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Regulation violated :	Yes
Area of violation :	LDR - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date :	11/02/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	8000
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	LDR - General
Date violation :	03/05/2010
Date achieved compliance :	11/02/2010
Violation lead agency :	State
Enforcement action :	REVISED PROPOSED CONSENT ORDER
Enforcement action date :	09/17/2010
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	8000
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	TSD - General
Date violation :	06/14/1990
Date achieved compliance :	05/14/1992
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	09/05/1990
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State
Proposed penalty amount :	N/R
Final penalty amount :	N/R
Paid penalty amount :	N/R

Regulation violated :	Yes
Area of violation :	TSD - Financial Requirements
Date violation :	06/14/1990
Date achieved compliance :	04/09/1992
Violation lead agency :	State
Enforcement action :	WRITTEN INFORMAL
Enforcement action date :	09/05/1990
Enf. disposition status :	N/R
Enf. disp. status date :	N/R
Enforcement lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : Generators - General
Date violation : 02/18/1998
Date achieved compliance : 03/27/1998
Violation lead agency : State
Enforcement action : VERBAL INFORMAL
Enforcement action date : 08/14/1998
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Regulation violated : Yes
Area of violation : TSD - Closure/Post-Closure
Date violation : 06/14/1990
Date achieved compliance : 01/01/2000
Violation lead agency : State
Enforcement action : WRITTEN INFORMAL
Enforcement action date : 09/05/1990
Enf. disposition status : N/R
Enf. disp. status date : N/R
Enforcement lead agency : State
Proposed penalty amount : N/R
Final penalty amount : N/R
Paid penalty amount : N/R

Evaluation Action Summary :
Evaluation date : 07/10/2002
Evaluation : SIGNIFICANT NON-COMPLIER
Area of violation : TSD - Tank System Standards
Date achieved compliance : 01/05/2005
Evaluation lead agency : EPA

Evaluation date : 07/10/2002
Evaluation : SIGNIFICANT NON-COMPLIER
Area of violation : Generators - Pre-transport
Date achieved compliance : 01/05/2005
Evaluation lead agency : EPA

Evaluation date : 03/31/1988
Evaluation : FINANCIAL RECORD REVIEW
Area of violation : TSD - General
Date achieved compliance : 12/29/1988
Evaluation lead agency : State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Evaluation date :	04/12/2012
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - Pre-transport
Date achieved compliance :	04/12/2012
Evaluation lead agency :	State
Evaluation date :	04/12/2012
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	State Statute or Regulation
Date achieved compliance :	04/12/2012
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	LDR - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	Generators - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	Generators - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	02/28/2017
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	04/18/1989
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	05/08/1989
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Evaluation date :	05/08/1989
Evaluation :	NON-FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	01/06/1995
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	04/10/1996
Evaluation :	NON-FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	03/09/1995
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD IS-Chemical, Physical, AND Treatment
Date achieved compliance :	03/13/1995
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	FACILITY SELF DISCLOSURE
Area of violation :	Generators - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	FACILITY SELF DISCLOSURE
Area of violation :	Generators - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/09/1995
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - Pre-transport
Date achieved compliance :	05/11/1995
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	FACILITY SELF DISCLOSURE
Area of violation :	Generators - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Evaluation date :	03/05/2010
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	Generators - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	Generators - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	07/10/2002
Evaluation :	FOCUSED COMPLIANCE INSPECTION
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	07/10/2002
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD - Tank System Standards
Date achieved compliance :	01/05/2005
Evaluation lead agency :	EPA
Evaluation date :	07/10/2002
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - Pre-transport
Date achieved compliance :	01/05/2005
Evaluation lead agency :	EPA
Evaluation date :	07/10/2002
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - Pre-transport
Date achieved compliance :	01/05/2005
Evaluation lead agency :	EPA
Evaluation date :	07/10/2002
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD - Tank System Standards
Date achieved compliance :	01/05/2005
Evaluation lead agency :	EPA
Evaluation date :	03/31/1988
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD - General
Date achieved compliance :	12/29/1988
Evaluation lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Evaluation date :	03/09/1995
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD - Contingency Plan and Emergency Procedures
Date achieved compliance :	05/11/1995
Evaluation lead agency :	State
Evaluation date :	04/09/1992
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD - Contingency Plan and Emergency Procedures
Date achieved compliance :	05/14/1992
Evaluation lead agency :	State
Evaluation date :	08/15/2007
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	State Statute or Regulation
Date achieved compliance :	09/17/2007
Evaluation lead agency :	State
Evaluation date :	12/16/1999
Evaluation :	NON-FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	05/14/1992
Evaluation :	NON-FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	10/28/1992
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	01/26/1993
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	05/24/1994
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Evaluation date :	09/14/2000
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	01/17/2001
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	11/02/2010
Evaluation :	NOT A SIGNIFICANT NON-COMPLIER
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	FACILITY SELF DISCLOSURE
Area of violation :	LDR - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	FACILITY SELF DISCLOSURE
Area of violation :	LDR - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	LDR - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	LDR - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/09/1995
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - Pre-transport
Date achieved compliance :	04/21/1995
Evaluation lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Evaluation date :	07/10/2002
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	Generators - Pre-transport
Date achieved compliance :	01/05/2005
Evaluation lead agency :	EPA
Evaluation date :	07/10/2002
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	TSD - Tank System Standards
Date achieved compliance :	01/05/2005
Evaluation lead agency :	EPA
Evaluation date :	02/18/1998
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	LDR - General
Date achieved compliance :	04/17/1998
Evaluation lead agency :	EPA
Evaluation date :	02/18/1998
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - General
Date achieved compliance :	03/03/1998
Evaluation lead agency :	EPA
Evaluation date :	01/05/2005
Evaluation :	NOT A SIGNIFICANT NON-COMPLIER
Area of violation :	Generators - Pre-transport
Date achieved compliance :	01/05/2005
Evaluation lead agency :	EPA
Evaluation date :	01/25/2006
Evaluation :	FOCUSED COMPLIANCE INSPECTION
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	02/15/2007
Evaluation :	FOCUSED COMPLIANCE INSPECTION
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	10/26/1987
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	TSD - Financial Requirements
Date achieved compliance :	12/29/1988
Evaluation lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Evaluation date :	01/05/2005
Evaluation :	NOT A SIGNIFICANT NON-COMPLIER
Area of violation :	TSD - Tank System Standards
Date achieved compliance :	01/05/2005
Evaluation lead agency :	EPA
Evaluation date :	01/05/2005
Evaluation :	NOT A SIGNIFICANT NON-COMPLIER
Area of violation :	Generators - Pre-transport
Date achieved compliance :	01/05/2005
Evaluation lead agency :	EPA
Evaluation date :	01/05/2005
Evaluation :	NOT A SIGNIFICANT NON-COMPLIER
Area of violation :	TSD - Tank System Standards
Date achieved compliance :	01/05/2005
Evaluation lead agency :	EPA
Evaluation date :	02/18/1998
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - Pre-transport
Date achieved compliance :	03/03/1998
Evaluation lead agency :	EPA
Evaluation date :	12/04/2007
Evaluation :	FOCUSED COMPLIANCE INSPECTION
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	08/17/1993
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD - Contingency Plan and Emergency Procedures
Date achieved compliance :	12/17/1993
Evaluation lead agency :	State
Evaluation date :	02/18/1998
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - Pre-transport
Date achieved compliance :	03/03/1998
Evaluation lead agency :	EPA
Evaluation date :	03/05/2010
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	Generators - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Evaluation date :	03/05/2010
Evaluation :	FACILITY SELF DISCLOSURE
Area of violation :	Generators - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	FACILITY SELF DISCLOSURE
Area of violation :	Generators - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	LDR - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	SIGNIFICANT NON-COMPLIER
Area of violation :	LDR - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	02/18/1998
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD - General Facility Standards
Date achieved compliance :	03/03/1998
Evaluation lead agency :	EPA
Evaluation date :	03/05/2010
Evaluation :	FACILITY SELF DISCLOSURE
Area of violation :	LDR - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	FACILITY SELF DISCLOSURE
Area of violation :	LDR - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State
Evaluation date :	03/05/2010
Evaluation :	FACILITY SELF DISCLOSURE
Area of violation :	LDR - General
Date achieved compliance :	11/02/2010
Evaluation lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Evaluation date :	06/14/1990
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD - General
Date achieved compliance :	05/14/1992
Evaluation lead agency :	State
Evaluation date :	06/25/1990
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	06/14/1990
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD - Financial Requirements
Date achieved compliance :	04/09/1992
Evaluation lead agency :	State
Evaluation date :	04/11/1996
Evaluation :	NON-FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	09/16/1996
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	01/23/1997
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	08/05/1997
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	01/21/1998
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State

Map Id: 53
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO.
10 ADAMS STREET
LYNCHBURG, VA 24504
Database(s) : [BRS, CORRACTS, RCRA_LQG] (*cont.*)

Envirosite ID: 337145373
EPA ID: VAD065417008

RCRA_LQG (*cont.*)

Evaluation date :	03/02/1999
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	08/04/1999
Evaluation :	NON-FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	08/01/2002
Evaluation :	FINANCIAL RECORD REVIEW
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	08/26/2004
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	N/R
Date achieved compliance :	N/R
Evaluation lead agency :	State
Evaluation date :	02/18/1998
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	Generators - General
Date achieved compliance :	03/27/1998
Evaluation lead agency :	State
Evaluation date :	06/14/1990
Evaluation :	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation :	TSD - Closure/Post-Closure
Date achieved compliance :	01/01/2000
Evaluation lead agency :	State

Unmappable Summary

2017

ENVIROSITE ID:	NAME:	ADDRESS:	CITY:	ZIP:	DATABASE(S):
14454928	A G BOONE COMPANY	ROUTE 29 NORTH	MADISON HEIGHTS	24572	UST - VA
14434421	AMSTED IND-GRIFFIN PIPE PRODUCTS CO	THOMAS ROAD	MADISON HEIGHTS	24572	ARCHIVED RCRA TSDF, CORRACTS, Corrective Actions_2020, RCRA_NONGEN, RCRA_TSDF
14454639	BELL ATLANTIC	ROUTE 701	MADISON HEIGHTS	24572	UST - VA
330012453	BRYANT SALVAGE	OLD RECYCLING RD	MADISON HEIGHTS	24572	Archived SPILLS - VA
330012530	BUILDING LOT	100 BLOCK OF TODD LANE	MADISON HEIGHTS	24572	Archived SPILLS - VA
14455465	BURLINGTON IND - LYNCHBURG TERMINAL	HWY 1301	MADISON HEIGHTS	24572	UST - VA
14570867	CHESAPEAKE & POTOMAC TELEPHONE CO	US RT 29 N	LYNCHBURG	24572	ECHO, FRS, RCRA_NONGEN
330013858	CONSTRUCTION SITE	100 BLOCK OF TODD LANE	MADISON HEIGHTS	24572	Archived SPILLS - VA
14572819	DACAM CORP	HWY 766 & KINGS RD	MADISON HEIGHTS	24572	ECHO, FRS, RCRA_NONGEN
14455742	EARLY BIRD MARKET	HWY. 29 NORTH	MADISON HEIGHTS	24572	UST - VA
14571148	ELLIOTTS ONE HOUR CLEANERS	SEMINOLE SHOPPING CTR	MADISON HEIGHTS	24572	ECHO, FRS, RCRA_NONGEN
13356285	FISHER AUTO PARTS INC	RTE 29 NORTH	MADISON HEIGHTS	24572	RCRA_NONGEN
319238788	FOAM IN JAMES-AMHERST SIDE OF RIVER AT LYNCHBURG	RIVEREDGE PARK-AMHERST CO.	MADISON HEIGHTS		PCD - VA, SPILLS - VA
325577745	GRIFFIN PIPE LANDFILL - AMHERST	THOMAS ROAD	MADISON HEIGHTS	24572	SWF/LF - VA
14455745	HOLIDAY INN TEXACO	U.S. 29 NORTH	MADISON HEIGHTS	24572	UST - VA
330018400	HUSS TRUCKING	ROUTE 29	MADISON HEIGHTS	24572	Archived SPILLS - VA
21815901	HYDRAULIC OIL RELEASE - STOWE LUMBER	EAST PERCH ROAD	MADISON HEIGHTS		PCD - VA, SPILLS - VA
330019349	JAMES & NANCY MCCRAY RESIDENCE	CORNER OF CRAB CREEK & E PERCH ROADS	MONROE	24572	Archived SPILLS - VA
14571675	K MART #7136	US 29 NORTH	MADISON HEIGHTS	24572	ECHO, FRS, RCRA_NONGEN
5668486	KENAN TRANSPORT LLC	ROUTE 29	MADISON HEIGHTS		HMIRS (DOT)
330020933	LOT 15, NEW BETHEL ESTATES 3	15 NIKONHA LANE	SALT CREEK	24572	Archived SPILLS - VA
325577764	MADISON HEIGHTS LANDFILL	RIVerview ROAD	MADISON HEIGHTS	24572	SWF/LF - VA
14455760	MILITARY SURPLUS STORE	HWY. 29 NORTH	MADISON HEIGHTS	24572	UST - VA
21815878	MVA WITH DIESEL RELEASE - MONACAN BRIDGE	MVA WITH DIESEL RELEASE - MONACAN BRIDGE	MADISON HEIGHTS		PCD - VA, SPILLS - VA
21815846	OVERTURNED TRUCK	RT 29 SB BEFORE RT 210	MADISON HEIGHTS		PCD - VA, SPILLS - VA
13221141	P&G OIL COMPANY INC	LAKEVIEW DR	MADISON HEIGHTS	24572	AST - VA
14455104	PHILLIPS 66 CO #24899	U.S. 29 NORTH	MADISON HEIGHTS	24572	UST - VA
21815848	SSO - MANHOLE IN FORCE MAIN	100 YARDS UPSTREAM OF WILLIAMS RUN PUMP STATION	MADISON HEIGHTS		PCD - VA, SPILLS - VA
340134639	SW-MIXED CDD & TIRES RIVERSIDE PARK	ROCKY HILL RD.	MADISON HEIGHTS		PCD - VA, SPILLS - VA
14454698	UNIVERSITY FIRESTONE INC	AMHERST PIKE	MADISON HEIGHTS	24572	UST - VA

FEDERAL RCRA NON-CORRACTS TSD FACILITIES LIST

ARCHIVED RCRA TSDF: Resource Conservation and Recovery Act hazardous waste transportation storage disposal and treatment facilities

Agency Version Date: 03/20/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/18/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 06/09/2017

RCRA_TSDF: Resource Conservation and Recovery Act hazardous waste transportation storage disposal and treatment facilities

Agency Version Date: 03/20/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/18/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 06/09/2017

FEDERAL CERCLIS LIST

CERCLIS NFRAP: The CERCLIS sites with No Further Remedial Action Planned from the CERCLIS program database. The Environmental Protection Agency decommissioned the CERCLIS data in 2014. The last update was November 12, 2013.

Agency Version Date: 11/16/2016
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 06/06/2017

CERCLIS-HIST: The CERCLIS program database contains information on the assessment and remediation of federal hazardous waste sites. The Environmental Protection Agency decommissioned the CERCLIS data in 2014. The last update was November 12, 2013.

Agency Version Date: 11/15/2016
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 06/06/2017

FEDERAL FACILITY: Sites where Federal Facilities Restoration and Reuse Office (FFRRO) arranged cleanup for Base Closure and Property Transfer at Federal Facilities

Agency Version Date: 03/28/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8712
Most Recent Contact: 06/06/2017

SEMS_8R_ACTIVE SITES: The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. NPL sites include latitude and longitude information. For non-NPL sites, a brief site status is provided.

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

SEMS_8R_ARCHIVED SITES: The Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

FEDERAL RCRA CORRACTS FACILITIES LIST

CORRACTS: List of facilities where Resource Conservation and Recovery Act Corrective Action Program used to investigate and remediate hazardous releases

Agency Version Date: 03/20/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/18/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-1667
Most Recent Contact: 06/09/2017

FEDERAL DELISTED NPL SITE LIST

DELISTED NPL: National Priority List of sites that were delisted and no longer require action

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

DELISTED PROPOSED NPL: Sites that have been delisted from the proposed National Priority List

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

SEMS_DELETED NPL: All Deleted National Priority List Sties

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

FEDERAL ERNS LIST

ERNS: Emergency Response Notification System records of reported spills

Agency Version Date: 05/03/2017
Agency Update Frequency: Annually
Planned Next Contact: 07/12/2017

Agency: National Response Center United States Coast Guard
Agency Contact: N/R
Most Recent Contact: 05/03/2017

FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES

Fed E C: Federal listing of remediation sites with engineering controls

Agency Version Date: 05/17/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/26/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 05/17/2017

Fed I C: Federal listing of remediation sites with institutional controls

Agency Version Date: 05/17/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/26/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 05/17/2017

RCRA IC_EC: Sites with institutional or engineering controls related to Resource Conservation and Recovery Act

Agency Version Date: 03/20/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/18/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 06/09/2017

FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES (cont.)

I C - VA: Sites with institutional controls

Agency Version Date: 12/02/2016
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 05/19/2017

FEDERAL NPL SITE LIST

NPL: List of priority contaminated sites among identified releases or threatened releases of hazardous substances pollutants or contaminants nationally

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

NPL EPA R1 GIS: Geospatial data for the Environmental Protection Agency Region 1 National Priority List subject to environmental regulation

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 06/06/2017

NPL EPA R6 GIS: Geospatial data for the Environmental Protection Agency Region 6 National Priority List subject to environmental regulation

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 06/06/2017

NPL EPA R8 GIS: Geospatial data for the Environmental Protection Agency Region 8 National Priority List subject to environmental regulation

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 06/06/2017

NPL EPA R9 GIS: Geospatial data for the Environmental Protection Agency Region 9 National Priority List subject to environmental regulation

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 06/06/2017

NPL LIENS: National Priority List of sites with Liens

Agency Version Date: 01/19/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/11/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 04/14/2017

PART NPL: Sites that are a part of an National Priority List site referred to as the parent site

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

FEDERAL NPL SITE LIST (cont.)

PROPOSED NPL: Sites that have been proposed for the National Priority List

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

SEMS_FINAL NPL: All Included National Priority List Sites

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

SEMS_PROPOSED NPL: All Proposed National Priority List Sites

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

FEDERAL RCRA GENERATORS LIST

RCRA_CESQG: Resource Conservation and Recovery Act listing of licensed conditionally exempt small quantity generators

Agency Version Date: 03/20/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/18/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 06/09/2017

RCRA_FULL_DETAIL: Full detail of related sites to the Resource Conservation and Recovery Act

Agency Version Date: 03/20/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/18/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 06/09/2017

RCRA_LQG: Resource Conservation and Recovery Act listing of licensed large quantity generators

Agency Version Date: 03/20/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/18/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 06/09/2017

RCRA_NONGEN: Resource Conservation and Recovery Act listing of licensed non-generators

Agency Version Date: 03/20/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/18/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 06/09/2017

RCRA_SQG: Resource Conservation and Recovery Act listing of licensed small quantity generators

Agency Version Date: 03/20/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/18/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 06/09/2017

STATE AND TRIBAL REGISTERED STORAGE TANK LISTS

FEMA UST: FEMA underground storage tank listing

Agency Version Date: 05/25/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/08/2017

Agency: FEMA
Agency Contact: 202-212-5283
Most Recent Contact: 05/12/2017

STATE AND TRIBAL REGISTERED STORAGE TANK LISTS (cont.)

INDIAN UST R1: Underground Storage Tanks on Indian Land in EPA Region 1

Agency Version Date: 04/18/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 06/27/2017

Agency: U.S. Environmental Protection Agency Region 1
Agency Contact: 855-246-3642
Most Recent Contact: 04/18/2017

INDIAN UST R10: Underground Storage Tanks on Indian Land in EPA Region 10

Agency Version Date: 05/25/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/03/2017

Agency: U.S. Environmental Protection Agency Region 10
Agency Contact: 855-246-3642
Most Recent Contact: 05/25/2017

INDIAN UST R2: Underground Storage Tanks on Indian Land in EPA Region 2

Agency Version Date: 04/24/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/03/2017

Agency: U.S. Environmental Protection Agency Region 2
Agency Contact: 855-246-3642
Most Recent Contact: 04/24/2017

INDIAN UST R4: Underground Storage Tanks on Indian Land in EPA Region 4

Agency Version Date: 05/15/2017
Agency Update Frequency: Semi Annually
Planned Next Contact: 07/24/2017

Agency: U.S. Environmental Protection Agency Region 4
Agency Contact: 855-246-3642
Most Recent Contact: 05/15/2017

INDIAN UST R5: Underground Storage Tanks on Indian Land in EPA Region 5

Agency Version Date: 05/04/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/13/2017

Agency: U.S. Environmental Protection Agency Region 5
Agency Contact: 855-246-3642
Most Recent Contact: 05/04/2017

INDIAN UST R6: Underground Storage Tanks on Indian Land in EPA Region 6

Agency Version Date: 05/18/2017
Agency Update Frequency: Semi Annually
Planned Next Contact: 07/27/2017

Agency: U.S. Environmental Protection Agency Region 6
Agency Contact: 855-246-3642
Most Recent Contact: 05/18/2017

INDIAN UST R7: Underground Storage Tanks on Indian Land in EPA Region 7

Agency Version Date: 11/21/2016
Agency Update Frequency: Varies
Planned Next Contact: 07/13/2017

Agency: U.S. Environmental Protection Agency Region 7
Agency Contact: 855-246-3642
Most Recent Contact: 05/04/2017

INDIAN UST R8: Underground Storage Tanks on Indian Land in EPA Region 8

Agency Version Date: 04/17/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 06/26/2017

Agency: U.S. Environmental Protection Agency Region 8
Agency Contact: 855-246-3642
Most Recent Contact: 04/17/2017

INDIAN UST R9: Underground Storage Tanks on Indian Land in EPA Region 9

Agency Version Date: 04/17/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 06/26/2017

Agency: U.S. Environmental Protection Agency Region 9
Agency Contact: 855-246-3642
Most Recent Contact: 04/17/2017

STATE AND TRIBAL REGISTERED STORAGE TANK LISTS (cont.)

AST - VA: Registered Aboveground Storage Tanks in Virginia

Agency Version Date: 03/27/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/14/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 06/05/2017

UST - VA: Registered Underground Storage Tanks in Virginia

Agency Version Date: 03/27/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/14/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 06/05/2017

RECORDS OF EMERGENCY RELEASE REPORTS

HMIRS (DOT): Hazardous Material spills reported by the Department of Transportation

Agency Version Date: 03/22/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/09/2017

Agency: U.S. Department of Transportation
Agency Contact: (202) 366-4996
Most Recent Contact: 05/31/2017

STATE AND TRIBAL LEAKING STORAGE TANK LISTS

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land in EPA Region 1

Agency Version Date: 04/18/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 06/27/2017

Agency: U.S. Environmental Protection Agency Region 1
Agency Contact: 855-246-3642
Most Recent Contact: 04/18/2017

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land in EPA Region 10

Agency Version Date: 05/15/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/24/2017

Agency: U.S. Environmental Protection Agency Region 10
Agency Contact: 855-246-3642
Most Recent Contact: 05/15/2017

INDIAN LUST R2: Leaking Underground Storage Tanks on Indian Land in EPA Region 2

Agency Version Date: 04/25/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/04/2017

Agency: U.S. Environmental Protection Agency Region 2
Agency Contact: 855-246-3642
Most Recent Contact: 04/25/2017

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land in EPA Region 4

Agency Version Date: 05/15/2017
Agency Update Frequency: Semi Annually
Planned Next Contact: 07/24/2017

Agency: U.S. Environmental Protection Agency Region 4
Agency Contact: 855-246-3642
Most Recent Contact: 05/15/2017

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land in EPA Region 5

Agency Version Date: 05/04/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/13/2017

Agency: U.S. Environmental Protection Agency Region 5
Agency Contact: 855-246-3642
Most Recent Contact: 05/04/2017

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land in EPA Region 6

Agency Version Date: 05/08/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/17/2017

Agency: U.S. Environmental Protection Agency Region 6
Agency Contact: 855-246-3642
Most Recent Contact: 05/08/2017

STATE AND TRIBAL LEAKING STORAGE TANK LISTS (cont.)

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land in EPA Region 7

Agency Version Date: 09/13/2016
Agency Update Frequency: Varies
Planned Next Contact: 07/13/2017

Agency: U.S. Environmental Protection Agency Region 7
Agency Contact: 855-246-3642
Most Recent Contact: 05/04/2017

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land in EPA Region 8

Agency Version Date: 05/05/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/14/2017

Agency: U.S. Environmental Protection Agency Region 8
Agency Contact: 855-246-3642
Most Recent Contact: 05/05/2017

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land in EPA Region 9

Agency Version Date: 04/17/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 06/26/2017

Agency: U.S. Environmental Protection Agency Region 9
Agency Contact: 855-246-3642
Most Recent Contact: 04/17/2017

LPT - VA: Petroleum Storage tanks with known releases

Agency Version Date: 05/05/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/14/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 05/05/2017

PRO LUST - VA: Piedmont Regional Office: Leaking Underground Storage Tanks

Agency Version Date: 05/05/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/14/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 05/05/2017

SWRO LPT - VA: South Western Region : Leaking Petroleum Storage Tanks

Agency Version Date: 05/05/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/14/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 05/05/2017

TRO LUST - VA: Tidewater Regional Office: Leaking Underground Storage Tanks

Agency Version Date: 05/05/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/14/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 05/05/2017

VRO LUST - VA: Valley Regional Office: Leaking Underground Storage Tanks

Agency Version Date: 05/05/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/14/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 05/05/2017

STATE AND TRIBAL VOLUNTARY CLEANUP SITES

ARCHIVED VRP - VA: Archived Voluntary Remediation Program Sites

Agency Version Date: 05/02/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/11/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4190
Most Recent Contact: 05/02/2017

STATE AND TRIBAL VOLUNTARY CLEANUP SITES (cont.)

VRP - VA: VRP Completed and Planned sites within Virginia

Agency Version Date: 12/02/2016
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 05/19/2017

STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

SWF/LF - VA: State Landfill locations

Agency Version Date: 03/27/2017
Agency Update Frequency: Annually
Planned Next Contact: 08/14/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 06/05/2017

OTHER ASCERTAINABLE RECORDS

Corrective Actions_2020: The RCRA cleanup baseline includes facilities expected to need corrective action.

Agency Version Date: 03/20/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/18/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: N/R
Most Recent Contact: 06/09/2017

LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES

DEBRIS REGION 9: Torres Martinez Reservation illegal dump site listing

Agency Version Date: 03/29/2017
Agency Update Frequency: Varies
Planned Next Contact: 06/23/2017

Agency: U.S. Environmental Protection Agency Region 9
Agency Contact: 855-246-3642
Most Recent Contact: 03/28/2017

INDIAN ODI R8: Region 8 Indian land open dump inventory sites maintained within the STARS program

Agency Version Date: 01/04/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/10/2017

Agency: Indian Health Service
Agency Contact: 855-246-3642
Most Recent Contact: 05/01/2017

ODI: Open dump inventory sites

Agency Version Date: 03/07/2017
Agency Update Frequency: No Update
Planned Next Contact: 07/25/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 05/16/2017

TRIBAL ODI: Indian land open dump inventory for all regions

Agency Version Date: 05/18/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/27/2017

Agency: Indian Health Service
Agency Contact: 301-443-3593
Most Recent Contact: 05/18/2017

LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES

FED CDL: The U.S. Department of Justice listing of clandestine drug lab locations

Agency Version Date: 04/17/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 06/26/2017

Agency: U.S. Department of Justice
Agency Contact: 202-307-7610
Most Recent Contact: 04/17/2017

LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES (cont.)

US HIST CDL: The U.S. Department of Justice historical listing of clandestine drug lab locations

Agency Version Date: 04/17/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 06/26/2017

Agency: U.S. Department of Justice
Agency Contact: 202-307-7610
Most Recent Contact: 04/17/2017

LOCAL BROWNFIELD LISTS

Fed Brownfields: Federal brownfield remediation sites

Agency Version Date: 04/25/2017
Agency Update Frequency: Semi Annually
Planned Next Contact: 07/04/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 04/25/2017

TRIBAL BROWNFIELDS: Tribal brownfield remediation site listing

Agency Version Date: 03/07/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/28/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 05/01/2017

BROWNFIELDS - VA: List of brownfield sites

Agency Version Date: 05/22/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/15/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4179
Most Recent Contact: 05/19/2017

LOCAL LAND RECORDS

LIENS 2: Comprehensive Environmental Response Compensation and Liability Act sites with liens

Agency Version Date: 05/11/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/04/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 04/07/2017

RECORDS OF EMERGENCY RELEASE REPORTS

ARCHIVED SPILLS - VA: The VA Department of Environment Quality's Pollution Response Program responses to air, water, and waste pollution incidents prior to October 2009.

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: Department of Environmental Quality
Agency Contact: 804-698-4000
Most Recent Contact: 06/06/2017

PCD - VA: The pollution control database is Virginia's version of the spills listing

Agency Version Date: 03/23/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/10/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 06/01/2017

SPILLS - VA: Oil and hazardous material spills report sites

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: Department of Environmental Quality
Agency Contact: 804-698-4000
Most Recent Contact: 06/06/2017

OTHER ASCERTAINABLE RECORDS

AFS: Air Facility Systems Quarterly Extract

Agency Version Date: 12/28/2016
Agency Update Frequency: Quarterly
Planned Next Contact: 06/23/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 03/28/2017

BRS: Reporting of hazardous waste generation and management from large quantity generators

Agency Version Date: 03/20/2017
Agency Update Frequency: Biennial
Planned Next Contact: 08/18/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 06/09/2017

CDC HAZDAT: The Agency for Toxic Substances and Disease Registry's Hazardous Substance Release/Health Effects Database.

Agency Version Date: 06/28/2014
Agency Update Frequency: Varies
Planned Next Contact: 08/15/2017

Agency: Agency for Toxic Substances and Disease Registry
Agency Contact: 770-488-6399
Most Recent Contact: 06/06/2017

COAL ASH DOE: List of existing and planned generators with 1 megawatt or greater of combined capacity that are utilizing coal ash impoundments.

Agency Version Date: 03/23/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/10/2017

Agency: Department of Energy
Agency Contact: (202) 586-8800
Most Recent Contact: 06/01/2017

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

Agency Version Date: 05/08/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/17/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 05/08/2017

COAL GAS: Manufactured Gas Plant locations

Agency Version Date: 06/28/2014
Agency Update Frequency: Quarterly
Planned Next Contact: 08/07/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 05/11/2017

CONSENT (DECREES): Legal decisions regarding responsibility for Superfund locations

Agency Version Date: 03/23/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/15/2017

Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 06/06/2017

DOD: Department of Defense sites

Agency Version Date: 04/03/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/15/2017

Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 06/06/2017

DOT OPS: Incident Data Report

Agency Version Date: 03/06/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/24/2017

Agency: U.S. Department of Transportation
Agency Contact: (202) 366-4996
Most Recent Contact: 05/15/2017

OTHER ASCERTAINABLE RECORDS (cont.)

ECHO: ECHO is EPA Enforcement and Compliance History Online website to search for facilities in your community to assess their compliance with environmental regulations related to CAA, CWA, RCRA, & SDWA.

Agency Version Date: 03/27/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/14/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-1667
Most Recent Contact: 06/05/2017

ENOI: ENOI - EPA Electronic Notice of Intent (eNOI) database contains construction sites industrial facilities pesticides and vessel operators to apply for coverage and submit a variety of other reports electronically required under EPAs Construction Genera

Agency Version Date: 03/10/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 07/28/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 05/19/2017

FA HWF: Hazardous Waste Facilities with Financial Assurance

Agency Version Date: 04/11/2017
Agency Update Frequency: Varies
Planned Next Contact: 06/20/2017

Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 04/11/2017

FEDLAND: Federal land locations

Agency Version Date: 03/27/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/14/2017

Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 06/05/2017

FRS: Facility Registry Systems

Agency Version Date: 03/02/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/20/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 05/11/2017

FTTS: Tracking of administrative and enforcement activities related to FIFRA/TSCA

Agency Version Date: 05/08/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/04/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 564-2280
Most Recent Contact: 05/08/2017

FTTS INSP: Tracking of inspections related to FIFRA/TSCA

Agency Version Date: 05/08/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/04/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 564-2280
Most Recent Contact: 05/08/2017

FUDS: Defense sites that require cleanup

Agency Version Date: 05/08/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/17/2017

Agency: US Army Corps of Engineering
Agency Contact: (202) 761-0011
Most Recent Contact: 05/08/2017

ICIS: Comprised of all Federal Administrative and Judicial enforcement information [intended to replace PCS] by tracking enforcement and compliance information (also contains what used to be known as FFTS)

Agency Version Date: 03/28/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/15/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 06/06/2017

OTHER ASCERTAINABLE RECORDS (cont.)

INDIAN RESERVATION: Indian Reservation sites

Agency Version Date: 05/10/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/19/2017

Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 05/10/2017

LEAD_SMELTER: Listing of former Lead Smelter Sites

Agency Version Date: 05/16/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/25/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 05/16/2017

LUCIS: Land Use Control Information Systems

Agency Version Date: 06/28/2014
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 08/18/2017

Agency: Department of the Navy: BRAC PMO
Agency Contact: (619) 532-0900
Most Recent Contact: 05/24/2017

MINES: Mines Master Index Files

Agency Version Date: 03/27/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/14/2017

Agency: Department of Labor
Agency Contact: (202) 693-9400
Most Recent Contact: 06/05/2017

MLTS: Sites in possession/use of radioactive materials regulated by NRC

Agency Version Date: 11/28/2016
Agency Update Frequency: Varies
Planned Next Contact: 07/24/2017

Agency: Nuclear Regulatory Commission
Agency Contact: (800) 397-4209
Most Recent Contact: 04/27/2017

NPL AOC: Areas of Concern related to NPL remediation sites

Agency Version Date: 04/03/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: Environmental Protection Agency
Agency Contact: N/R
Most Recent Contact: 06/06/2017

OSHA: OSHA's listing of inspections violations and fatality information

Agency Version Date: 03/28/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/15/2017

Agency: Occupational Safety & Health Administration
Agency Contact: 800-321-6742
Most Recent Contact: 06/06/2017

PADS: Listing of generators transporters commercial store/ brokers and disposers of PCB

Agency Version Date: 04/28/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/07/2017

Agency: Environmental Protection Agency
Agency Contact: (703) 308-8404
Most Recent Contact: 04/28/2017

PCB TRANSFORMER: Registry of PCB's

Agency Version Date: 04/08/2017
Agency Update Frequency: No Update
Planned Next Contact: 08/25/2017

Agency: Environmental Protection Agency
Agency Contact: (703) 308-8404
Most Recent Contact: 06/16/2017

OTHER ASCERTAINABLE RECORDS (cont.)

RAATS: Listing of major violators with enforcement actions issued under RCRA. Includes administrative and civil actions filed by the EPA. This dataset is no longer maintained.

Agency Version Date: 03/20/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/18/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 06/09/2017

RADINFO: EPA regulated facilities with radiation and radioactive materials

Agency Version Date: 04/08/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/25/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 06/16/2017

RMP: Facilities producing/handling/ process/ distribute/ store specific chemicals report plans required by the Clean Air Act

Agency Version Date: 01/10/2017
Agency Update Frequency: Monthly
Planned Next Contact: 08/22/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 564-2534
Most Recent Contact: 05/24/2017

ROD: Permanent remedy at an NPL site

Agency Version Date: 04/28/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/15/2017

Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 06/06/2017

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners

Agency Version Date: 03/09/2017
Agency Update Frequency: No Update
Planned Next Contact: 07/27/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 05/18/2017

SEMS_SMELTER: This report includes sites that have smelting-related, or potentially smelting-related, indicators in the SEMS database. The report includes information on the site location as well as contaminants of concern.

Agency Version Date: 03/28/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 08/15/2017

Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 06/06/2017

SSTS: Tracking of facilities who produce pesticides and their quantity

Agency Version Date: 02/28/2017
Agency Update Frequency: Annually
Planned Next Contact: 02/28/2018

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/28/2017

TOSCA-CHEMICAL: Chemicals controlled by the Toxic Substance Control Act

Agency Version Date: 06/28/2014
Agency Update Frequency: Varies
Planned Next Contact: 07/18/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 05/09/2017

TOSCA-PLANT: Plants controlled by the Toxic Substance Control Act

Agency Version Date: 03/15/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/02/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 05/24/2017

OTHER ASCERTAINABLE RECORDS (cont.)

TRIS: Information regarding toxic chemicals that are being used/manufactured/ treated/ transported/released into the environment

Agency Version Date: 03/27/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/14/2017

Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 06/05/2017

UMTRA: Uranium Recovery Sites

Agency Version Date: 03/27/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/14/2017

Agency: United States Nuclear Regulatory Commission
Agency Contact: (301) 415-8200
Most Recent Contact: 06/05/2017

AIRS - VA: AIRS Title V facilities

Agency Version Date: 03/17/2017
Agency Update Frequency: Varies
Planned Next Contact: 09/04/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 06/08/2017

CEDS - VA: Comprehensive Environmental Data System- Wastewater Permit Disposal System

Agency Version Date: 03/23/2017
Agency Update Frequency: Varies
Planned Next Contact: 08/10/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 06/01/2017

DAYCARE - VA: List of child care facilities

Agency Version Date: 04/27/2017
Agency Update Frequency: Varies
Planned Next Contact: 07/06/2017

Agency: Department of Social Services
Agency Contact: (804) 726-7000
Most Recent Contact: 04/27/2017

DRYCLEANERS - VA: Dry Cleaning Facilities

Agency Version Date: 03/30/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 09/06/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 06/10/2017

ENF - VA: List of enforcement actions

Agency Version Date: 04/19/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 06/28/2017

Agency: Department of Environmental Quality
Agency Contact: (804) 698-4000
Most Recent Contact: 04/19/2017

SUBJECT PROPERTY ADDRESS:

Central Virginia Training Center
Route 334
Madison Heights, VA 24572

SUBJECT PROPERTY COORDINATES:

Latitude(North):	37.410621 - 37°24'38.2"
Longitude(West):	-79.117949 - -79°7'4.6"
Universal Transverse Mercator:	Zone 17N
UTM X (Meters):	666560.62
UTM Y (Meters):	4142087.71

ELEVATION:

Elevation: 720.932 ft. above sea level

USGS TOPOGRAPHIC MAP:

Subject Property Map:	37079d1 KELLY, VA
Most Recent Revision:	2016
Subject Property Map:	37079d2 LYNCHBURG, VA
Most Recent Revision:	2016

GEOHYDROLOGY DATA:**SUBJECT PROPERTY TOPOGRAPHY:**

Topographic Gradient: West

DFIRM FLOOD ZONE:

DFIRM Flood	
Subject Property County:	Electronic Data:
AMHERST	Yes - refer to the PROPERTY PROXIMITY MAP and AREA MAP
Flood Plain Panel at Subject Property:	51009C
Additional Panels in search area:	510093

FEMA FLOOD ZONE:

FEMA Flood	
Subject Property County:	Electronic Data:
AMHERST	Yes - refer to the PROPERTY PROXIMITY MAP and AREA MAP
Flood Plain Panel at Subject Property:	No available data
Additional Panels in search area:	5100930010B

NATIONAL WETLAND INVENTORY:

NWI Electronic

NWI Quad at Subject Property:

Data Coverage:

KELLY

Yes - refer to the Geological Findings Map

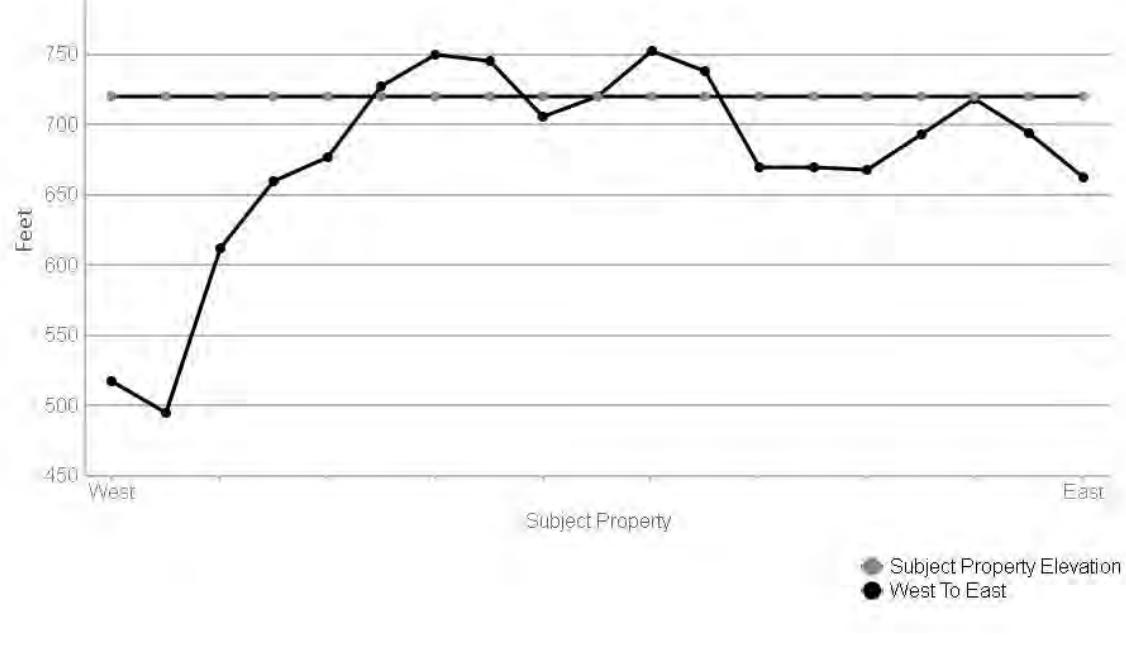
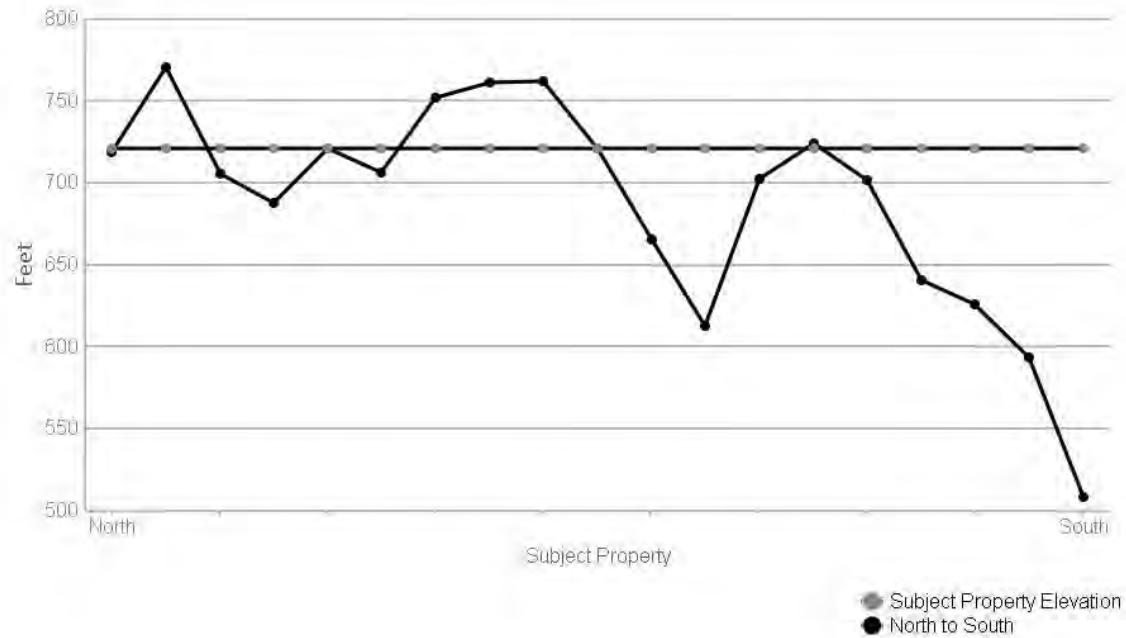
LITHOSTRATIGRAPHIC INFORMATION:

ROCK STRATIGRAPHIC UNIT:

GEOLOGIC AGE IDENTIFICATION

Era: Paleozoic Category: 135 Ce Cambrian eugeosynclinal
System: Cambrian
Series: Cambrian eugeosynclinal
Code: Ce

SURROUNDING ELEVATION PROFILES:

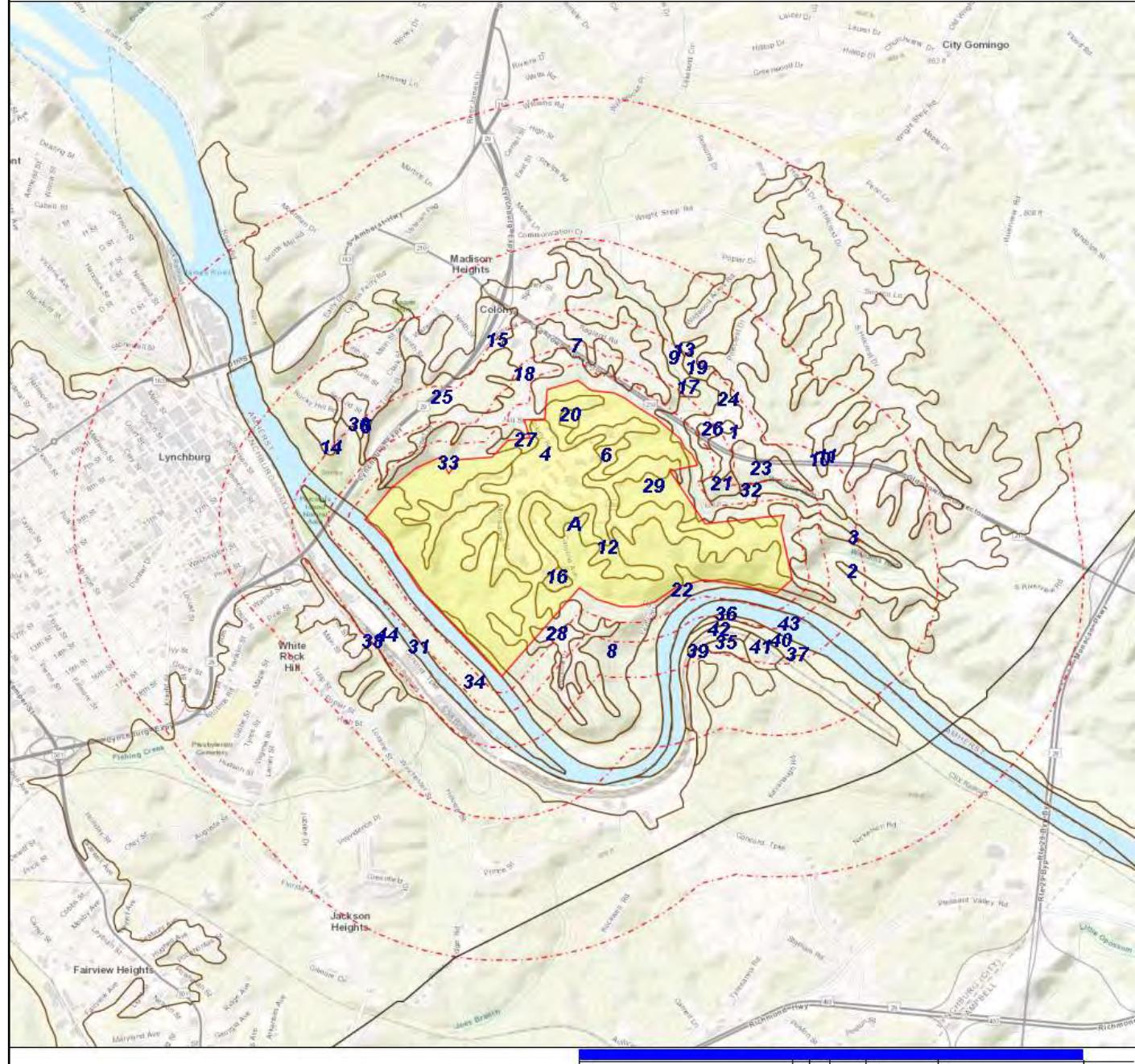


Geological Landscape Section Soil Map

2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: June 16, 2017



+ Subject Property

— SSURGO

— STATSGO

SOIL COMPOSITION IN GENERAL AREA OF SUBJECT PROPERTY:

Agency source: Soil Conservation Service, US Department of Agriculture

SOIL MAP ID 1

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials,	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and	4-14	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	127-183	Clay	1984.	the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 2

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.)	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.)	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil	4-14	4.5-6

Geological Landscape Section Summary

2017

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 3

USDA Soil Name	Stott Knob, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	C
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Moderate

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-23	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials,	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and	4-42	3.5-6

Geological Landscape Section Summary

2017

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-23	Loam	1984.	the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	3.5-6
2	23-53	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.5-6
3	53-76	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	3.5-6
4	76-101		No data	No data	0-14	No data

SOIL MAP ID 4

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-14	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984.	4-14	4.5-6

SOIL MAP ID 5

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size	4-14	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	25-127	Clay	of State Highway and Transportation Officials, 1984.	distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 6

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	14-42	4.5-6

Geological Landscape Section Summary

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Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 7

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-14	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984.	4-14	4.5-6

SOIL MAP ID 8

USDA Soil Name	Rhodhiss, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Moderate

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-20	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5
2	20-102	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size	4-14	4.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	20-102	Clay loam	of State Highway and Transportation Officials, 1984.	distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6.5
3	102-152	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5

SOIL MAP ID 9

USDA Soil Name	Codorus, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B/D
Soil Drainage Class	Somewhat poorly drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-18	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-14	4.5-6

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Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-18	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984.	4-14	4.5-6
2	18-102	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	5.1-6.5
3	102-147	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-141	5.1-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
4	147-165	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, sands with fines, Clayey Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-141	5.1-6.5

SOIL MAP ID 10

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent	4-14	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	25-127	Clay	M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 11

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	14-42	4.5-6

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Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984.	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 12

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-14	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	127-183	Clay	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984.	4-14	4.5-6

SOIL MAP ID 13

USDA Soil Name	Water,Miscellaneous area
USDA Soil Texture	Not Reported
Hydrologic Soil Group	Not Reported
Soil Drainage Class	Not Reported
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Not Reported

SOIL MAP ID 14

USDA Soil Name	Wintergreen, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-18	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in	4-42	3.6-5.5

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Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-18	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	3.6-5.5
2	18-157	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.6-5.5

SOIL MAP ID 15

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75	14-42	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Transportation Officials, 1984.	mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 16

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

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Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 17

USDA Soil Name	Wintergreen, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-18	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	3.6-5.5
2	18-157	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	3.6-5.5

SOIL MAP ID 18

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

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Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 19

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-14	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984.	4-14	4.5-6

SOIL MAP ID 20

USDA Soil Name	Udorthents, Taxon above family
USDA Soil Texture	Not Reported
Hydrologic Soil Group	Not Reported
Soil Drainage Class	Not Reported
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Not Reported

SOIL MAP ID 21

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and	14-42	4.5-6

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Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 22

USDA Soil Name	Combs, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	A
Soil Drainage Class	Well drained
Hydric Classification	5
Corrosion Potential - Uncoated Steel	Low

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-30	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	5.6-7.3
2	30-183	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	5.6-7.3

SOIL MAP ID 23

USDA Soil Name	Rhodhiss, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Moderate

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-20	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5
2	20-102	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6.5
3	102-152	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5

SOIL MAP ID 24

USDA Soil Name	Rhodhiss, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Moderate

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-20	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5
2	20-102	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6.5
3	102-152	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-42	4.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	102-152	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984).	4-42	4.5-6.5

SOIL MAP ID 25

USDA Soil Name	Rhodhiss, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Moderate

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-20	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5
2	20-102	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size	4-14	4.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	20-102	Clay loam	of State Highway and Transportation Officials, 1984.	distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6.5
3	102-152	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5

SOIL MAP ID 26

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	14-42	4.5-6

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Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 27

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-14	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984.	4-14	4.5-6

SOIL MAP ID 28

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size	4-14	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	25-127	Clay	of State Highway and Transportation Officials, 1984.	distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6

SOIL MAP ID 29

USDA Soil Name	Rhodhiss, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Moderate

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-20	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-42	4.5-6.5

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Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-20	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984).	4-42	4.5-6.5
2	20-102	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6.5
3	102-152	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5

SOIL MAP ID 30

USDA Soil Name	Clifford, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6
2	25-127	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	127-183	Clay	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-14	4.5-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	127-183	Clay	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984.	4-14	4.5-6

SOIL MAP ID 31

USDA Soil Name	Water,Miscellaneous area
USDA Soil Texture	Not Reported
Hydrologic Soil Group	Not Reported
Soil Drainage Class	Not Reported
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Not Reported

SOIL MAP ID 32

USDA Soil Name	Comus, Series
USDA Soil Texture	Fine sandy loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Moderate

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Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-20	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
2	20-114	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6
3	114-165	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6

SOIL MAP ID 33

USDA Soil Name	Rhodhiss, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Moderate

Geological Landscape Section Summary

2017

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-20	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5
2	20-102	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6.5
3	102-152	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	4.5-6.5

SOIL MAP ID 34

USDA Soil Name	Combs, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	A
Soil Drainage Class	Well drained
Hydric Classification	5
Corrosion Potential - Uncoated Steel	Low

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-30	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	5.6-7.3
2	30-183	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	5.6-7.3

SOIL MAP ID 35

USDA Soil Name	Masada, Series
USDA Soil Texture	Fine sandy loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Geological Landscape Section Summary

2017

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-28	Fine sandy loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, sands with fines, Clayey Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-5.5
2	28-135	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-5.5
3	135-211	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, sands with fines, Clayey Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-5.5

SOIL MAP ID 36

USDA Soil Name	Chewacla, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B/D
Soil Drainage Class	Somewhat poorly drained
Hydric Classification	49
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-38	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6.5
2	38-96	Silty clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6.5
3	96-173	Silt loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-42	4.5-7.8

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	96-173	Silt loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984.	4-42	4.5-7.8

SOIL MAP ID 37

USDA Soil Name	Cut and fill land, Miscellaneous area
USDA Soil Texture	Not Reported
Hydrologic Soil Group	Not Reported
Soil Drainage Class	Not Reported
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Not Reported

SOIL MAP ID 38

USDA Soil Name	Tallapoosa, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	C
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Low

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and	4-14	4.5-5

Geological Landscape Section Summary

2017

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-5
2	25-43	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-5
3	43-76	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-5
4	76-86		No data	No data	0.01-0.42	No data

SOIL MAP ID 39

USDA Soil Name	Tallapoosa, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	C
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Low

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-25	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-5
2	25-43	Clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-5
3	43-76	Loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	4-14	4.5-5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	43-76	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	test D 2487, in ASTM, 1984).	4-14	4.5-5
4	76-86		No data	No data	0.01-0.42	No data

SOIL MAP ID 40

USDA Soil Name	Toccoa, Series
USDA Soil Texture	Fine sandy loam
Hydrologic Soil Group	A
Soil Drainage Class	Well drained
Hydric Classification	7
Corrosion Potential - Uncoated Steel	Moderate

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-58	Fine sandy loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984).	COARSE-GRAINED SOILS, Sands, sands with fines, Clayey Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	5.1-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	58-162	Fine sandy loam	Silt-Clay materials (more than 35% passing No. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, sands with fines, Clayey Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-42	5.1-6.5

SOIL MAP ID 41

USDA Soil Name	Wahee, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	C/D
Soil Drainage Class	Somewhat poorly drained
Hydric Classification	9
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-23	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-14	4.5-6
2	23-117	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials,	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent	0.42-1.4	3.6-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	23-117	Clay	1984.	on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.4	3.6-5.5
3	117-127	Sand	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-141	3.6-5.5

SOIL MAP ID 42

USDA Soil Name	Wehadkee, Series
USDA Soil Texture	Loam
Hydrologic Soil Group	B/D
Soil Drainage Class	Somewhat poorly drained
Hydric Classification	89
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-58	Loam	Silt-Clay materials (more than 35% passing NO. 200), silty soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is less than 50%), Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-42	4.5-6.5
2	58-94	Loam	Silt-Clay materials	FINE-GRAINED SOILS,	4-14	4.5-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	58-94	Loam	(more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	4-14	4.5-6.5
3	94-127	Loam	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, sands with fines, Clayey Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	14-141	4.5-6.5

SOIL MAP ID 43

USDA Soil Name	Water,Miscellaneous area
USDA Soil Texture	Not Reported
Hydrologic Soil Group	Not Reported
Soil Drainage Class	Not Reported
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Not Reported

SOIL MAP ID 44

USDA Soil Name	Urban land,Miscellaneous area
USDA Soil Texture	Not Reported
Hydrologic Soil Group	Not Reported
Soil Drainage Class	Not Reported
Hydric Classification	0
Corrosion Potential - Uncoated Steel	Not Reported

SOIL MAP ID A

USDA Soil Name	Madison, Series
USDA Soil Texture	Clay loam
Hydrologic Soil Group	B
Soil Drainage Class	Well drained
Hydric Classification	1
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-15	Clay loam	No data	No data	4.2343-14.1143	4.5-6.5
2	15-76	No data	No data	No data	4.2343-14.1143	4.5-5.5
3	76-89	No data	No data	No data	4.2343-14.1143	4.5-6
4	89-168	No data	No data	No data	4.2343-14.1143	4.5-6

WATER AGENCY DATA:

WATER AGENCY SEARCH DISTANCES:

<u>DATABASE:</u>	<u>SEARCH DISTANCE (MILES):</u>
PWS	1.000

FEDERAL WATER AGENCY DATA SUMMARY:

<u>MAP ID:</u>	<u>WELL ID:</u>	<u>LOCATION FROM SP:</u>
8	VA6113270	1/2 - 1 Mile NW
10	VA5031960	1/2 - 1 Mile W
11	VA5009250	1/2 - 1 Mile NNW

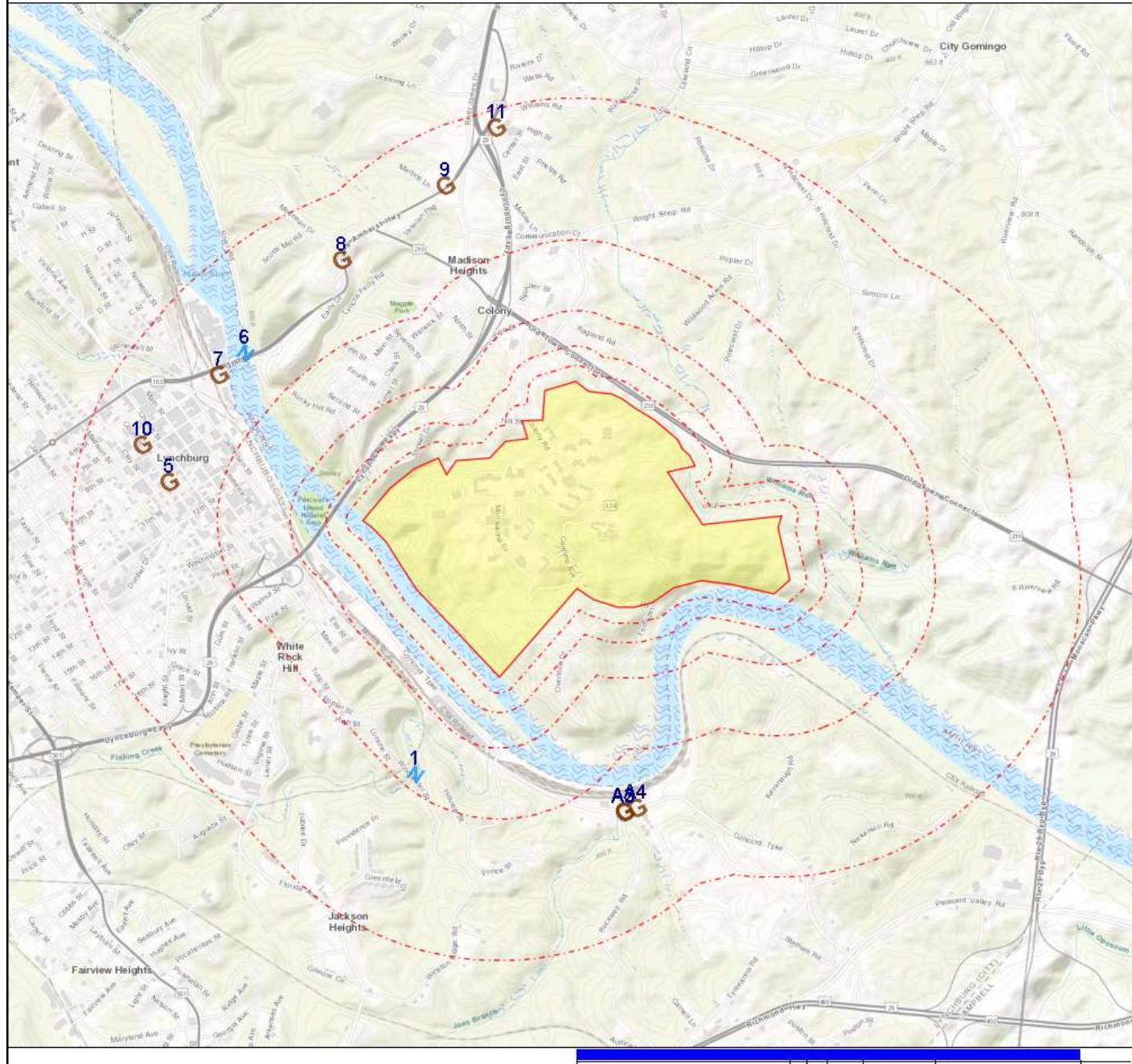
Note: PWS System location is not always the same as well location.

Geological Findings Map

2017

SUBJECT NAME: Central Virginia Training Center
 ADDRESS: Route 334, Madison Heights, VA 24572
 LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
 ORDER #: 13052
 REPORT DATE: June 16, 2017



+ Subject Property

● Equal/Higher Elevation

○ Lower Elevation

× Basins (No Data)

~~ NWIS

↗ NWIS

○ Geological Site

Geological Landscape Section Map Findings

2017

Map Id: 1
Direction: SW
Distance: 0.451 mi.
Actual: 2383.567 ft.
Elevation: 0.107 mi. / 562.992 ft.
Relative: Lower

Site Name : N/R

Envirosite ID: N/R
EPA ID: N/R

Database(s) : [NWIS]

NWIS

Geological Landscape Section Map Findings

2017

Map Id: 1
Direction: SW
Distance: 0.451 mi.
Actual: 2383.567 ft.
Elevation: 0.107 mi. / 562.992 ft.
Relative: Lower

Site Name : N/R

Envirosite ID: N/R
EPA ID: N/R

Database(s) : [NWIS] (*cont.*)

NWIS (*cont.*)

Classcode: NWIS

Map Id: A2
Direction: SSE
Distance: 0.643 mi.
Actual: 3394.466 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LIGHTWEIGHT BLOCK COMPANY, INC
2304 CONCORD TURNPIKE
LYNCHBURG, VA 24504

Envirosite ID: 330126604
EPA ID: N/R

Database(s) : [PCS ENF]

PCS ENF

NPDES ID :	VAU001593
ICIS Facility Interest ID :	3200038150
Facility UIN :	110007008086
Facility Type Code :	Privately Owned Facility
Impaired Waters :	N/R
Latitude :	37.39689
Longitude :	-79.11163

Formal Enforcement Actions

Settlement Entered Date :	04/22/2003
ENF Identifier :	03-2003-N051
Activity ID :	3200294904
Activity Type Code :	Administrative, Formal
ENF Type Code :	309A
ENF Type Description :	CWA 309A AO For Compliance
Agency :	EPA
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Informal Enforcement Actions

Achieved Date :	10/21/2002
Registry ID :	110007008086
ENF Identifier :	03-N00000084
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	EPA

Geological Landscape Section Map Findings

2017

Map Id: A3
Direction: SSE
Distance: 0.646 mi.
Actual: 3410.130 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LYNCHBURG REGIONAL WASTEWATER TREATMENT PLANT
2301 CONCORD TPKE
LYNCHBURG, VA 24505
Database(s) : [PCS ENF, PCS FACILITY]

Envirosite ID: 333531458
EPA ID: N/R

PCS ENF

NPDES ID :	VA0024970
ICIS Facility Interest ID :	3200005600
Facility UIN :	110039930849
Facility Type Code :	Municipal or Water District
Impaired Waters :	N/R
Latitude :	37.398055
Longitude :	-79.113888

Formal Enforcement Actions

Settlement Entered Date :	07/31/2015
ENF Identifier :	VA-BR14-0909
Activity ID :	3600189852
Activity Type Code :	Administrative, Formal
ENF Type Code :	STAOCO
ENF Type Description :	State Administrative Order of Consent
Agency :	State
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	\$0.00

Settlement Entered Date :	08/04/2011
ENF Identifier :	VA-BR10-1021
Activity ID :	3200292336
Activity Type Code :	Administrative, Formal
ENF Type Code :	SCWAPO
ENF Type Description :	State CWA Penalty AO
Agency :	State
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	\$38,092.00

Settlement Entered Date :	08/19/1994
ENF Identifier :	VA-N00000519
Activity ID :	3200292338
Activity Type Code :	Administrative, Formal
ENF Type Code :	STAOCO
ENF Type Description :	State Administrative Order of Consent
Agency :	State
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Informal Enforcement Actions

Achieved Date :	02/24/2017
Registry ID :	110039930849
ENF Identifier :	VA-W2017-02-L-0003
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State

Geological Landscape Section Map Findings

2017

Map Id: A3
Direction: SSE
Distance: 0.646 mi.
Actual: 3410.130 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LYNCHBURG REGIONAL WASTEWATER TREATMENT PLANT
2301 CONCORD TPKE
LYNCHBURG, VA 24505
Database(s) : [PCS ENF, PCS FACILITY] (*cont.*)

Envirosite ID: 333531458
EPA ID: N/R

PCS ENF (*cont.*)

Achieved Date :	06/10/2016
Registry ID :	110039930849
ENF Identifier :	VA-W2016-06-L-0001
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	01/15/2014
Registry ID :	110039930849
ENF Identifier :	VA-W2014-01-L-0002
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	03/08/2012
Registry ID :	110039930849
ENF Identifier :	VA-N00000641
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	01/17/2012
Registry ID :	110039930849
ENF Identifier :	VA-N00000623
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	12/09/2011
Registry ID :	110039930849
ENF Identifier :	VA-N00000558
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	11/07/2011
Registry ID :	110039930849
ENF Identifier :	VA-N00000421
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL

Geological Landscape Section Map Findings

2017

Map Id: A3
Direction: SSE
Distance: 0.646 mi.
Actual: 3410.130 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LYNCHBURG REGIONAL WASTEWATER
TREATMENT PLANT
2301 CONCORD TPKE
LYNCHBURG, VA 24505
Database(s) : [PCS ENF, PCS FACILITY] (*cont.*)

Envirosite ID: 333531458
EPA ID: N/R

PCS ENF (*cont.*)

ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 08/16/2011
Registry ID : 110039930849
ENF Identifier : VA-N00000391
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 06/06/2011
Registry ID : 110039930849
ENF Identifier : VA-N00000241
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 05/10/2011
Registry ID : 110039930849
ENF Identifier : VA-N00000390
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 04/07/2011
Registry ID : 110039930849
ENF Identifier : VA-N00000389
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 03/15/2011
Registry ID : 110039930849
ENF Identifier : VA-N00000258
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 02/11/2011
Registry ID : 110039930849

Geological Landscape Section Map Findings

2017

Map Id: A3
Direction: SSE
Distance: 0.646 mi.
Actual: 3410.130 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LYNCHBURG REGIONAL WASTEWATER
TREATMENT PLANT
2301 CONCORD TPKE
LYNCHBURG, VA 24505
Database(s) : [PCS ENF, PCS FACILITY] (*cont.*)

Envirosite ID: 333531458
EPA ID: N/R

PCS ENF (*cont.*)

ENF Identifier :	VA-N00000374
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	01/13/2011
Registry ID :	110039930849
ENF Identifier :	VA-N00000199
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	12/07/2010
Registry ID :	110039930849
ENF Identifier :	VA-N00003354
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	11/08/2010
Registry ID :	110039930849
ENF Identifier :	VA-N00003355
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	10/14/2010
Registry ID :	110039930849
ENF Identifier :	VA-N00003309
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	10/07/2010
Registry ID :	110039930849
ENF Identifier :	VA-N00003308
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State

Geological Landscape Section Map Findings

2017

Map Id: A3
Direction: SSE
Distance: 0.646 mi.
Actual: 3410.130 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LYNCHBURG REGIONAL WASTEWATER TREATMENT PLANT
2301 CONCORD TPKE
LYNCHBURG, VA 24505
Database(s) : [PCS ENF, PCS FACILITY] (*cont.*)

Envirosite ID: 333531458
EPA ID: N/R

PCS ENF (*cont.*)

Achieved Date : 09/09/2010
Registry ID : 110039930849
ENF Identifier : VA-N00003103
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 08/06/2010
Registry ID : 110039930849
ENF Identifier : VA-N00003074
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 06/04/2010
Registry ID : 110039930849
ENF Identifier : VA-N00002827
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 05/13/2010
Registry ID : 110039930849
ENF Identifier : VA-N00002786
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 03/11/2009
Registry ID : 110039930849
ENF Identifier : VA-N00001572
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 02/13/2009
Registry ID : 110039930849
ENF Identifier : VA-N00001545
Activity Type Code : AIF

Geological Landscape Section Map Findings

2017

Map Id: A3
Direction: SSE
Distance: 0.646 mi.
Actual: 3410.130 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LYNCHBURG REGIONAL WASTEWATER TREATMENT PLANT
2301 CONCORD TPKE
LYNCHBURG, VA 24505
Database(s) : [PCS ENF, PCS FACILITY] (*cont.*)

Envirosite ID: 333531458
EPA ID: N/R

PCS ENF (*cont.*)

Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	01/09/2009
Registry ID :	110039930849
ENF Identifier :	VA-N00001427
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	12/05/2008
Registry ID :	110039930849
ENF Identifier :	VA-N00002294
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	12/02/2008
Registry ID :	110039930849
ENF Identifier :	VA-N00002293
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	11/06/2008
Registry ID :	110039930849
ENF Identifier :	VA-N00001383
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	08/06/2008
Registry ID :	110039930849
ENF Identifier :	VA-N00001262
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State

Geological Landscape Section Map Findings

2017

Map Id: A3
Direction: SSE
Distance: 0.646 mi.
Actual: 3410.130 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LYNCHBURG REGIONAL WASTEWATER
TREATMENT PLANT
2301 CONCORD TPKE
LYNCHBURG, VA 24505
Database(s) : [PCS ENF, PCS FACILITY] (*cont.*)

Envirosite ID: 333531458
EPA ID: N/R

PCS ENF (*cont.*)

Achieved Date :	05/07/2008
Registry ID :	110039930849
ENF Identifier :	VA-N00001082
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	02/12/2008
Registry ID :	110039930849
ENF Identifier :	VA-N00001045
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	11/05/2007
Registry ID :	110039930849
ENF Identifier :	VA-N00003574
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	08/09/2007
Registry ID :	110039930849
ENF Identifier :	VA-N00003573
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	05/22/2007
Registry ID :	110039930849
ENF Identifier :	VA-N00003572
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	02/14/2007
Registry ID :	110039930849
ENF Identifier :	VA-N00003571
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL

Geological Landscape Section Map Findings

2017

Map Id: A3
Direction: SSE
Distance: 0.646 mi.
Actual: 3410.130 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LYNCHBURG REGIONAL WASTEWATER
TREATMENT PLANT
2301 CONCORD TPKE
LYNCHBURG, VA 24505
Database(s) : [PCS ENF, PCS FACILITY] (*cont.*)

Envirosite ID: 333531458
EPA ID: N/R

PCS ENF (*cont.*)

ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 11/14/2006
Registry ID : 110039930849
ENF Identifier : VA-N00003570
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 08/04/2006
Registry ID : 110039930849
ENF Identifier : VA-N00003569
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 05/10/2006
Registry ID : 110039930849
ENF Identifier : VA-N00003568
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 01/17/2006
Registry ID : 110039930849
ENF Identifier : VA-N00003567
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 10/26/2005
Registry ID : 110039930849
ENF Identifier : VA-N00003566
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : State

Achieved Date : 07/13/2005
Registry ID : 110039930849

Geological Landscape Section Map Findings

2017

Map Id: A3
Direction: SSE
Distance: 0.646 mi.
Actual: 3410.130 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LYNCHBURG REGIONAL WASTEWATER TREATMENT PLANT
2301 CONCORD TPKE
LYNCHBURG, VA 24505
Database(s) : [PCS ENF, PCS FACILITY] (*cont.*)

Envirosite ID: 333531458
EPA ID: N/R

PCS ENF (*cont.*)

ENF Identifier :	VA-N00003565
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	06/01/2005
Registry ID :	110039930849
ENF Identifier :	VA-N00003564
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	03/11/2005
Registry ID :	110039930849
ENF Identifier :	VA-N00003563
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	12/23/2003
Registry ID :	110039930849
ENF Identifier :	VA-N00003562
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State
Achieved Date :	10/23/2002
Registry ID :	110039930849
ENF Identifier :	VA-N00003561
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State

PCS FACILITY

Issue Date :	04/05/2016
Original Issue Date :	12/13/1974
Issuing Agency :	STATE
Effective Date :	04/05/2016
Expiration Date :	03/31/2021
Retirement Date :	N/R
Termination Date :	N/R

Geological Landscape Section Map Findings

2017

Map Id: A3
Direction: SSE
Distance: 0.646 mi.
Actual: 3410.130 ft.
Elevation: 0.098 mi. / 518.504 ft.
Relative: Lower

Site Name : LYNCHBURG REGIONAL WASTEWATER TREATMENT PLANT
2301 CONCORD TPKE
LYNCHBURG, VA 24505
Database(s) : [PCS ENF, PCS FACILITY] (*cont.*)

Envirosite ID: 333531458
EPA ID: N/R

PCS FACILITY (*cont.*)

Agency Type Code :	State
Activity ID :	3600688280
External Permit Number :	VA0024970
Facility Type Indicator :	POTW
Permit Type Code :	NPDES Individual Permit
Major Minor Status :	M
Permit Status Code :	Effective
Total Design Flow Number :	22
Actual Average Flow Number :	N/R
State Water Body :	VAC-H03R
State Water Body Name :	James River/Blackwater Creek/Ivy Creek
Permit Name :	Lynchburg Regional Wastewater Treatment Plant
Permit Comp Status :	N/R
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator Code :	Approved

Map Id: A4
Direction: SSE
Distance: 0.665 mi.
Actual: 3510.630 ft.
Elevation: 0.098 mi. / 518.143 ft.
Relative: Lower

Site Name : LYNCHBURG STP
2301 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [INACTIVE PCS]

Envirosite ID: 330129906
EPA ID: N/R

INACTIVE PCS

Issue Date :	01/01/1994
Original Issue Date :	01/01/1994
Effective Date :	01/01/1994
Expiration Date :	12/31/1999
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	N/R
Agency Type Code :	U.S. EPA
Activity ID :	3200124442
External Permit Number :	VAL024970
Facility Type Indicator :	NON-POTW
Permit Type Code :	Associated Permit Record
Major Minor Status :	N
Permit Status Code :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	LYNCHBURG STP
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	N/R

Geological Landscape Section Map Findings

2017

Map Id: A4
Direction: SSE
Distance: 0.665 mi.
Actual: 3510.630 ft.
Elevation: 0.098 mi. / 518.143 ft.
Relative: Lower

Site Name : LYNCHBURG STP
2301 CONCORD TURNPIKE
LYNCHBURG, VA 24504
Database(s) : [INACTIVE PCS] (*cont.*)

Envirosite ID: 330129906
EPA ID: N/R

INACTIVE PCS (*cont.*)

EDMR Authorization : N
Pretreatment Indicator Code : N/R

Map Id: 5
Direction: W
Distance: 0.679 mi.
Actual: 3583.412 ft.
Elevation: 0.132 mi. / 695.21 ft.
Relative: Lower

Site Name : LYNCHBURG CITY SCHOOL
10TH & COURT ST
LYNCHBURG, VA 24505
Database(s) : [PCS ENF]

Envirosite ID: 323683428
EPA ID: N/R

PCS ENF

NPDES ID :	VAU000004
ICIS Facility Interest ID :	3200026853
Facility UIN :	110010917990
Facility Type Code :	Municipality
Impaired Waters :	N/R
Latitude :	37.413
Longitude :	-79.14339

Formal Enforcement Actions

Settlement Entered Date :	02/28/1995
ENF Identifier :	03-1995-N055
Activity ID :	3200294177
Activity Type Code :	Administrative, Formal
ENF Type Code :	309A
ENF Type Description :	CWA 309A AO For Compliance
Agency :	EPA
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Informal Enforcement Actions

Achieved Date :	N/R
Registry ID :	N/R
ENF Identifier :	N/R
Activity Type Code :	N/R
Activity Type Description :	N/R
ENF Type Code :	N/R
ENF Type Description :	N/R
Agency :	N/R

Geological Landscape Section Map Findings

2017

Map Id: 6
Direction: WNW
Distance: 0.687 mi.
Actual: 3625.090 ft.
Elevation: 0.094 mi. / 495.013 ft.
Relative: Lower

Site Name : N/R
Database(s) : [NWIS]

Envirosite ID: N/R
EPA ID: N/R

NWIS

Agency:	USGS
Site Identification Number:	02025700
Site Name:	JAMES RIVER AT HWY 29 (ALTERNATE) AT LYNCHBURG, VA
Site Type:	ST
DMS Latitude:	372510
DMS Longitude:	0790820
Decimal Latitude:	37.41958685
Decimal Longitude:	-79.13863529
Latitude-Longitude Method:	M
Latitude-Longitude Accuracy:	S
Latitude-Longitude Datum:	NAD27
Decimal Latitude/Longitude Datum:	NAD83
District Code:	51
State Code:	51
County Code:	009
Country Code:	US
Land Net Location Description:	N/R
Name of Location Map:	LYNCHBURG
Scale of Location Map:	24000
Altitude of Gage/Land Surface:	N/R
Method Altitude Determined:	N/R
Altitude Accuracy:	N/R
Altitude Datum:	N/R
Hydrologic Unit Code:	02080203
Drainage Basin Code:	N/R
Topographic Setting Code:	N/R
Data Types:	NN
Instruments:	NN
Construction Date:	N/R
Date Site Established:	N/R
Drainage Area:	3341
Contributing Drainage Area:	N/R
Time-zone Abbreviation:	EST
Daylight Saving Time:	Y
Data Reliability Code:	U
Data-Other GW File:	N/R
National Aquifer Code:	N/R
Local Aquifer Code:	N/R
Local Aquifer Type Code:	N/R
Well Depth:	N/R
Hole Depth:	N/R
Source of Depth Data:	N/R
Project Number:	N/R
Realtime-Data Flag:	N/R
Peak Begin Date:	N/R
Peak End Date:	N/R
Peak Count:	N/R
Water Quality Begin Date:	N/R
Water Quality End Date:	N/R
Water Quality Count:	N/R
Ground Water Begin Date:	N/R
Ground Water End Date:	N/R
Ground Water Count:	N/R
Site Visit Begin Date:	N/R
Site Visit End Date:	N/R
Site Visit Count:	N/R
State:	VA

Geological Landscape Section Map Findings

2017

Map Id: 6
Direction: WNW
Distance: 0.687 mi.
Actual: 3625.090 ft.
Elevation: 0.094 mi. / 495.013 ft.
Relative: Lower

Site Name : N/R

Envirosite ID: N/R
EPA ID: N/R

Database(s) : [NWIS] (cont.)

NWIS (cont.)

Classcode: NWIS

Map Id: 7
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO LLC -
LYNCHBURG
10 ADAMS ST
LYNCHBURG, VA 24504

Envirosite ID: 330100395
EPA ID: N/R

Database(s) : [INACTIVE PCS, PCS ENF]

INACTIVE PCS

Issue Date :	09/25/2006
Original Issue Date :	09/25/2006
Effective Date :	09/25/2006
Expiration Date :	09/24/2011
Retirement Date :	N/R
Termination Date :	07/01/2014
Issuing Agency :	STATE
Agency Type Code :	State
Activity ID :	3200117016
External Permit Number :	VA0002925
Facility Type Indicator :	NON-POTW
Permit Type Code :	NPDES Individual Permit
Major Minor Status :	N
Permit Status Code :	Terminated
Total Design Flow Number :	N/R
Actual Average Flow Number :	.04
State Water Body :	VAC-H03R
State Water Body Name :	James River/Blackwater Creek/Ivy Creek
Permit Name :	Griffin Pipe Products Co LLC - Lynchburg
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator Code :	N/R

PCS ENF

NPDES ID :	VA0002925
ICIS Facility Interest ID :	3200002702
Facility UIN :	110000585750
Facility Type Code :	N/R
Impaired Waters :	N/R
Latitude :	37.41904
Longitude :	-79.1404

Formal Enforcement Actions

Settlement Entered Date : N/R

Geological Landscape Section Map Findings

2017

Map Id: 7
Direction: WNW
Distance: 0.707 mi.
Actual: 3735.402 ft.
Elevation: 0.096 mi. / 506.89 ft.
Relative: Lower

Site Name : GRIFFIN PIPE PRODUCTS CO LLC -
LYNCHBURG
10 ADAMS ST
LYNCHBURG, VA 24504
Database(s) : [INACTIVE PCS, PCS ENF] (*cont.*)

Envirosite ID: 330100395
EPA ID: N/R

PCS ENF (*cont.*)

ENF Identifier :	N/R
Activity ID :	N/R
Activity Type Code :	N/R
ENF Type Code :	N/R
ENF Type Description :	N/R
Agency :	N/R
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Informal Enforcement Actions

Achieved Date :	04/25/2001
Registry ID :	110000585750
ENF Identifier :	VA-N00002357
Activity Type Code :	AIF
Activity Type Description :	Administrative - Informal
ENF Type Code :	LOVWL
ENF Type Description :	Letter of Violation/ Warning Letter
Agency :	State

Map Id: 8
Direction: NW
Distance: 0.772 mi.
Actual: 4074.486 ft.
Elevation: 0.142 mi. / 748.688 ft.
Relative: Higher

Site Name : VA6113270
RT1 BOX 12 MADISON
MADISON, VA 22727
Database(s) : [PWS]

Envirosite ID: 333956098
EPA ID: N/R

PWS

PWS ID :	VA6113270
PWS Type :	Transient non-community system
PWS Name :	OAK HILL EXXON JACK ELSTON MGR
Activity Status :	Inactive
Primary Source :	Ground water
Admin Name :	OAK HILL EXXON JACK ELSTON MGR
Alt Phone Number :	N/R
CDS ID :	N/R
DBPR Schedule Category :	N/R
Deactivation Date :	12/01/1982
EPA Region :	Region 3
Email Address :	N/R
Fax Number :	N/R
First Reported Date :	02/10/1979
GW or SW :	Groundwater
Is Grant Eligible :	N
Is Outstanding Performer :	N/R
Is School or Daycare :	N
Is Source Water Protected :	N/R
Is Wholesaler :	N
LT2 Schedule Category :	N/R

Geological Landscape Section Map Findings

2017

Map Id: 8
Direction: NW
Distance: 0.772 mi.
Actual: 4074.486 ft.
Elevation: 0.142 mi. / 748.688 ft.
Relative: Higher

Site Name : VA6113270
RT1 BOX 12 MADISON
MADISON, VA 22727
Database(s) : [PWS] (*cont.*)

Envirosite ID: 333956098
EPA ID: N/R

PWS (*cont.*)

Last Reported Date :	02/10/1996
NPM Candidate :	N
Org Name :	N/R
Outstanding Performer Date :	N/R
Owner Type :	Private
Phone Number :	703-948-4200
Phone Ext Number :	N/R
Population Category 2 :	< 10,000
Population Category 3 :	<=3300
Population Category 4 :	< 10K
Population Category 5 :	<=500
Population Category 11 :	101-500
Primacy Agency :	Virginia
Primacy Type :	State
Season Begin Date :	01-01
Season End Date :	12-31
Service Connections Count :	1
Source Water Protection Date :	N/R
Submission Quarter :	4
Submission Status Code :	Y
Submission Year :	2016
Submission Year Quarter :	2016Q4
Population Served Count :	200
Seasonal Startup System :	N/R
Reduced Monitoring Begin Date :	N/R
Reduced Monitoring End Date :	N/R
Reduced RTCR Monitoring :	N/R

Map Id: 9
Direction: NNW
Distance: 0.797 mi.
Actual: 4210.648 ft.
Elevation: 0.149 mi. / 786.417 ft.
Relative: Higher

Site Name : HUSS, INC
5216 AMHERST HWY
MADISON HEIGHTS, VA 24572
Database(s) : [PCS ENF]

Envirosite ID: 26965731
EPA ID: N/R

PCS ENF

NPDES ID :	VAU001654
ICIS Facility Interest ID :	6169075
Facility UIN :	110015794416
Facility Type Code :	Privately Owned Facility
Impaired Waters :	N/R
Latitude :	37.428127
Longitude :	-79.126114

Formal Enforcement Actions

Settlement Entered Date :	N/R
ENF Identifier :	N/R
Activity ID :	N/R
Activity Type Code :	N/R

Geological Landscape Section Map Findings

2017

Map Id: 9
Direction: NNW
Distance: 0.797 mi.
Actual: 4210.648 ft.
Elevation: 0.149 mi. / 786.417 ft.
Relative: Higher

Site Name : HUSS, INC
5216 AMHERST HWY
MADISON HEIGHTS, VA 24572
Database(s) : [PCS ENF] (*cont.*)

Envirosite ID: 26965731
EPA ID: N/R

PCS ENF (*cont.*)

ENF Type Code : N/R
ENF Type Description : N/R
Agency : N/R
Fed Penalty Assessed Amount : N/R
State Local Penalty Amount : N/R

Informal Enforcement Actions
Achieved Date : 01/20/2004
Registry ID : 110015794416
ENF Identifier : 03-N00000089
Activity Type Code : AIF
Activity Type Description : Administrative - Informal
ENF Type Code : LOVWL
ENF Type Description : Letter of Violation/ Warning Letter
Agency : EPA

Map Id: 10
Direction: W
Distance: 0.803 mi.
Actual: 4239.250 ft.
Elevation: 0.134 mi. / 707.021 ft.
Relative: Lower

Site Name : VA5031960
JACK HARRIS 716 COURT ST
LYNCHBURG, VA 24504
Database(s) : [PWS]

Envirosite ID: 333893383
EPA ID: N/R

PWS

PWS ID : VA5031960
PWS Type : Community water system
PWS Name : WINDSOR FOREST SUBDIVISION
Activity Status : Inactive
Primary Source : Ground water
Admin Name : WINDSOR FOREST SUBDIVISION
Alt Phone Number : N/R
CDS ID : N/R
DBPR Schedule Category : N/R
Deactivation Date : 08/01/1980
EPA Region : Region 3
Email Address : N/R
Fax Number : N/R
First Reported Date : 02/10/1979
GW or SW : Groundwater
Is Grant Eligible : N
Is Outstanding Performer : N/R
Is School or Daycare : N
Is Source Water Protected : N/R
Is Wholesaler : N
LT2 Schedule Category : N/R
Last Reported Date : 02/10/1996
NPM Candidate : N
Org Name : N/R
Outstanding Performer Date : N/R

Geological Landscape Section Map Findings

2017

Map Id: 10
Direction: W
Distance: 0.803 mi.
Actual: 4239.250 ft.
Elevation: 0.134 mi. / 707.021 ft.
Relative: Lower

Site Name : VA5031960
JACK HARRIS 716 COURT ST
LYNCHBURG, VA 24504
Database(s) : [PWS] (*cont.*)

Envirosite ID: 333893383
EPA ID: N/R

PWS (*cont.*)

Owner Type :	Private
Phone Number :	804-847-0227
Phone Ext Number :	N/R
Population Category 2 :	< 10,000
Population Category 3 :	<=3300
Population Category 4 :	< 10K
Population Category 5 :	<=500
Population Category 11 :	<=100
Primacy Agency :	Virginia
Primacy Type :	State
Season Begin Date :	01-01
Season End Date :	12-31
Service Connections Count :	33
Source Water Protection Date :	N/R
Submission Quarter :	4
Submission Status Code :	Y
Submission Year :	2016
Submission Year Quarter :	2016Q4
Population Served Count :	36
Seasonal Startup System :	N/R
Reduced Monitoring Begin Date :	N/R
Reduced Monitoring End Date :	N/R
Reduced RTCR Monitoring :	N/R

Map Id: 11
Direction: NNW
Distance: 0.934 mi.
Actual: 4933.578 ft.
Elevation: 0.145 mi. / 766.798 ft.
Relative: Higher

Site Name : VA5009250
113 PHELPS ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [PWS, PWS ENF]

Envirosite ID: 333863594
EPA ID: N/R

PWS

PWS ID :	VA5009250
PWS Type :	Community water system
PWS Name :	AMHERST CO SERVICE AUTHORITY (ACSA)
Activity Status :	Active
Primary Source :	Surface water
Admin Name :	FRENCH, DAN E.
Alt Phone Number :	N/R
CDS ID :	9999
DBPR Schedule Category :	System serving 10K to 49,999 people OR belonging to a CDS in which the largest system serves 10K to
Deactivation Date :	N/R
EPA Region :	Region 3
Email Address :	acsava@acsava.com
Fax Number :	434-845-1613
First Reported Date :	02/10/1979
GW or SW :	Surface water
Is Grant Eligible :	Y

Geological Landscape Section Map Findings

2017

Map Id: 11
Direction: NNW
Distance: 0.934 mi.
Actual: 4933.578 ft.
Elevation: 0.145 mi. / 766.798 ft.
Relative: Higher

Site Name : VA5009250
113 PHELPS ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [PWS, PWS ENF] (**cont.**)

Envirosite ID: 333863594
EPA ID: N/R

PWS (**cont.**)

Is Outstanding Performer :	N/R
Is School or Daycare :	N
Is Source Water Protected :	Y
Is Wholesaler :	N
LT2 Schedule Category :	Schedule 3
Last Reported Date :	11/28/2016
NPM Candidate :	Y
Org Name :	FRENCH, DAN E.
Outstanding Performer Date :	N/R
Owner Type :	Local government
Phone Number :	434-845-1606
Phone Ext Number :	N/R
Population Category 2 :	10,000+
Population Category 3 :	3,301-50,000
Population Category 4 :	10K-49,999
Population Category 5 :	10,001-100,000
Population Category 11 :	10,001-50,000
Primacy Agency :	Virginia
Primacy Type :	State
Season Begin Date :	N/R
Season End Date :	N/R
Service Connections Count :	6800
Source Water Protection Date :	06/20/2012
Submission Quarter :	4
Submission Status Code :	Y
Submission Year :	2016
Submission Year Quarter :	2016Q4
Population Served Count :	13,619
Seasonal Startup System :	N/R
Reduced Monitoring Begin Date :	N/R
Reduced Monitoring End Date :	N/R
Reduced RTCR Monitoring :	N/R

PWS ENF

PWS Name :	AMHERST CO SERVICE AUTHORITY (ACSA)
EPA Region :	Region 3
Primacy Agency :	Virginia
PWS Type :	Community water system
Primacy Type :	State
Primary Source :	Surface water
Activity Status :	Active
Deactivation Date :	N/R
Owner Type :	Local government
Phone Number :	434-845-1606

Violation Details

RTC Enforcement ID :	260403
Violation ID :	5039103
Submission Year :	2016
Violation First Reported Date :	03/12/2005
Contaminant Name :	TTHM
Rule Family :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 1 Disinfectants and Disinfection Byproducts Rule

Geological Landscape Section Map Findings

2017

Map Id: 11
Direction: NNW
Distance: 0.934 mi.
Actual: 4933.578 ft.
Elevation: 0.145 mi. / 766.798 ft.
Relative: Higher

Site Name : VA5009250
113 PHELPS ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [PWS, PWS ENF] (**cont.**)

Envirosite ID: 333863594
EPA ID: N/R

PWS ENF (**cont.**)

Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	N/R
Public Notification Tier :	2
Address Line 1 :	113 Phelps Road, MADISON HEIGHTS, 24572
Address Line 2 :	PO Box 100
Compliance Status :	Returned to Compliance
RTC Date :	04/21/2003
Enforcement Action Description :	State Compliance achieved
Admin Name :	FRENCH, DAN E.
Email Address :	acsava@acsava.com
RTC Enforcement ID :	260403
Violation ID :	5039203
Submission Year :	2016
Violation First Reported Date :	03/12/2005
Contaminant Name :	TTHM
Rule Family :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	N/R
Public Notification Tier :	2
Address Line 1 :	113 Phelps Road, MADISON HEIGHTS, 24572
Address Line 2 :	PO Box 100
Compliance Status :	Returned to Compliance
RTC Date :	04/21/2003
Enforcement Action Description :	State Compliance achieved
Admin Name :	FRENCH, DAN E.
Email Address :	acsava@acsava.com
RTC Enforcement ID :	260403
Violation ID :	5039403
Submission Year :	2016
Violation First Reported Date :	03/12/2005
Contaminant Name :	TTHM
Rule Family :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	N/R
Public Notification Tier :	2
Address Line 1 :	113 Phelps Road, MADISON HEIGHTS, 24572
Address Line 2 :	PO Box 100
Compliance Status :	Returned to Compliance
RTC Date :	04/21/2003
Enforcement Action Description :	State Compliance achieved
Admin Name :	FRENCH, DAN E.
Email Address :	acsava@acsava.com

Geological Landscape Section Map Findings

2017

Map Id: 11
Direction: NNW
Distance: 0.934 mi.
Actual: 4933.578 ft.
Elevation: 0.145 mi. / 766.798 ft.
Relative: Higher

Site Name : VA5009250
113 PHELPS ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [PWS, PWS ENF] (**cont.**)

Envirosite ID: 333863594
EPA ID: N/R

PWS ENF (**cont.**)

RTC Enforcement ID :	260503
Violation ID :	5039503
Submission Year :	2016
Violation First Reported Date :	03/12/2005
Contaminant Name :	Total Haloacetic Acids (HAA5)
Rule Family :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	N/R
Public Notification Tier :	2
Address Line 1 :	113 Phelps Road, MADISON HEIGHTS, 24572
Address Line 2 :	PO Box 100
Compliance Status :	Returned to Compliance
RTC Date :	04/21/2003
Enforcement Action Description :	State Compliance achieved
Admin Name :	FRENCH, DAN E.
Email Address :	acsava@acsava.com

RTC Enforcement ID :	260503
Violation ID :	5039603
Submission Year :	2016
Violation First Reported Date :	03/12/2005
Contaminant Name :	Total Haloacetic Acids (HAA5)
Rule Family :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	N/R
Public Notification Tier :	2
Address Line 1 :	113 Phelps Road, MADISON HEIGHTS, 24572
Address Line 2 :	PO Box 100
Compliance Status :	Returned to Compliance
RTC Date :	04/21/2003
Enforcement Action Description :	State Compliance achieved
Admin Name :	FRENCH, DAN E.
Email Address :	acsava@acsava.com

RTC Enforcement ID :	N/R
Violation ID :	5038991
Submission Year :	2016
Violation First Reported Date :	10/28/1991
Contaminant Name :	Coliform (TCR)
Rule Family :	Total Coliform Rules
Rule Group :	Microbials
Rule Name :	Total Coliform Rule
Violation Type :	Maximum Contaminant Level Violation, Monthly (TCR)
Is Health Based :	Y
Is Major Violation :	N/R

Map Id: 11
Direction: NNW
Distance: 0.934 mi.
Actual: 4933.578 ft.
Elevation: 0.145 mi. / 766.798 ft.
Relative: Higher

Site Name : VA5009250
113 PHELPS ROAD
MADISON HEIGHTS, VA 24572
Database(s) : [PWS, PWS ENF] (**cont.**)

Envirosite ID: 333863594
EPA ID: N/R

PWS ENF (**cont.**)

Severity Indicator Count :	N/R
Public Notification Tier :	2
Address Line 1 :	113 Phelps Road, MADISON HEIGHTS, 24572
Address Line 2 :	PO Box 100
Compliance Status :	Known
RTC Date :	N/R
Enforcement Action Description :	State Public Notification requested
Admin Name :	FRENCH, DAN E.
Email Address :	acsava@acsava.com

RADON DATA:

STATE SOURCE: No Available Data

FEDERAL AREA RADON INFORMATION FOR: 24572

NUMBER OF SAMPLE SITES: 7

Area:	Average Activity:	% <4 pCi/L:	% 4-20 pCi/L:	% >20 pCi/L:
basement	4.125 pCi/L	50%	50%	0%
first floor	1.1333 pCi/L	100%	0%	0%

INACTIVE PCS

Inactive Permit Compliance Facilities
Environmental Protection Agency
(202) 564-6582
Inactive Permitted facilities to discharge wastewater

NWIS

National Water Information Systems
United States Geological Society
(703) 648-5953
Information on all water resources for the United States. This database contains all current and historical data for the nation.

PCS ENF

Enforced Permit Compliance Facilities
Environmental Protection Agency
(202) 564-6582
Permitted facilities to discharge wastewater (Federal equivalent to NPDES)

PCS FACILITY

Permit Compliance Facilities
Environmental Protection Agency
(202) 564-6582
Permitted facilities to discharge wastewater (Federal equivalent to NPDES)

PWS

Public Water Supply
Environmental Protection Agency
(800) 426-4791
Safe drinking water information Systems

PWS ENF

Public Water Supply locations with Enforcement Violations
Environmental Protection Agency
(800) 426-4791
Safe drinking water information Systems with enforcement violations

STORMWATER

Storm Water Permits
Environmental Protection Agency
(202) 566-1667
Permitted storm water sites

FLOOD Q3

Flood data
Environmental Protection Agency
(202) 566-1667
Q3 Flood Data

HYDROLOGIC UNIT

Hydrologic Unit Maps

USGS

The United States Geological Survey created a hierarchical system of hydrologic units originally called regions, sub-regions, accounting units, and cataloging units. Each unit was assigned a unique Hydrologic Unit Code (HUC). As first implemented the system had 21 regions, 221 subregions, 378 accounting units, and 2,264 cataloging units. Over time the system was changed and expanded. As of 2010 there are six levels in the hierarchy, represented by hydrologic unit codes from 2 to 12 digits long, called regions, subregions, basins, subbasins, watersheds, and subwatersheds. The table below describes the system's hydrologic unit levels and their characteristics, along with example names and codes.

WETLANDS NWI

National Wetland Inventory

U.S. Fish and Wildlife Service

(703) 358-2171

Wetland Inventory for the United States

SSURGO

Detailed Soil Data Map

Natural Resources Conservation Service: U.S. Department of Agriculture

(202) 690-4985

Detailed Soil Data Map

STATSGO & MUI

General Soil Data Map

Natural Resources Conservation Service: U.S. Department of Agriculture

(202) 690-4985

General Soil Data Map

USGS GEOLOGIC AGE

USGS Digital Data Series DDS

Natural Resources Conservation Service: U.S. Department of Agriculture

(202) 690-4985

USGS Digital Data Series DDS: Geologic Age and Rock Stratigraphic Unit

RADON

National Radon Database

USGS

703-605-6008

A study of the EPA/State Residential Radon Survey and the National Residential Radon Survey.

AIRPORT FACILITIES

Airport landing facilities

Federal Aviation Administration

(866) 835-5322

Airport landing facilities

BASINS

Better Assessment Science Integrating point & Non-point Sources

U.S. Environmental Protection Agency

855-246-3642

Integrated geographical information system national watershed data and environmental assessment known as Better Assessment Science Integrating point & Non-point Sources

EPICENTERS

National Geographical Data Center

National Geographical Data Center

303-497-6826

Data on over four million earthquakes dating from 2100 B.C. to 1995 A.D.

FLOOD DFIRM

National Flood Hazard Layer Database

Federal Emergency Management Agency

The National Flood Hazard Layer Database (NFHL) is a computer database that contains the flood hazard map information from FEMAs Flood Map Modernization program. These map data are from Digital Flood Insurance Rate Map (DFIRM) databases and Letters of Map Revision.

Attachment C – Historic Aerial Photographs



Historical Aerial Photo Report | 2017

Order Number: 13052

Report Generated: 06/20/2017

Project Name: Central Virginia Training Center

Project Number: 17-772

Central Virginia Training Center
Route 334
Madison Heights, VA 24572

1175 Post Road East
Westport, CT 06880
Toll Free: 866-211-2028
www.envirositecorp.com

Historical Aerial Photo Report

2017

Envirosite's Aerial Report is designed to assist in evaluating a subject property resulting from past activities. Envirosite's Aerial Map Report includes a search of USGS historical aerial maps, dating back to the early 1900s.

ENVIROSITE SEARCHED SOURCES

SUBJECT PROPERTY:

Central Virginia Training Center
Route 334
Madison Heights, VA 24572

YEAR:	SCALE:	SOURCE:
1947	1" = 1,000'	U.S.G.S.
1955	1" = 1,000'	U.S.G.S.
1959	1" = 1,000'	U.S.G.S.
1962	1" = 1,000'	U.S.G.S.
1968	1" = 1,000'	U.S.G.S.
1970	1" = 1,000'	U.S.G.S.
1977	1" = 1,000'	U.S.G.S.
1982	1" = 1,000'	U.S.G.S.
1991	1" = 1,000'	U.S.G.S.
1994	1" = 1,000'	U.S.G.S.
2003	1" = 1,000'	U.S.G.S.
2008	1" = 1,000'	U.S.G.S.
2014	1" = 1,000'	U.S.G.S.

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AERIAL PHOTO

FLIGHT YEAR:
1947



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
1955



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
1959



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
1962



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
1968



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
1970



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
1977



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
1982



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
1991



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
1994



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
2003



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
2008



Scale:

1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
2014



Scale: 1" = 1,000'



AERIAL PHOTO

FLIGHT YEAR:
2014



Scale: 1" = 1,000'



Attachment D – Historic Topographic Maps



Historical Topographic Map Report | 2017

Order Number: 13052

Report Generated: 06/16/2017

Project Name: Central Virginia Training Center
Project Number: 17-772

Central Virginia Training Center
Route 334
Madison Heights, VA 24572

1175 Post Road East
Westport, CT 06880
Toll Free: 866-211-2028
www.envirositecorp.com

Envirosite's Historical Topographic Map Report is designed to assist in evaluating a subject property resulting from past activities. Envirosite's Historical Topographic Map Report includes a search of USGS historical topographic maps, dating back to the early 1900s.

TOPOGRAPHIC MAPS FOUND:

	<u>Map Name:</u>	<u>Year:</u>	<u>Revision Year:</u>	<u>Scale:</u>	<u>Series:</u>
1.	<u>Lynchburg</u>	1944	N/R	1 : 62500	7.5
2.	<u>Lynchburg</u>	1944	N/R	1 : 62500	7.5
3.	<u>Lynchburg</u>	1950	N/R	1 : 62500	7.5
4.	<u>Kelly</u>	1963	N/R	1 : 24000	7.5
5.	<u>Kelly</u>	1963	1970	1 : 24000	7.5
6.	<u>Kelly</u>	1963	1986	1 : 24000	7.5
7.	<u>Lynchburg</u>	1963	N/R	1 : 24000	7.5
8.	<u>Lynchburg</u>	1963	1968	1 : 24000	7.5
9.	<u>Lynchburg</u>	1963	1978	1 : 24000	7.5
10.	<u>Lynchburg</u>	1963	1984	1 : 24000	7.5
11.	<u>Kelly</u>	2010	N/R	1 : 24000	7.5
12.	<u>Lynchburg</u>	2011	N/R	1 : 24000	7.5
13.	<u>Kelly</u>	2013	N/R	1 : 24000	7.5
14.	<u>Lynchburg</u>	2013	N/R	1 : 24000	7.5
15.	<u>Kelly</u>	2016	N/R	1 : 24000	7.5
16.	<u>Lynchburg</u>	2016	N/R	1 : 24000	7.5

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Historical Topographic Map

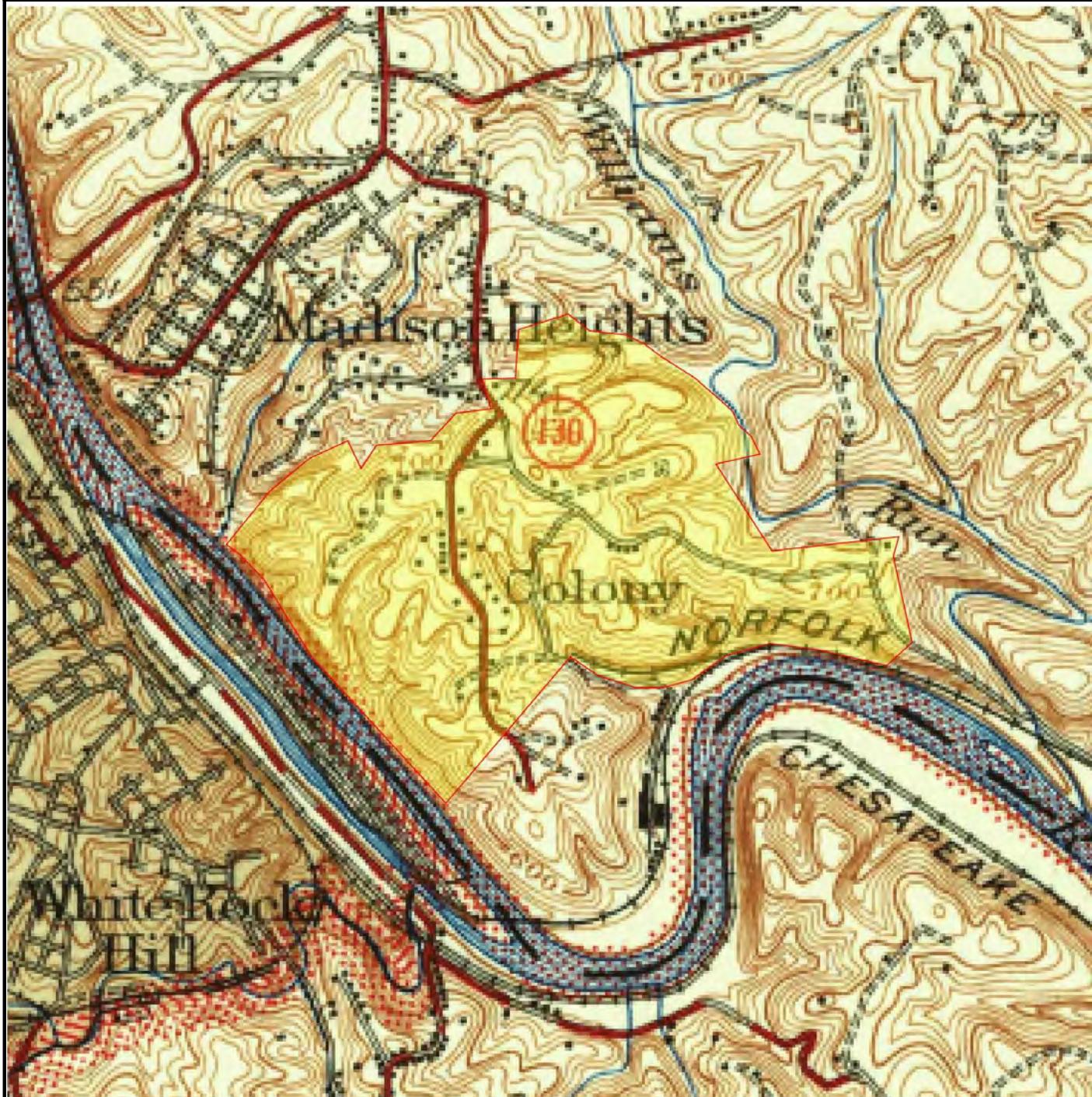
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME:	Lynchburg	MAP YEAR:	1944	REVISION YEAR:	N/R
SERIES:	7.5	SCALE:	1 : 62500	Part	1



Historical Topographic Map

2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME:	Lynchburg	MAP YEAR:	1944	REVISION YEAR:	N/R
SERIES:	7.5	SCALE:	1 : 62500	Part	1



Historical Topographic Map

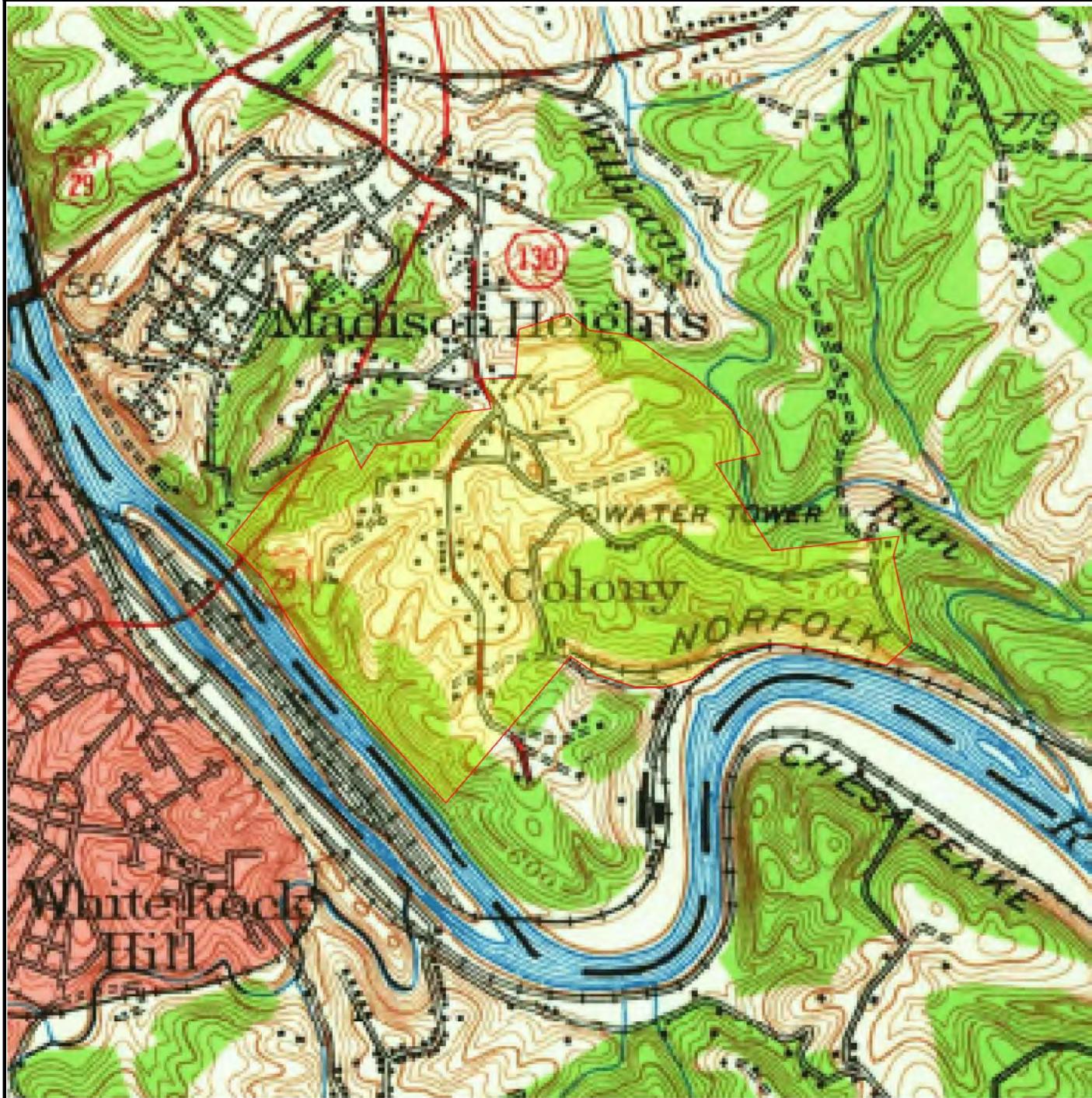
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME:	Lynchburg	MAP YEAR:	1950	REVISION YEAR:	N/R
SERIES:	7.5	SCALE:	1 : 62500	Part	1



Historical Topographic Map

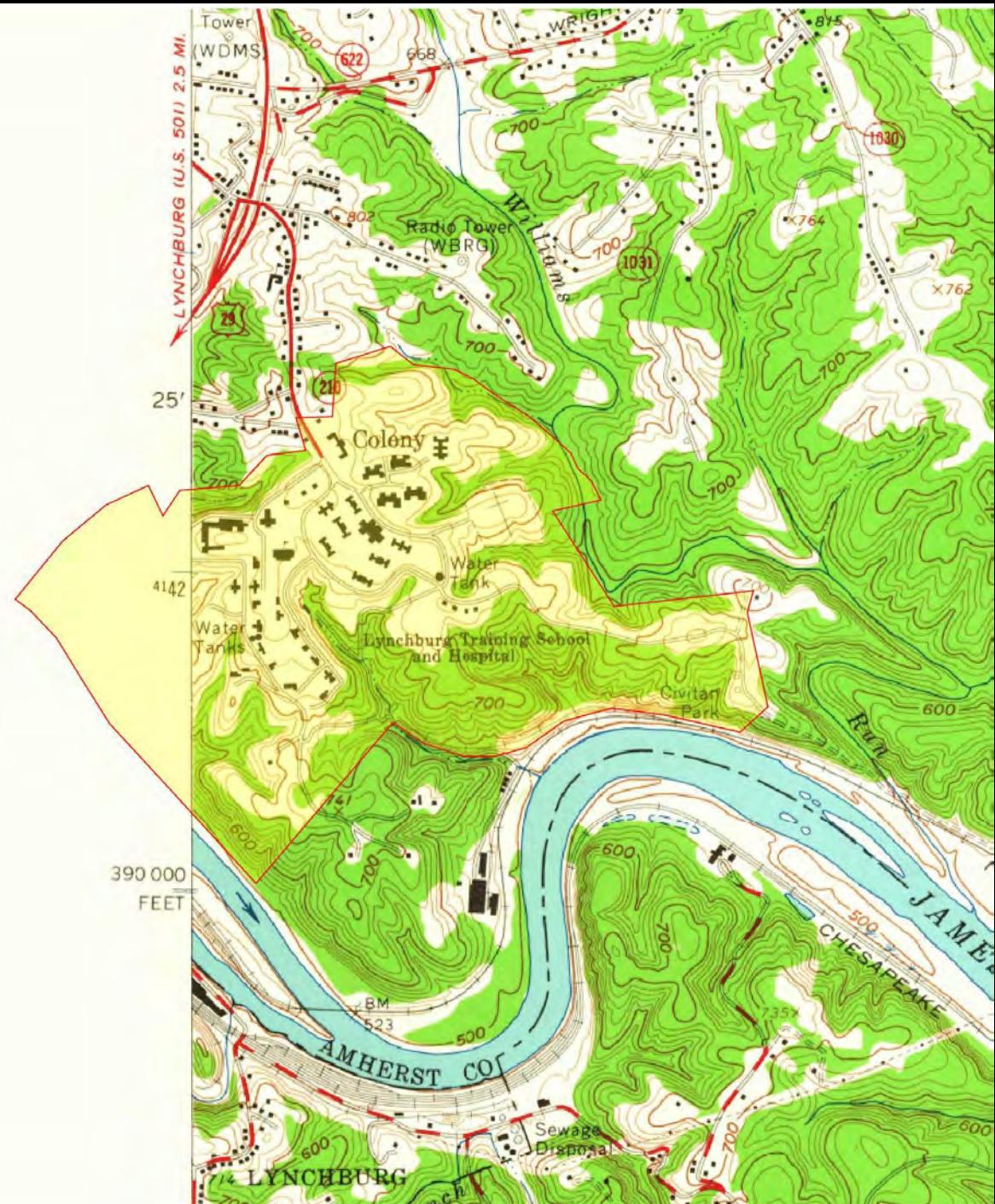
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME:	Kelly	MAP YEAR:	1963	REVISION YEAR:	N/R
SERIES:	7.5	SCALE:	1 : 24000	Part	1



Historical Topographic Map

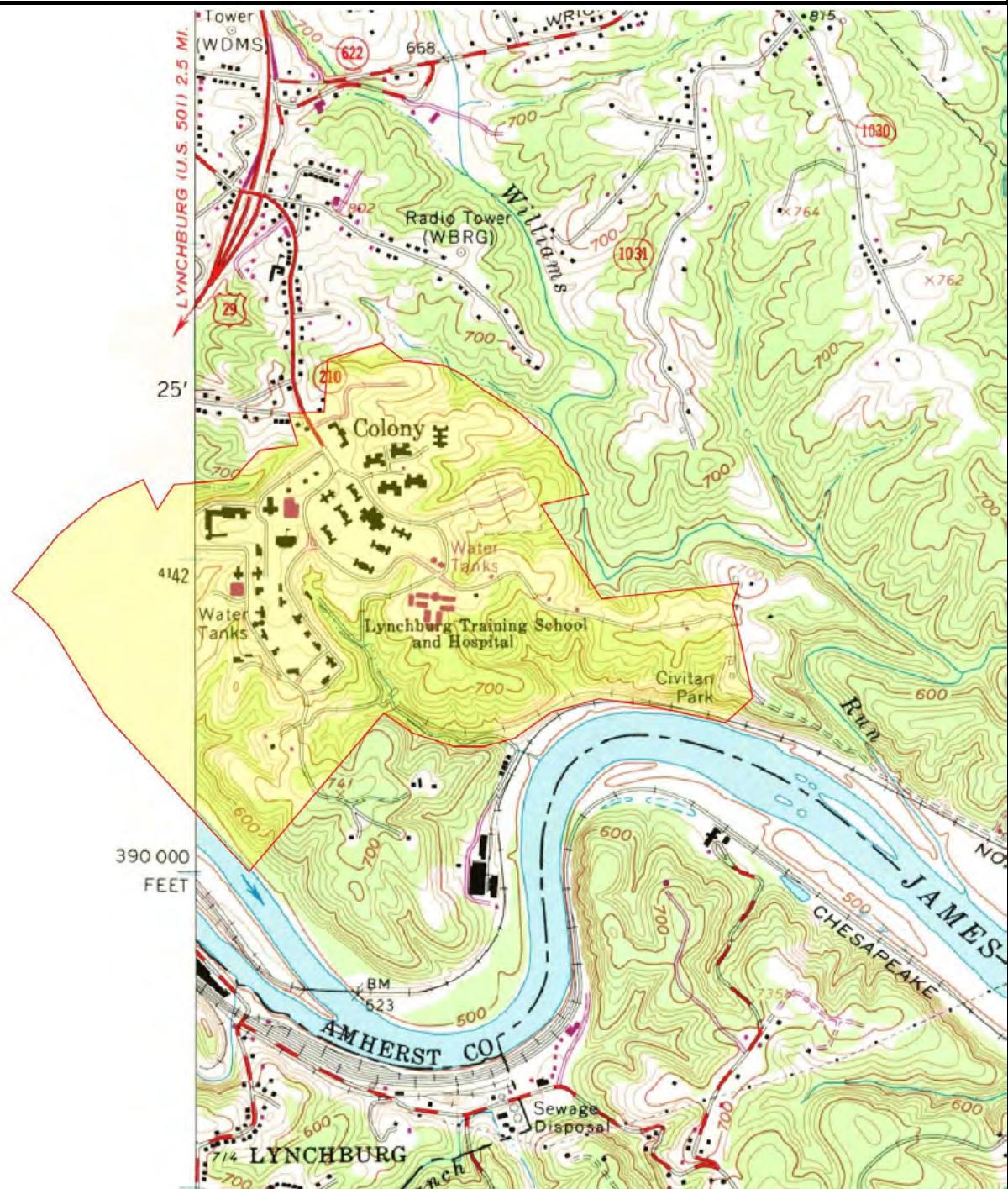
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME:	Kelly	MAP YEAR:	1963	REVISION YEAR:	1970
SERIES:	7.5	SCALE:	1 : 24000	Part	1



Historical Topographic Map

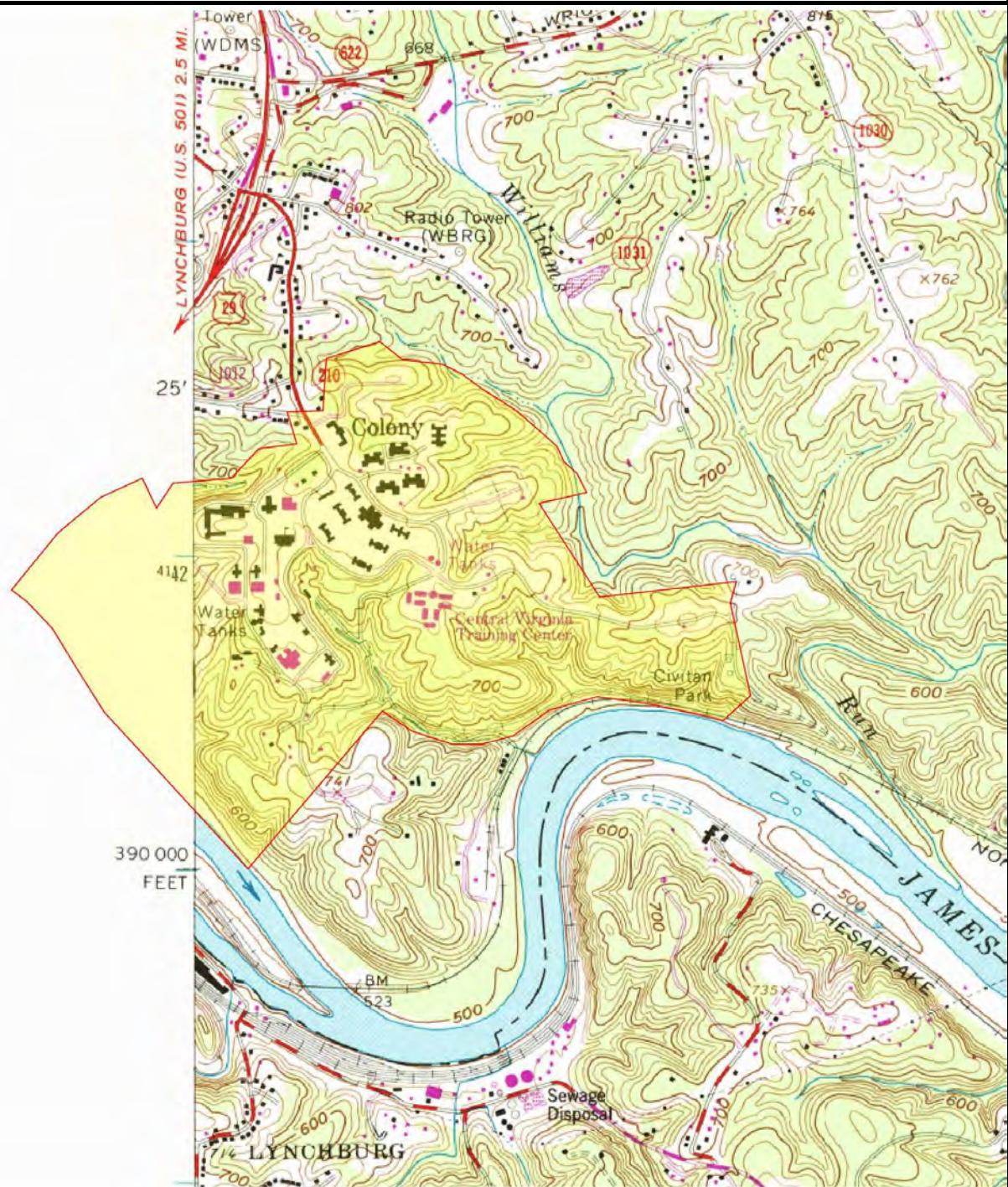
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME:	Kelly	MAP YEAR:	1963	REVISION YEAR:	1986
SERIES:	7.5	SCALE:	1 : 24000	Part	1



Historical Topographic Map

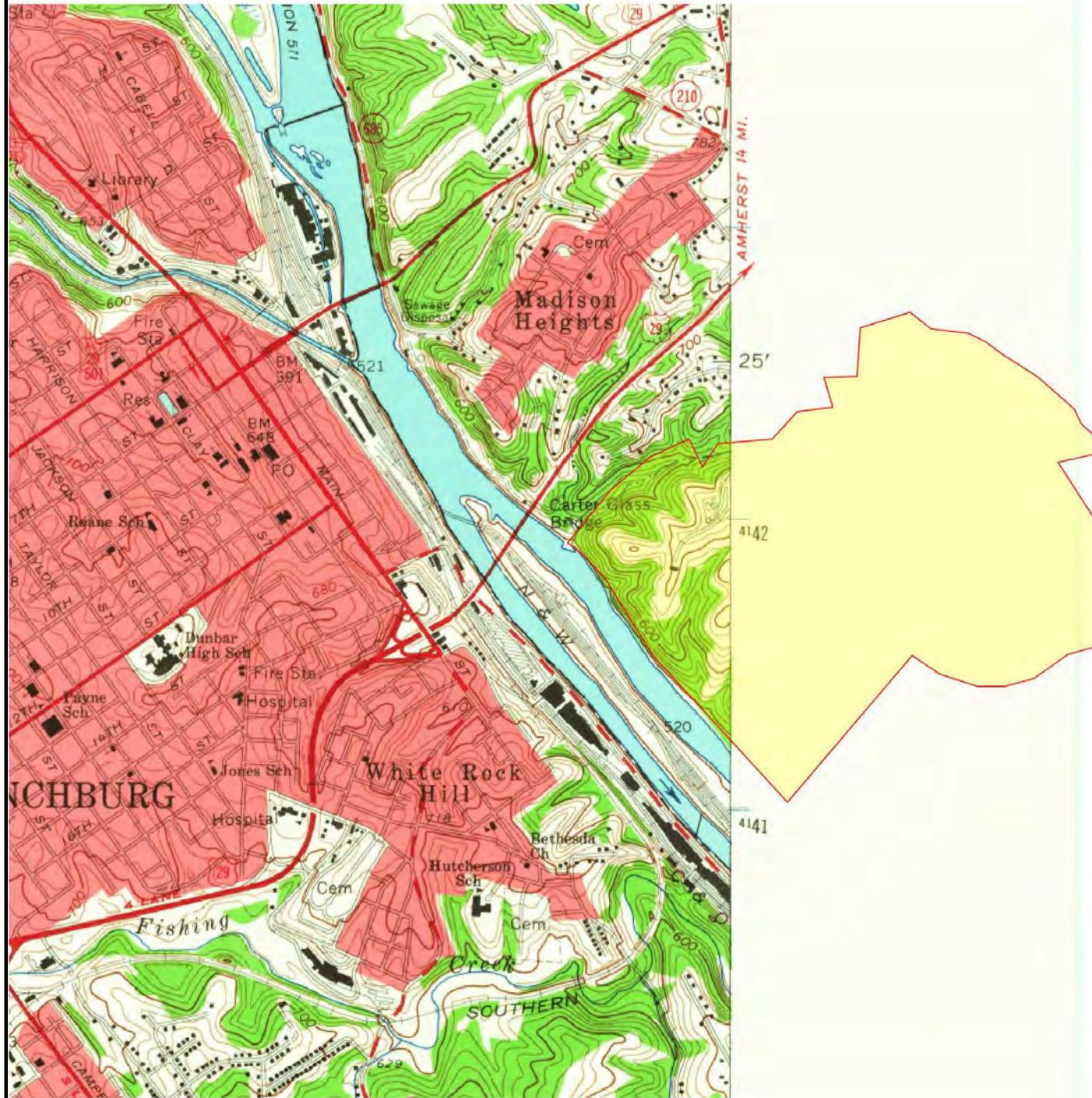
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME:	Lynchburg	MAP YEAR:	1963	REVISION YEAR:	N/R
SERIES:	7.5	SCALE:	1 : 24000	Part	1



Historical Topographic Map

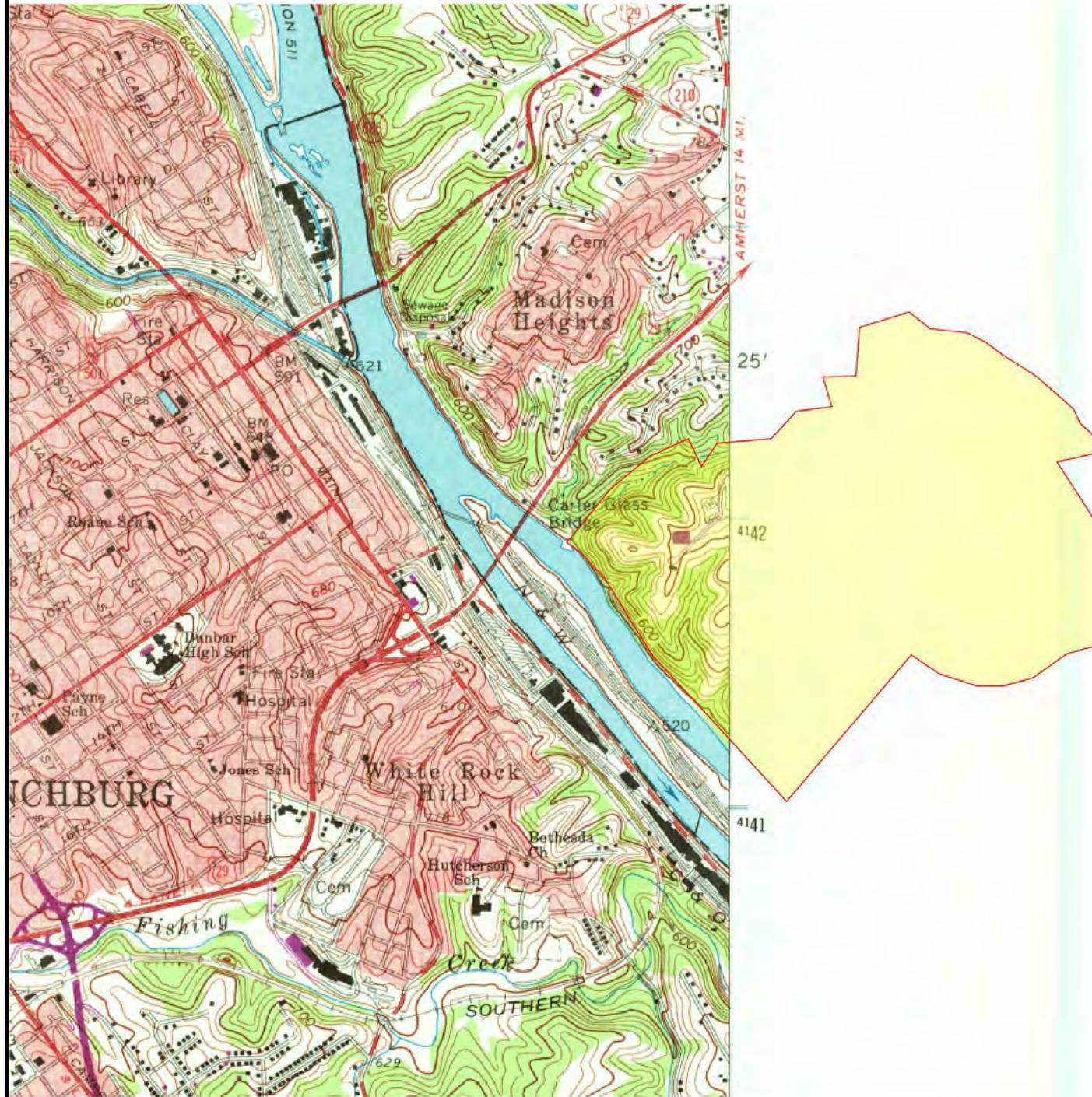
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME: Lynchburg MAP YEAR: 1963 REVISION YEAR: 1968
SERIES: 7.5 SCALE: 1 : 24000 Part 1



Historical Topographic Map

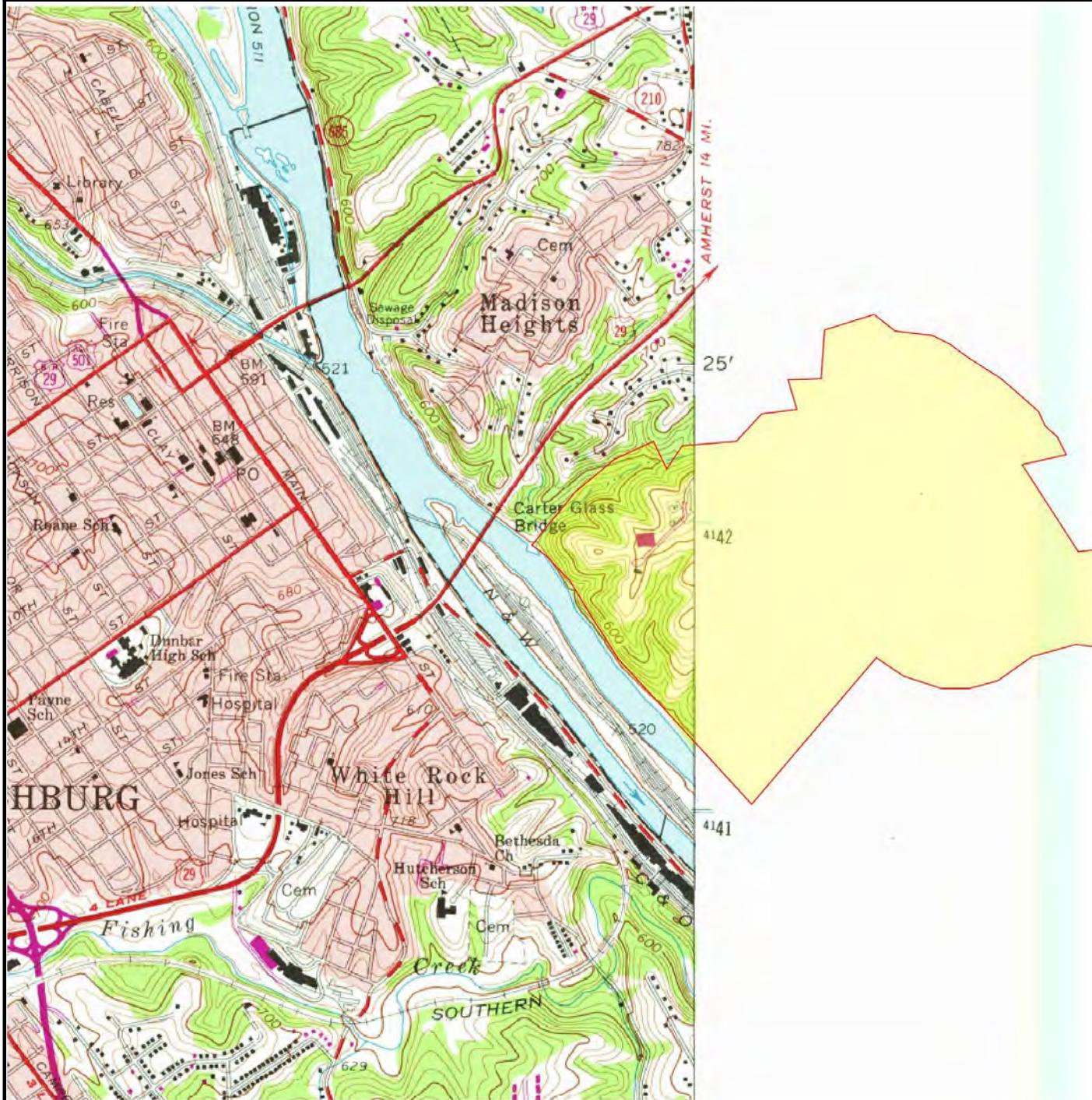
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME: Lynchburg MAP YEAR: 1963 REVISION YEAR: 1978
SERIES: 7.5 SCALE: 1 : 24000 Part 1



Historical Topographic Map

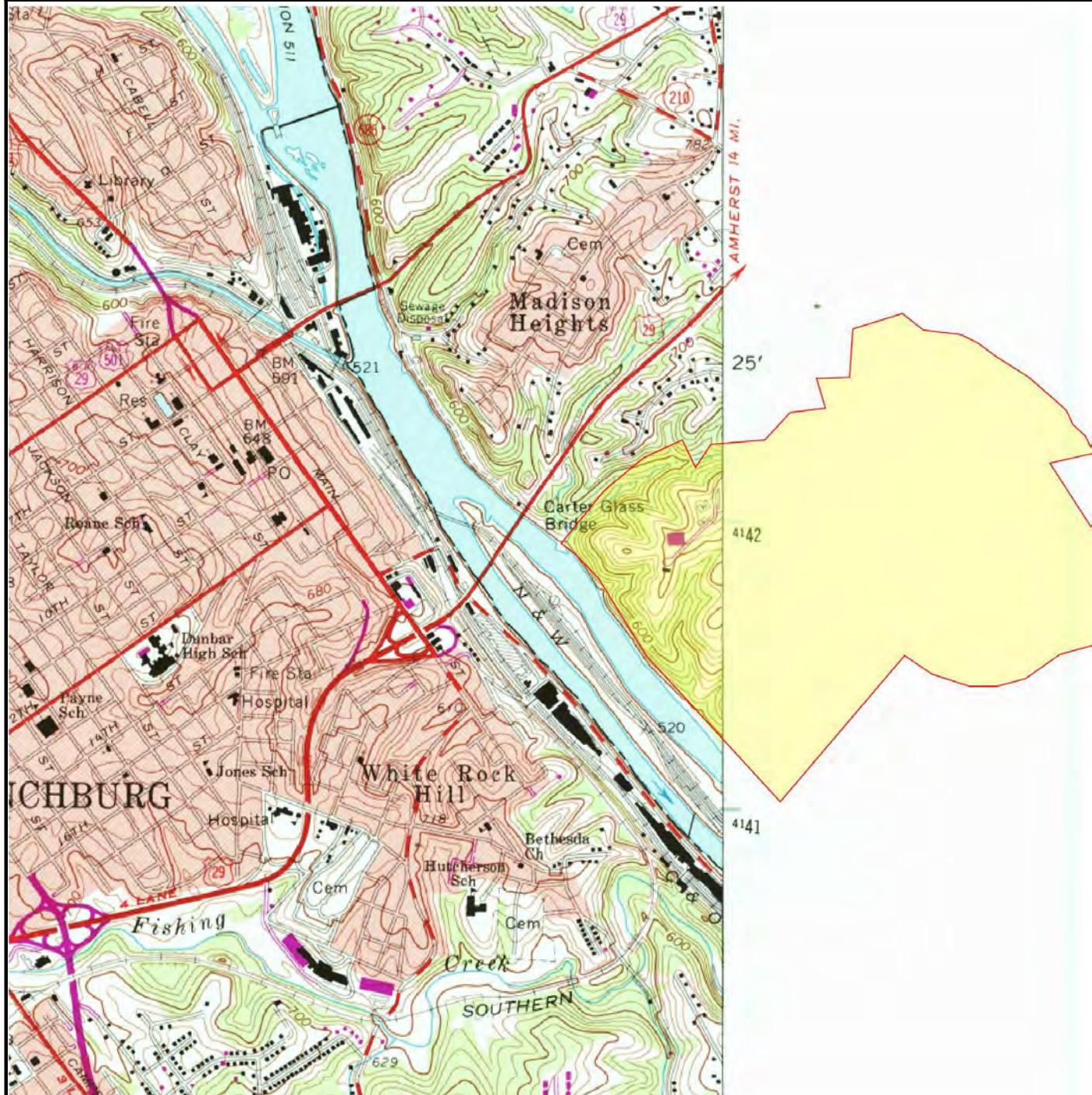
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME: Lynchburg MAP YEAR: 1963 REVISION YEAR: 1984
SERIES: 7.5 SCALE: 1 : 24000 Part 1



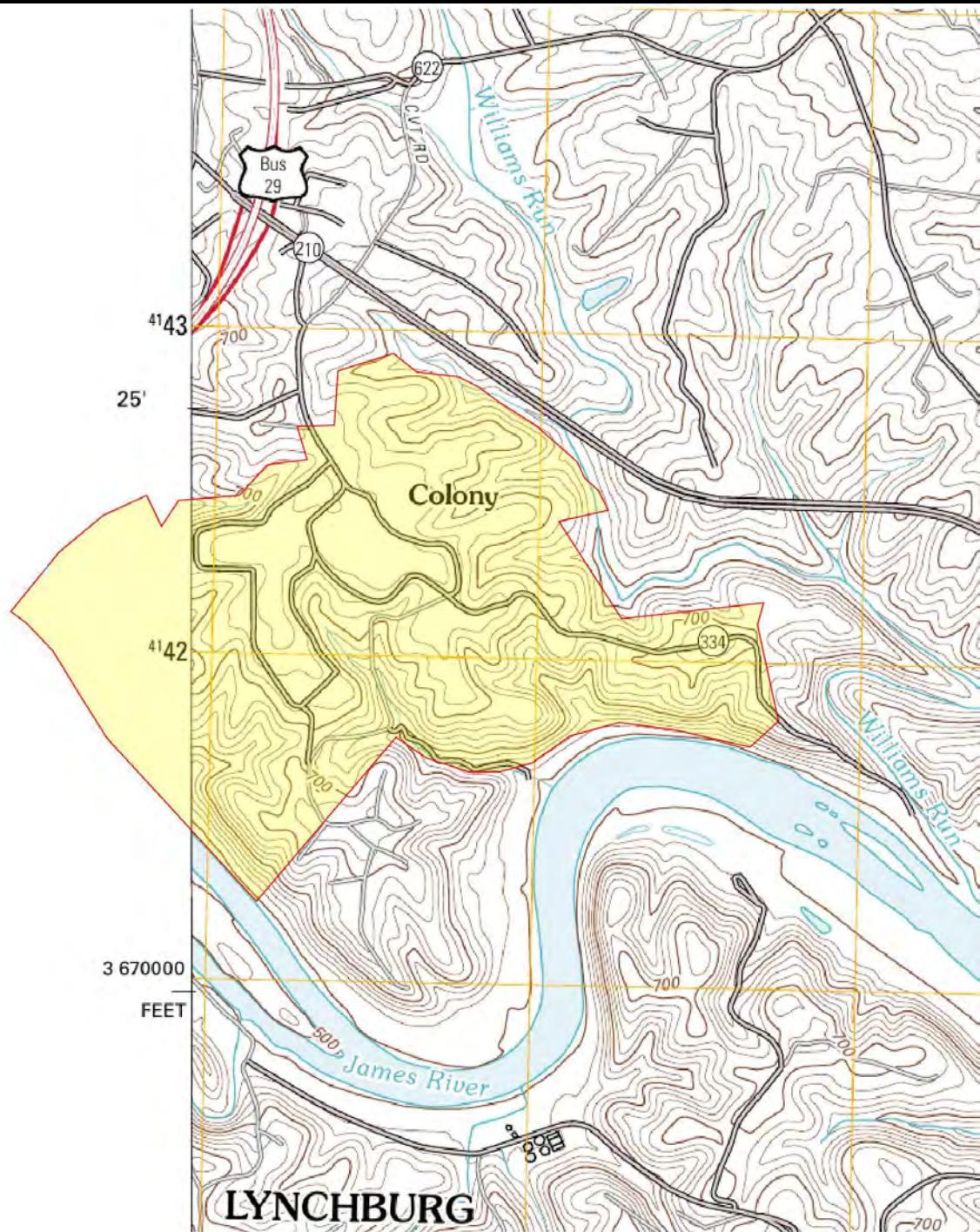
Historical Topographic Map

2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:				
MAP NAME:	Kelly	MAP YEAR:	2010	REVISION YEAR:
SERIES:	7.5	SCALE:	1 : 24000	Part
				N/R
				1



Historical Topographic Map

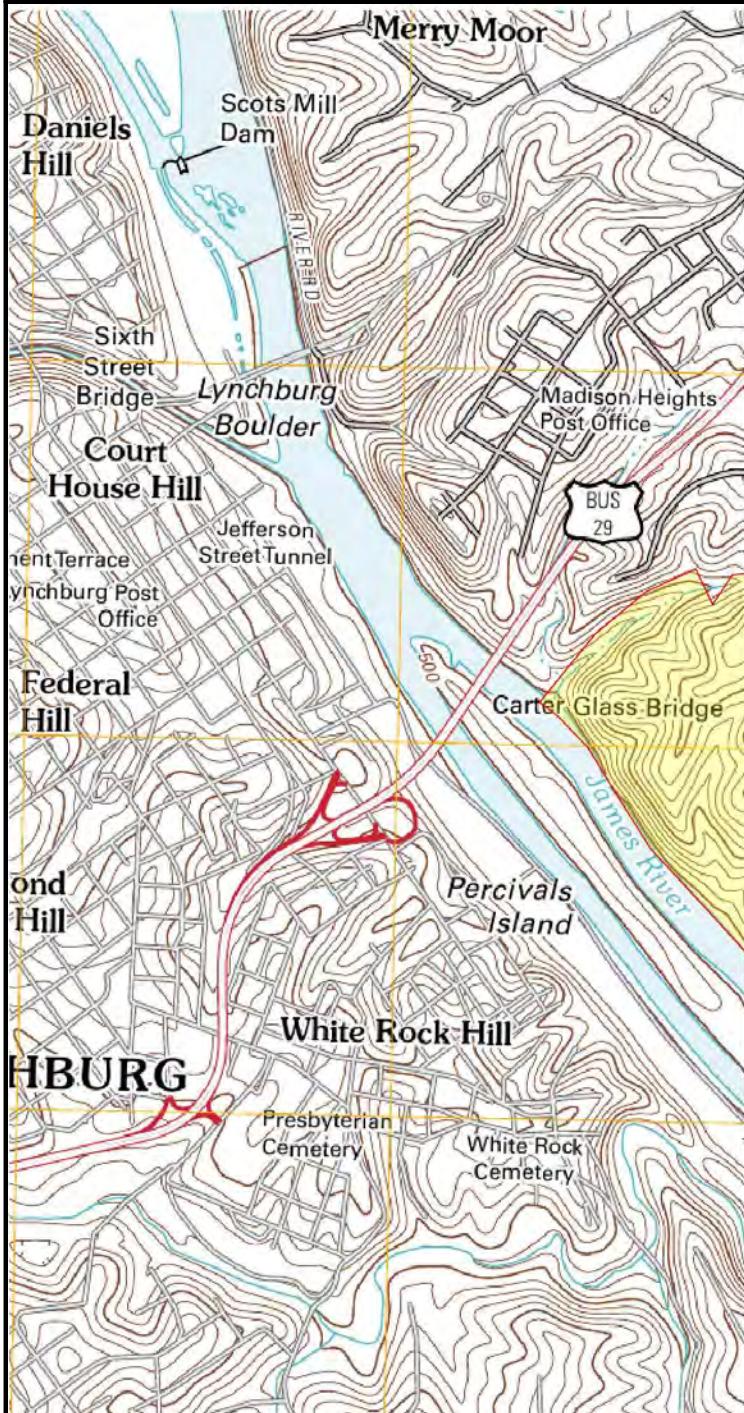
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME:	Lynchburg	MAP YEAR:	2011	REVISION YEAR:	N/R
SERIES:	7.5	SCALE:	1 : 24000	Part	1



Historical Topographic Map

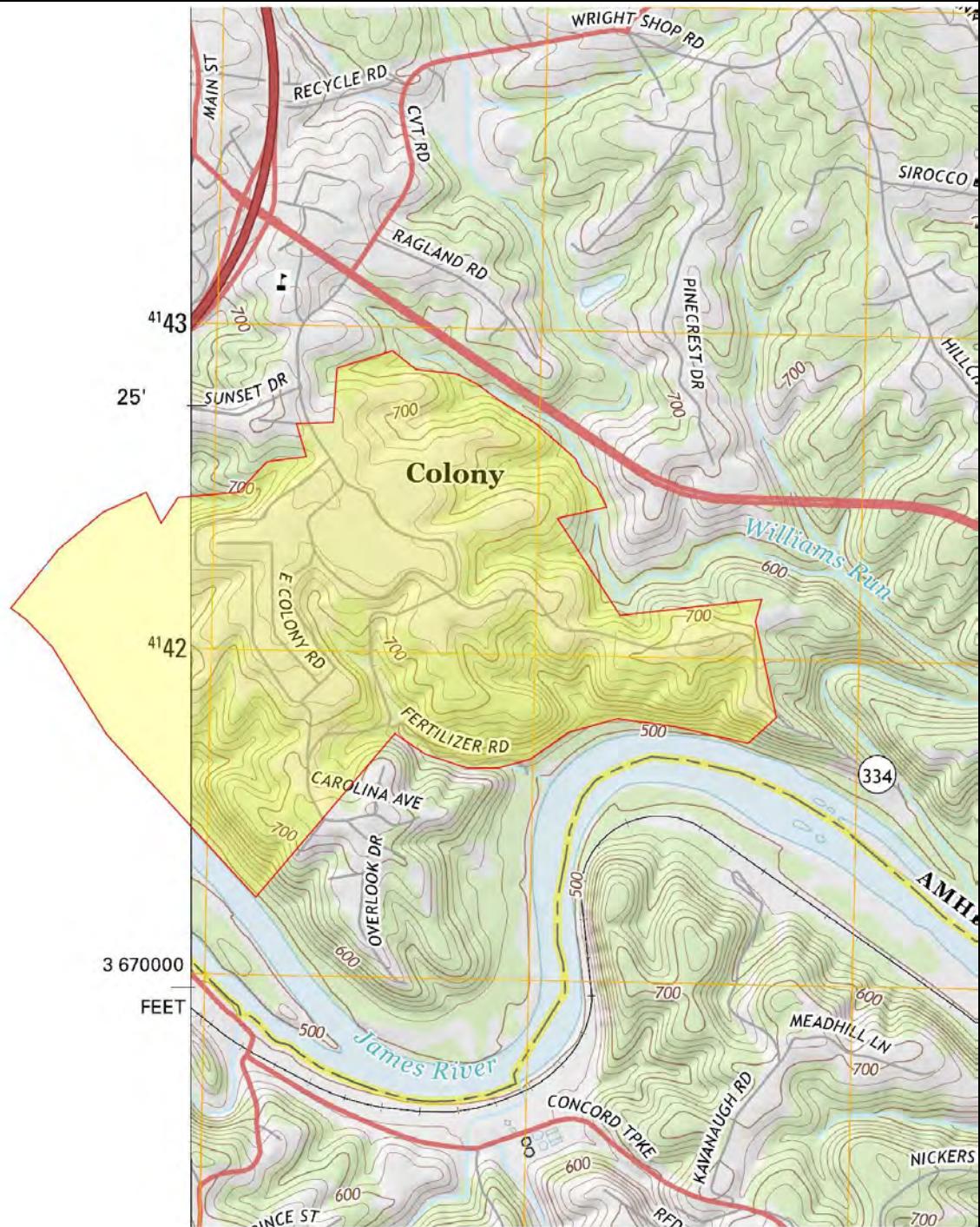
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME:	Kelly	MAP YEAR:	2013	REVISION YEAR:	N/R
SERIES:	7.5	SCALE:	1 : 24000	Part	1



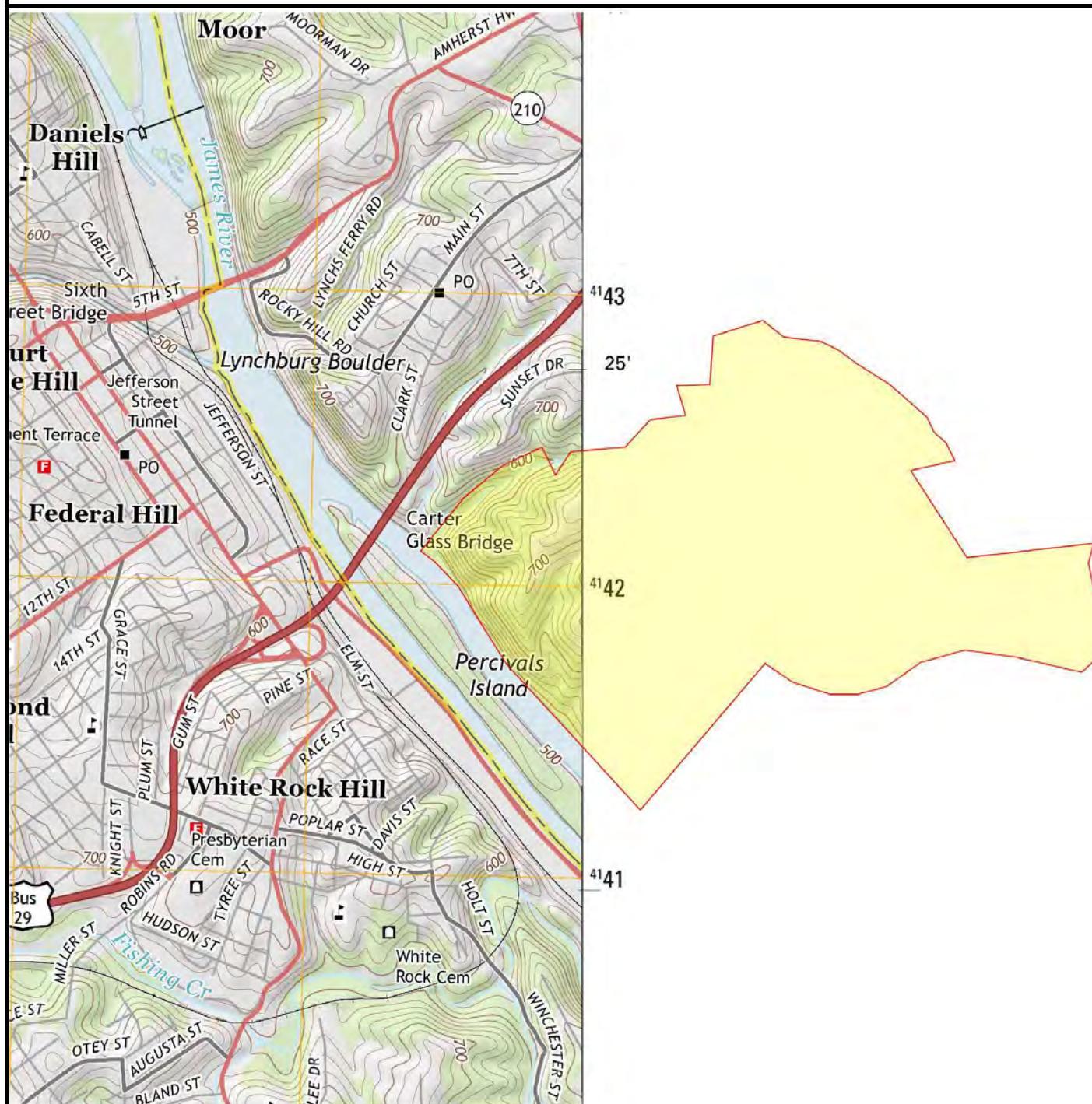
Historical Topographic Map

2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:
MAP NAME: Lynchburg MAP YEAR: 2013 REVISION YEAR: N/R
SERIES: 7.5 SCALE: 1 : 24000 Part 1



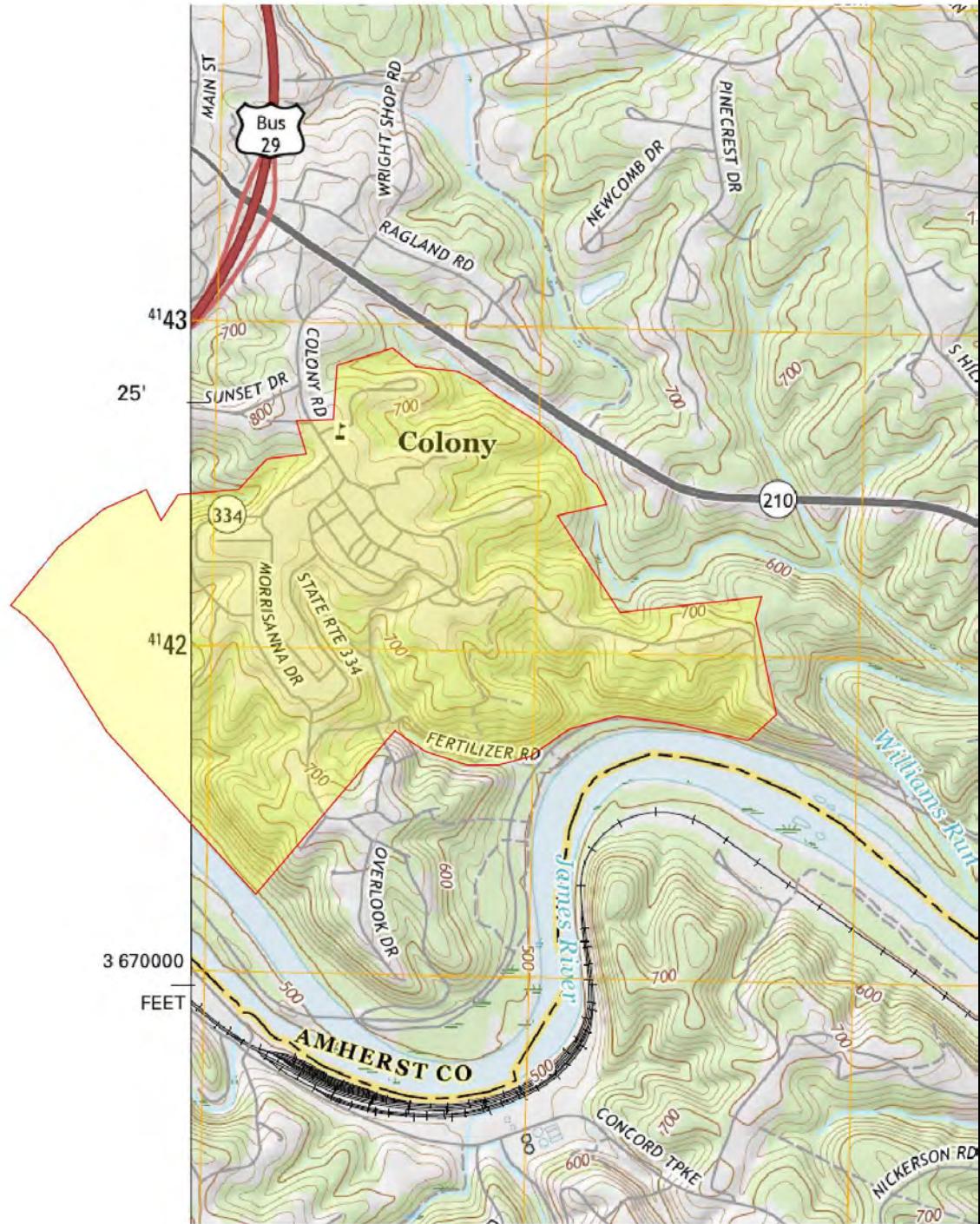
Historical Topographic Map

2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:				
MAP NAME:	Kelly	MAP YEAR:	2016	REVISION YEAR:
SERIES:	7.5	SCALE:	1 : 24000	Part



Historical Topographic Map

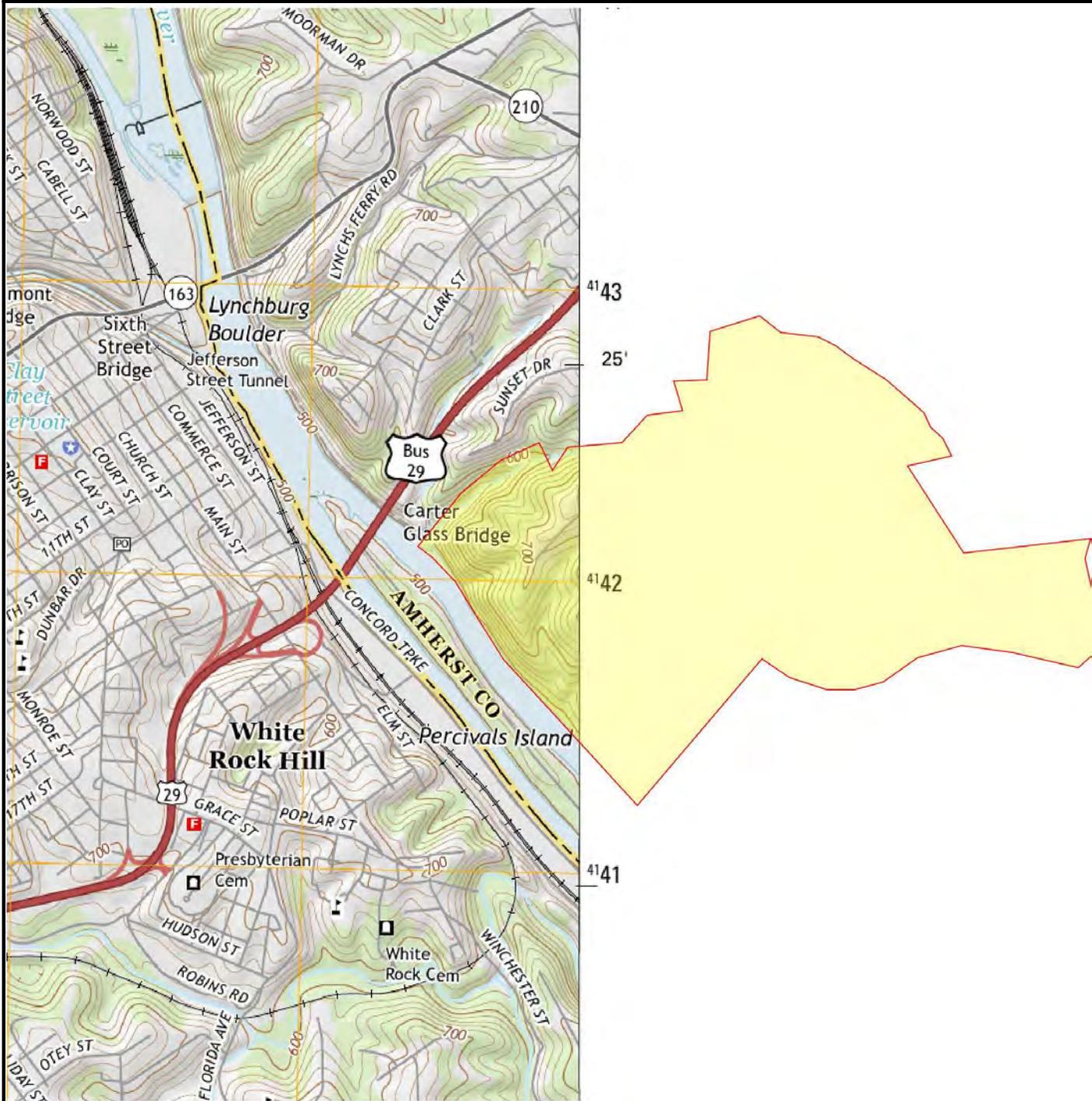
2017

SUBJECT NAME: Central Virginia Training Center
ADDRESS: Route 334, Madison Heights, VA 24572
LAT/LONG: 37.410621 / -79.117949

PREPARED FOR: EEE Consulting Inc Mechanicsville
ORDER #: 13052
REPORT DATE: 06/16/2017

SUBJECT QUAD:

MAP NAME:	Lynchburg	MAP YEAR:	2016	REVISION YEAR:	N/R
SERIES:	7.5	SCALE:	1 : 24000	Part	1



Attachment E – Historic Fire Insurance Maps

HIG Research Summary

Site Location

Central Virginia Training Center
Route 334
Madison Heights, VA

Requested by

Envirosite Corporation
1175 Post Road E
Westport, CT

HIG Project #

2005888

Client Project #

17-772

Date Created

06/20/2017



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FIM+ Maps

The HIG Historical Map Collection and the United States Library of Congress Map Collection were searched for fire insurance maps (FIM), real estate atlases and similar maps for the site location and adjoining properties. Maps from the HIG Collection were used to create a multi-page file named FIM+Maps. The maps have title blocks that include the map publisher, year the map was created and, if applicable, the year the map was last updated. The years provided are:

1951, 1955, 1965, 1971, 1973

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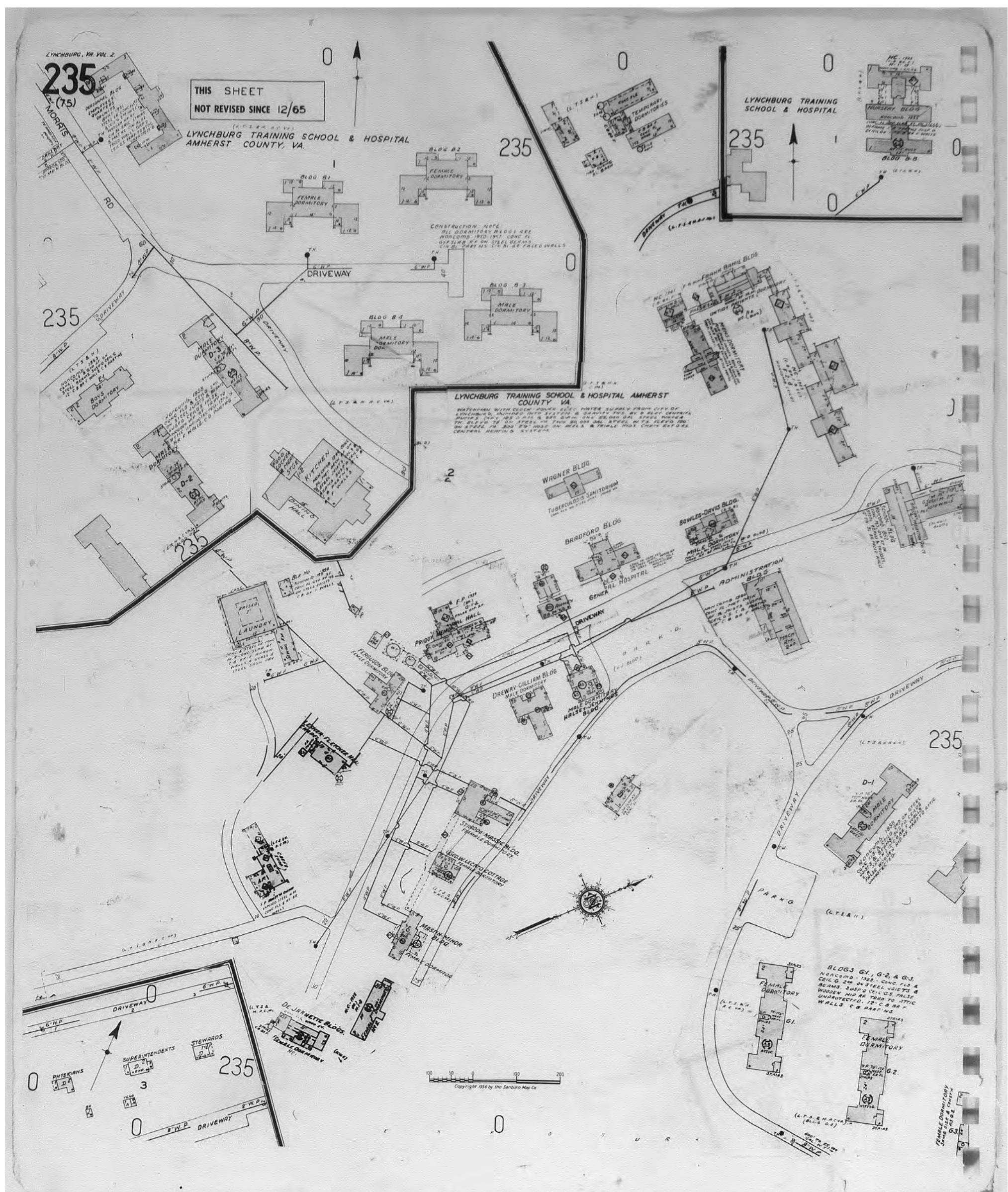
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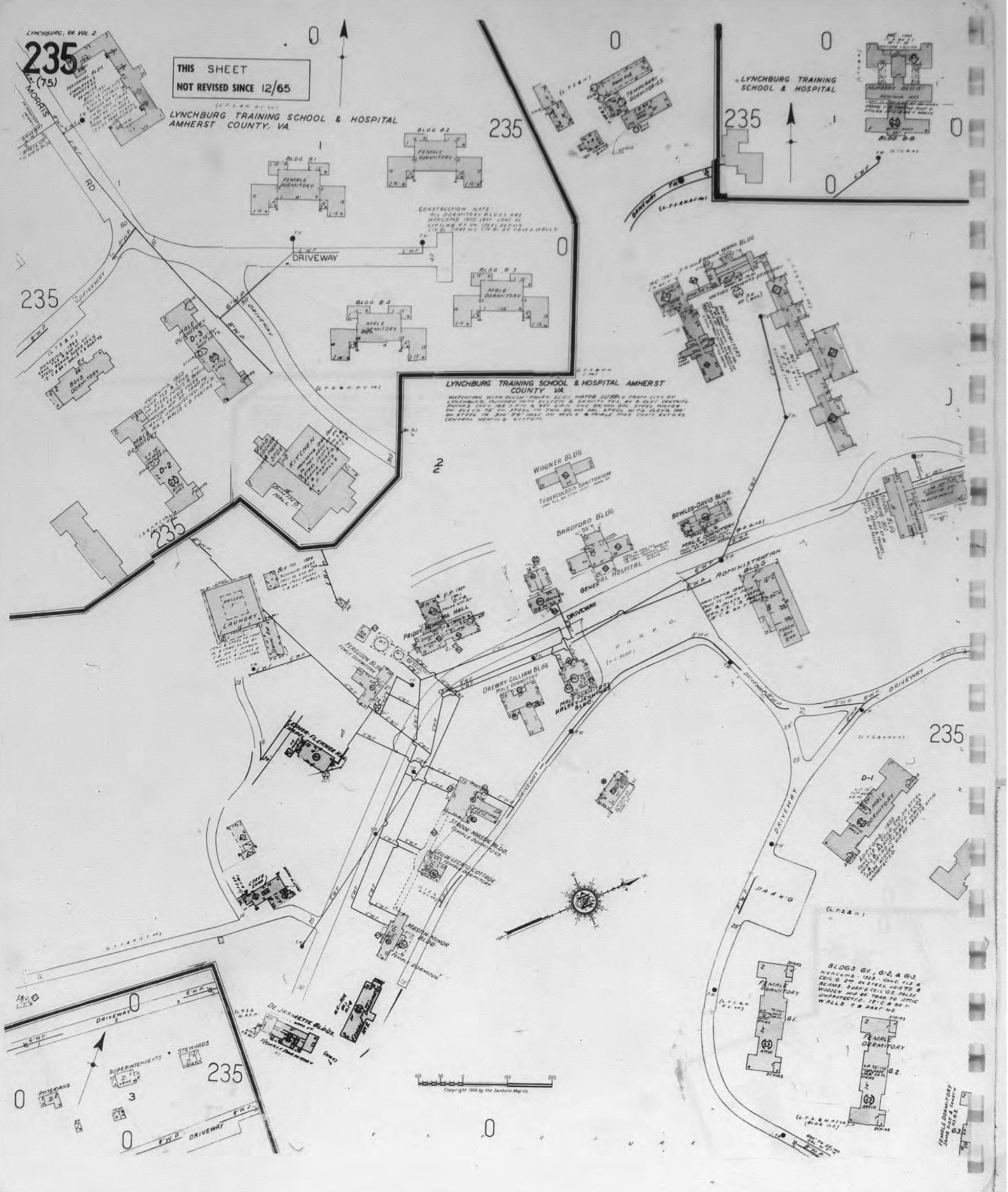


Map Type: Fire Insurance
 Publisher: Sanborn Map Co.
 Publication Name: Lynchburg, VA Vol. 2
 Base Map Date: 1907
 Revised Date: 1973
 Republished Date: 1955
 Sheet Number: 235

1973

Requested by: Envirosite Corporation
 Central Virginia Training Center
 Route 334
 Madison Heights, VA 24572
 Client Project # 17-772
 HIG Project # 2005888 www.historicalinfo.com



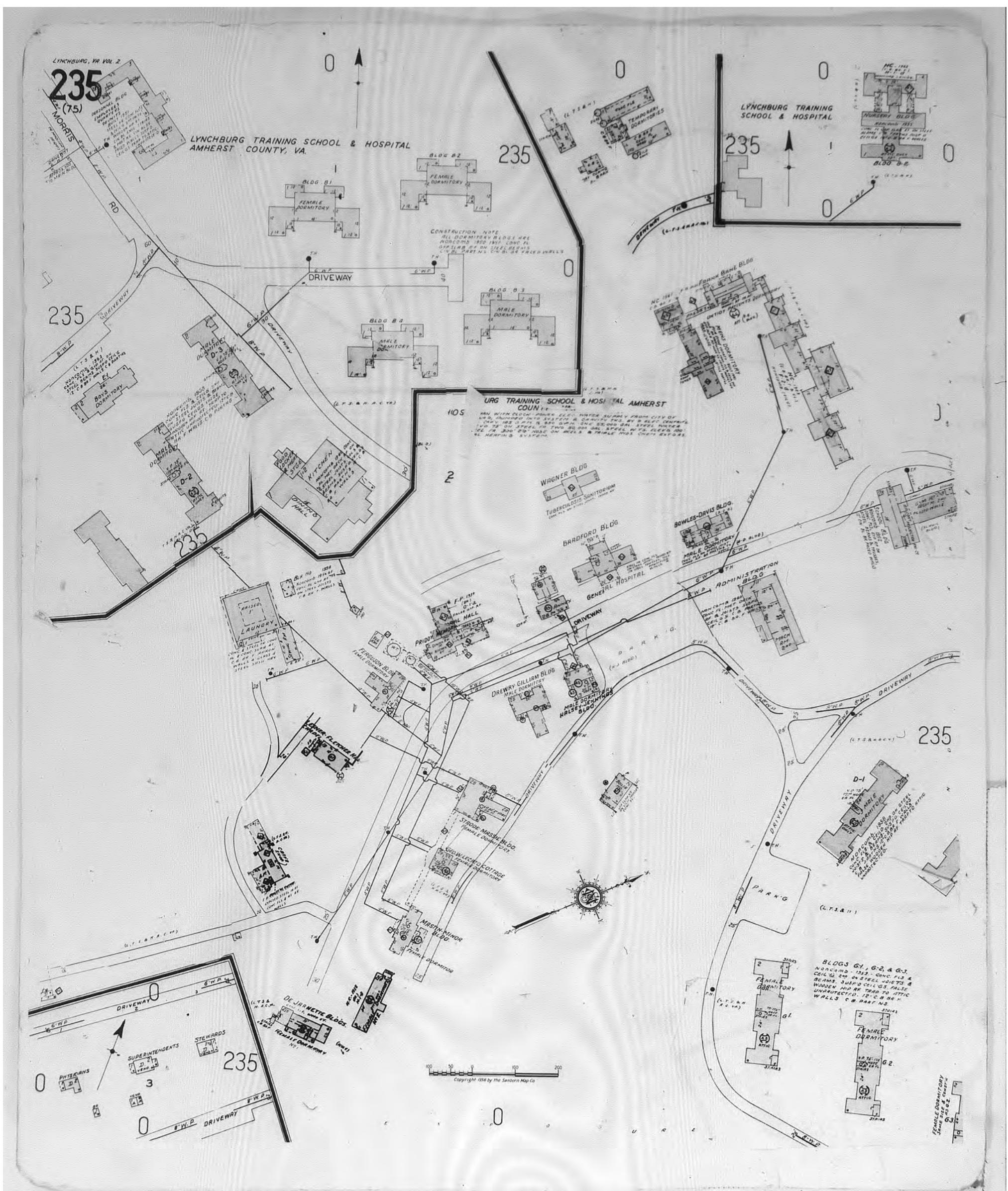


Map Type: Fire Insurance
Publisher: Sanborn Map Co.
Publication Name: Lynchburg, VA Vol. 2
Base Map Date: 1907
Revised Date: 1971
Republished Date: 1955
Sheet Number: 225

1971

Requested by: Envirosite Corporation
Central Virginia Training Center
Route 334
Madison Heights, VA 24572
Client Project # 17-772
HIG Project # 2005888 www.historicalimaging.com



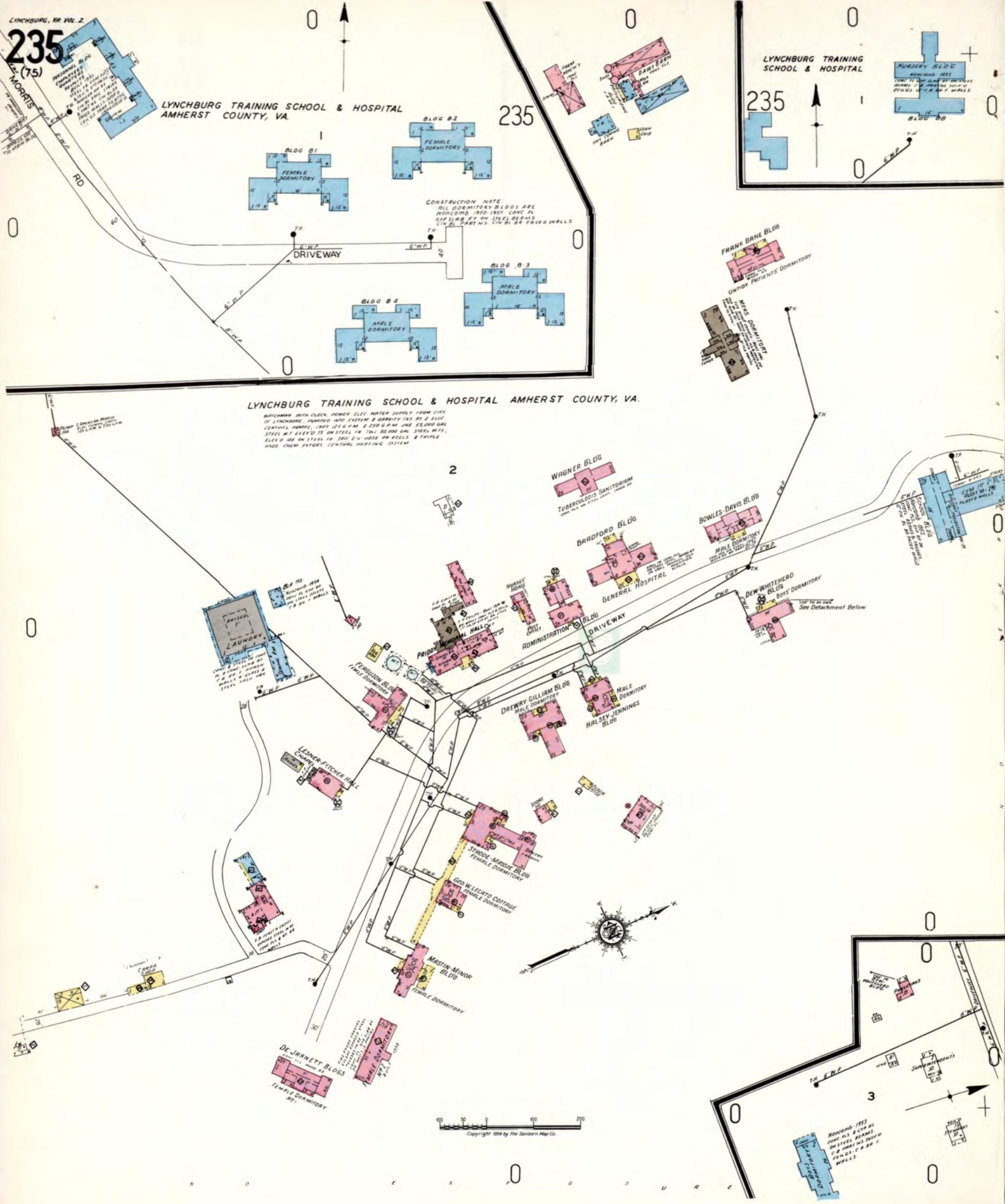


Map Type: Fire Insurance
Publisher: Sanborn Map Co.
Publication Name: Lynchburg, VA Vol. 2
Base Map Date: 1907
Revised Date: 1965
Republished Date: 1955
Sheet Number: 225

1965

Requested by: Envirosite Corporation
Central Virginia Training Center
Route 334
Madison Heights, VA 24572
Client Project # 17-772
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Map Type: Fire Insurance
 Publisher: Sanborn Map Co.
 Publication Name: Lynchburg, VA Vol. 2
 Base Map Date: 1907
 Revised Date: 1955
 Republished Date: 1955
 Sheet Number: 235

1955

Requested by: Envirosite Corporation
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