



January 25, 2012

Mr. Gerold Noyes, P.E.
Vermont Department of Environmental Conservation
Waste Management Division
103 S. Main Street, West Building
Waterbury, Vermont 05671-0404

RE: 2011 Annual Monitoring Report
UniFirst Plant Site, Williamstown, Vermont (Site #77-0087)

Dear Gerold:

Waite Environmental Management, LLC (WEM) is pleased to present two copies of the *2011 Annual Monitoring Report* for the UniFirst Plant Site in Williamstown, Vermont. The report provides details and results of the October 2011 (4th Quarter) sampling event, as well as summarizes the results from 1st, 2nd, and 3rd Quarters. This report has been prepared in accordance with the requirements and conditions described in the *State of Vermont Contract for Personal Services EC13-04*.

A digital copy (*.PDF) of this report has been placed on the VT DEC's ftp site.

Do not hesitate to call me if you have any questions about the report or the work conducted. I can be reached at (802) 860-9400 or by email at mwaite@waiteenv.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Miles E. Waite". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Miles E. Waite, Ph.D.
Principal Hydrogeologist

Enclosure

2011 ANNUAL MONITORING REPORT

for the

UNIFIRST PLANT SITE WILLIAMSTOWN, VERMONT

VT DEC Site #77-0087

January 25, 2012

Prepared for:

STATE OF VERMONT
Vermont Department of Environmental Conservation
Waste Management Division
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1.0 INTRODUCTION

The following *2011 Annual Monitoring Report* for the UniFirst Plant Site in Williamstown, Vermont (see attached Site Location Map in Appendix A) was prepared by Waite Environmental Management, LLC (WEM) for the Vermont Department of Environmental Conservation (VT DEC). This report has been completed in accordance WEM's contract with State of Vermont (contract EC13-04) for environmental monitoring.

This report includes discussion of the results of groundwater, drinking water, surface water, indoor air, and outdoor air conducted by WEM during 2011. Monitoring locations were surrounding the Williamstown Elementary School, Brush Hill Road, and Construction Hill Road. Events covered in this report include:

- Monitoring of thirteen (13) indoor air locations and three (3) outdoor air locations in January and July 2011.
- Monitoring of five (5) groundwater seeps, three (3) overburden groundwater monitoring wells, two (2) unused springs, and five (5) residential supply wells in April 2011.
- Monitoring of thirteen (13) overburden monitoring wells, five (5) seeps, two (2) unused springs, five (5) residential supply wells, and one (1) bedrock monitoring well in October 2011.
- Monitoring of four (4) surface water locations from the tributary to the Rouleau Brook in July 2011.

Monitoring at these locations was conducted in accordance with WEM's *Work Plan for Environmental Monitoring* ("Work Plan") [1], with the *Field/Lab Coordination Memorandum for Water Monitoring* ("FLCM-Water") [2], and the *Field/Lab Coordination Memorandum for Air Monitoring* ("FLCM-Air") [3]. The scope of work described in the Work Plan has been added to in accordance with the Proposal For Work #30 (May 12, 2005), Proposal For Work #30A (February 4, 2005), and Proposal For Work #31 (August 18, 2005).

All results except those from 4th Quarter 2011, which are discussed in this report, have been previously detected by WEM [4,5,6].

2.0 GROUNDWATER SAMPLING

Groundwater monitoring was conducted by WEM during April and October 2011. The following locations were monitored:

- Seeps SS-2, SS-3, SS-5, W-Seep, and Seep-1A (April and October);
- Unused springs SP-3 and SP-4 (April and October);
- Overburden monitoring wells MW-1, MW-C, MW-D, MW-E, MW-50, W-1, W-19, W-20, W-25, PZ-101, PZ-102 (October) and MW-51, MW-A and W-23 (April and October)
- Bedrock monitoring well MW-25884 (October).

All seep and monitoring well locations are shown in the Site Plan in Appendix A. Details and results of the sampling events are described below.

2.1 Groundwater Sample Collection: Seeps and Unused Springs

All seep samples were collected by grab sampling methods on April 28 and October 19, 2011. The sampling method involved using a clean, glass jar at each sample station to collect the seep water. At actively flowing seeps, the lip of the sampling jar was utilized to collect water from a discharge location within the identified area. At non-flowing seeps, samples were collected by gently submerging the sampling jar into a hole excavated into the identified area that was allowed to fill with groundwater. After each sample collection, the glass jar was decontaminated with Alconox and triple-rinsed with VOC-free water. Note that the order of sample collection was as dictated by the FLCM-Water. All seeps had groundwater present and were successfully sampled during both events.

The unused springs were also collected by grab sampling methods on April 28 and October 19, 2011. These springs are currently used only for groundwater monitoring. The spring tile for SP-4 is buried and access is via a vertical standpipe that extends to the ground surface and is covered by a flush-mounted well box. Spring SP-3 is accessed directly via the springhouse. Both spring samples are collected using dedicated polyethylene bailers.

Once each sample was collected, seep/spring water was then used for the measurement of the following field geochemical parameters: dissolved oxygen (DO), specific conductance (SC), temperature, pH, turbidity, and redox potential. Parameter measurement was conducted using a Horiba U-22 multi-parameter water quality meter that was calibrated by WEM during each day of use.

All samples were delivered by WEM to TestAmerica (TA) laboratory of South Burlington, Vermont. Seep/spring water samples were submitted for analysis of volatile organic compounds via EPA Method 8260B. Results for tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and trans-1,2-dichloroethene (trans-1,2-DCE) are discussed in Section 2.5.

2.2 Groundwater Level Measurement: Overburden Monitoring Wells

Prior to groundwater sampling on October 19, 2011, the water level in each overburden monitoring well was measured with a water level probe. Groundwater was present in all wells except MW-A and MW-51, which were again observed to be dry. Depth to groundwater ranged from 3.08 to 10.97 ft below top-of-casing (ft btoc).

Using top-of-casing elevation data, the measurements were converted into groundwater elevations. Elevation data from October 2011 are shown with historical measurements in Table 1.1 in Appendix B. Compared to the October 2010 data, groundwater elevations were similar. The largest difference in elevation between 2010 and 2011 was noted in well W-23 (0.98 ft increase).

Groundwater elevations were also plotted to develop a groundwater elevation map (see Groundwater Elevation Map – October 2011 in Appendix A). As this map shows, there are southeastern and southern groundwater flow components. The lateral hydraulic gradient, calculated between W-20 and MW-50, was 0.050 ft/ft, or 5%.

2.3 Groundwater Sample Collection: Overburden Monitoring Wells

On April 28, 2011, one (1) monitoring well was sampled; well W-23 is typically sampled in the spring of the year instead of the fall as the well is often dry during the fall. On October 19, 2011 ten (10) monitoring wells were sampled. Prior to sampling, wells were purged using dedicated polyethylene bailers (W-25, MW-50, MW-E, MW-D, W-23) or a peristaltic pump with tubing dedicated to each well (PZ-101, PZ-102, W-19, W-20, MW-C, and W-1). Purge volumes were calculated as three (3) times the volume of water in the well. Upon reaching the desired purge volume or until the well was purged dry, a small volume of the water was collected in a glass jar for field geochemical parameters measurement using a Horiba U-22 multi-parameter water quality meter that was calibrated daily by WEM prior to use. Samples were then poured directly from the bailers into the sampling containers or sampled from the dedicated tubing at the outlet of the peristaltic pump.

All samples were delivered by WEM to TA. Monitoring well samples were submitted for analysis of volatile organic compounds via EPA Method 8260B. Results for PCE, TCE, cis-1,2-DCE and trans-1,2-DCE are discussed in Section 2.5.

2.4 Groundwater Sample Collection: Bedrock Monitoring Well

Bedrock monitoring well MW-25884 was sampled by WEM on October 17, 2011. Purging and sampling of this well involves using a low-flow methodology. The well is purged via a Grundfos Redi-Flo II submersible pump connected to disposable polyethylene tubing that extended to a depth of approximately 92 feet. The purge rate ranges between 500-600 milliliters/minute (ml/min). During the purging process, the water level was monitored using a water level probe and geochemical parameters were measured using a Horiba U-22 multi-parameter water quality meter that was calibrated daily by WEM prior to use. The well was

allowed to purge until geochemical parameters stabilized. Upon stabilization, a sample was then collected directly from the outlet of the tubing.

All samples were delivered by WEM to TA. Samples were submitted for analysis of volatile organic compounds via EPA Method 8260B. Results for PCE, TCE, cis-1,2-DCE and trans-1,2-DCE are discussed in Section 2.5.

2.5 Discussion of Results

Validated laboratory analytical results are summarized in Table 2.0 in Appendix B. Full copies of the laboratory reports are presented in the Data Validation Reports for each sampling event [8,11]. Following is a detailed discussion of field and laboratory results.

2.5.1 Field Geochemical Parameters

Field geochemical parameter measurements from April and October 2011 are summarized in Tables 1.2 through 1.7 in Appendix B, and the October 2011 data can be seen in the field data sheets in Appendix D. Based on a comparison to historical water quality parameters (2002-2010), the following observations can be made from the October 2011 data:

- **Dissolved Oxygen:** Both the April and October readings are generally elevated compared to historical measurements. An increasing trend since 2008 is apparent in many wells.
- **Specific Conductance:** Both the April and October readings are within the range of historical measurements. No anomalies or clear trends are noted. A previously noted rising trend in spring SP-4 is no longer apparent.
- **pH:** The April and October readings were within the range of historical measurements. No anomalies or clear trends are noted.
- **Turbidity:** The April readings were within the range of historical measurements. The October readings were generally lower than historical measurements but no anomalies or clear trends are apparent.
- **Redox:** Both the April and October readings within the range of historical measurements. No anomalies or clear trends are noted.

2.5.2 Seep and Unused Spring Sampling Results

The analytical results from seep and unused spring sampling in April and October 2011 are summarized in Table 2.0 in Appendix B. These results indicate the following:

- **W-SEEP:** No target compounds were detected during April 2011, and only a “trace” (estimated below reporting limit) of PCE was detected during October 2011.
- **SS-2:** No target compounds were detected during either April or October 2011.
- **SS-3:** In April and October 2011, PCE and a trace of TCE were detected. In October 2011 an additional trace of cis-1,2-DCE was detected.
- **SS-5:** In April 2011, traces of PCE and TCE were detected. In October 2011, TCE and cis-1,2-DCE were detected and a trace of PCE was detected.
- **SEEP-1A:** In April 2011, PCE and a trace of TCE were detected. In October 2011, PCE and TCE were both detected.
- **Unused spring SP-3:** In April 2011, PCE and a trace of TCE were detected. In October 2011, only trace of PCE was detected.
- **Unused spring SP-4:** In April and October 2011, TCE and PCE were both detected.

The only exceedences of the Vermont groundwater enforcement standard (“VGES”) [12] were the PCE concentrations at spring SP-4 during April and October 2011 and the PCE concentration at spring SP-3 in April 2011. All other compounds detected in the seeps and springs during 2011 were below the VGES.

In SS-3, the seep that historically has the highest concentrations of target VOCs, concentrations appear to continue in a decreasing trend, with the October 2011 PCE concentration the lowest detected since 2003. At SP-4, the PCE concentrations continue to be elevated compared to historical levels. At SP-3 during April 2011, the PCE concentration (9.9 ug/L) was the highest recorded since sampling began in 1997, but the October 2011 PCE concentration was only trace, indicative of large seasonal variations. In all other seeps and springs, concentrations appear to be stable or non-detectable over time. Trends can be seen in the graphs presented in Appendix C.

2.5.3 Monitoring Well Sampling Results

The analytical results from monitoring well sampling in April (W-23 only) and October (all other monitoring wells) 2011 are summarized in Table 2.0 in Appendix B. These results indicate the following:

- **PCE:** The target compound PCE was detected in all eleven wells that were sampled, including: W-23 (82 ug/L), MW-D (54 ug/L), W-20 (33 ug/L), MW-E (23 ug/L), W-1 (22 ug/L), MW-C (13 ug/L), W-25 (8.9 ug/L), PZ-102 (8.6 ug/L), PZ-101 (6.3 ug/L), W-19 (3.9 ug/L), and MW-50 (2.3 ug/L).
- **TCE:** The target compound TCE was detected in nine of the wells that were sampled, including well W-20 (31 ug/L), MW-D (18 ug/L), MW-E (8.8 ug/L), MW-50 (2.2 ug/L), W-23 (2.3 ug/L), and W-25 (1.9 ug/L), and at trace (estimated below reporting limit) concentrations in W-1, MW-C, and PZ-102.

- **cis-1,2-DCE:** The target compound cis-1,2-DCE was detected in four of the wells sampled, including: W-20 (4.5 ug/L) and MW-D (1.8 ug/L), and at trace (estimated below reporting limit) concentrations only in MW-E and MW-50.
- **trans-1,2-DCE:** The target compound trans-1,2-DCE was detected in well MW-E (1.3 ug/L) and at a trace (estimated below reporting limit) concentration in well MW-50.

Concentrations were in excess of the VGES for PCE in nine wells (W-23, W-1, W-20, W-25, MW-C, MW-D, MW-E, PZ-101, and PZ-102) and for TCE for three wells (W-20, MW-D and MW-E). There were no exceedences for cis-1,2-DCE or trans-1,2-DCE.

The distribution of contamination is also shown visually in the VOC concentration contour map in Appendix A, shown for the October 2011 results. The data indicate that contaminant levels increase up the hillside to the north/northwest of the School, as would be expected given that the source (former UniFirst Plant) is to the north. However, there is also a localized higher concentration zone at the southwest corner of the School building (MW-D) that cannot be explained. With this plume configuration, there is a swath of less contaminated groundwater underneath the northern half of school building footprint. The 2011 contaminant distribution is similar to the distribution in 2010.

Compared to historical results, shown graphically in Appendix C, concentrations of target compounds in most of the wells have been generally steady or decreasing since the mid-1990s. Wells that have previously shown increasing concentration trends are MW-D (since mid 1990s), PZ-102 (since 2004), W-19 (since 2005) and W-20 (since 2005). Based on the recent data, the increasing trends appear to have crested for the time being with the exception of W-20.

2.5.4 Bedrock Monitoring Well Sampling Results

The analytical results from sampling of bedrock monitoring well MW-25884 during October 2011 are summarized in Table 2. These results indicate that PCE, TCE and cis-1,2-DCE were all detected at trace (estimated below reporting limit) concentrations, and the compound trans-1,2-DCE was not detected. In general, concentrations of target VOCs in well MW-25884 have remained steady, hovering around the reporting limit, since sampling began in 2005.

2.5.5 QA/QC Samples

As part of the quality assurance/quality control (QA/QC) program, WEM collected field duplicate samples during all of the 2011 sampling events described above. Duplicate pairs included: “SS-Z” and SP-4 (April); “SS-Z” and SS-3 (October); “W-Z” and MW-D (October); and “BRW-X” and MW-25884 (October). These samples were analyzed by TA using the same method (EPA Method 8260B). Results of the duplicate analyses were within acceptance criteria and did not result in any qualifications of the data with the exception of the October results for the pair SS-Z and SS-3, which resulted in the qualification of the PCE results as estimated.

WEM also collected trip blanks and field blanks during all of the 2011 sampling events for analysis by EPA Method 8260B. No target compounds were reported in any of the blanks collected by WEM for groundwater, seep or bedrock sampling from the Unifirst site during 2011.

2.6 Discussion of Data Validation

The laboratory data from groundwater sampling during April and October 2011 were validated by Phoenix Chemistry Services, an independent data validator. The validation was performed in accordance with Tier III guidelines as described by the USEPA Region I. Details are presented in the Data Validation Reports [8, 11] on file at the VT DEC offices in Waterbury. The text of the validation report for the October 2011 sampling event [11] is included in Appendix E.

Results for the target VOCs were determined to be valid as detected for all groundwater samples collected in April (sample delivery group SDG No. UNIF40), and October (sample delivery group SDG No. UNIF42) with the following exception:

- On the basis of unacceptable precision in the field duplicate pair, October 2011 results for PCE in SS-3 and SS-Z were qualified as estimated.

There were qualifications for some non-target compounds (acetone and carbon tetrachloride) in April. While there were some minor issues pertaining to laboratory documentation and data presentation, none of them had a direct effect on the validity of the analytical data.

2.7 Well Maintenance

All wells appeared to be in adequate condition and no maintenance activities were required during 2011.

The box for unused spring SP-3 was formally abandoned by the Johnson Company during January 2012. The spring box was filled in with sand, but a monitoring well was installed within the footprint prior to filling to allow future access for this sampling location. The monitoring well ("MW-SP-3") will be sampled starting in 2012.

2.8 Recommendations

Based on the above information, overburden groundwater at the Site continues to show evidence of chlorinated VOCs at concentrations that exceed applicable enforcement standards. Given these conditions, WEM recommends continuing the groundwater monitoring program as specified in the Work Plan and FLCM-Water, and with more recent specifications regarding sampling of additional monitoring points (MW-25884 and MW-SP-3). The next sampling event is scheduled for April 2012.

3.0 WATER SUPPLY SAMPLING

Water supply sampling was conducted by WEM at five (5) residences on April 28 and October 19, 2011. Sampling could not be conducted at the Kriesz residence (WP-20) on either date as it was unoccupied and the water service was shut off. Sampling was conducted in accordance with WEM's Work Plan and with the FLCM-Water. All sampling locations are shown in the Site Plan in Appendix A.. Details and results of the water supply sampling events are described below.

3.1 Water Supply Sample Collection

All water supply samples were collected by tap sampling methods. This involved accessing the pre-specified tap (outside hose bib or kitchen sink) at each residence, allowing the water to run in order to purge 30-50 gallons of water, and then slowly collecting the water sample directly from the tap into laboratory containers. The order of sample collection was as dictated by the FLCM-Water. Tap locations for each of the residences sampled are shown in the table below.

**WATER SUPPLY SAMPLING LOCATIONS
UniFirst Plant Site, Williamstown, Vermont**

Residence	Sample Name	Tap Location
Jeffords	WP-3	Kitchen
Beattie	WP-5	Outside tap - next to front porch
McGlynn	WP-7	Outside tap – next to front door
Duke	WP-8	Kitchen
Dindo (former Evelyn)	WP-13	Kitchen
Kriesz	WP-20	Outside tap – north side of house

Note that the Work Plan calls for sampling from the kitchen sink of the Duke and Dindo residences. Due to inability of WEM to obtain access to the Dindo kitchen sink during April and October, these samples were collected from the outside tap instead.

All samples were delivered by WEM to TA. Water supply samples were submitted for analysis of volatile organic compounds via EPA Method 524.2. Results for PCE, TCE, cis-1,2-DCE and trans-1,2-DCE are discussed below.

3.2 Discussion of Results

Validated laboratory analytical results are summarized in Table 3.0 in Appendix B. Full copies of the laboratory reports are presented in Data Validation Reports [8, 11].

The analytical results indicate that no target VOCs were detected above reporting limits in water samples WP-3, WP-5, WP-7, WP-8 or WP-13 collected during April 2011 or in WP-5, WP-7, WP-8, or WP-13 collected during October 2011. The October results for WP-3 indicate a trace concentration (estimated below reporting limit) of TCE. The estimated concentration (0.18 ug/L) is well below the drinking water standard for TCE (5.0 ug/L). The occasional trace presence of TCE has occurred in this well before (2001, 2007, 2010), and is the only evidence of target compounds in drinking water collected from these residential supply wells since the mid-1980s.

3.2.1 QA/QC Samples

As part of the QA/QC program, WEM collected a field duplicate sample during each sampling event. The duplicate sample labeled “WP-Z” was collected in conjunction with the sample from WP-3 in April and October. Both pairs were analyzed by TA using the same method (EPA Method 524.2). In all cases, results of the duplicate analyses were with acceptance criteria and did not result in any qualifications of the data.

WEM also collected trip blanks and field blanks during each sampling event. No target compounds were detected in any of the blanks with the exception of blank “FB-5” collected on October 19, 2011 which had trace detections for cis-1,2-DCE, methylene chloride, and chlorobenzene. The laboratory investigated this analysis and opined that these results were due to laboratory contamination. Due to the laboratory contamination, results for cis-1,2-DCE in supply samples WP-3 and WP-Z were qualified as not detected at the reporting limit (U).

Lastly, during both the April and October 2011 event WEM submitted a blind performance evaluation (PE) sample labeled as “W-23” for analysis by EPA Method 524.2. The PE samples were acquired through Environmental Resource Associates of Arvada, Colorado. The April results indicate that all of the spiked target compounds were within the vendor’s published QC Performance Acceptance Limits with the exception of one non-target compound (carbon tetrachloride). The October results had numerous disagreements with the vendor’s acceptance limits, which prompted an investigation into the anomalous results. As neither laboratory or field handling errors were identified, the validator rejected the PE sample results on the basis of suspected errors in the vendor’s preparation of the PE sample vials. Further description of the PE sample analysis is presented in the Data Validation Report in Appendix E.

3.3 Discussion of Data Validation

The laboratory data from the April and October 2011 water supply sampling events were validated by Phoenix Chemistry Services, an independent data validator. The validation was performed in accordance with Tier III guidelines as described by the USEPA Region I. Details are presented in the Data Validation Reports [8, 11] on file at the VT DEC offices in Waterbury. The text of the validation report for the October 2011 sampling event [11] is included in Appendix E.

Results for the target VOCs were determined to be valid as detected for all supply well samples collected in April (sample delivery group SDG No. UNIF40), and October (sample delivery group SDG No. UNIF42) with the following exception:

- On the basis of laboratory contamination, October 2011 results for cis-1,2-DCE in WP-3 and WP-Z were qualified as not detected at the reporting limit (U)
- On the basis of suspected errors in the preparation of the PE sample vials, all October 2011 results from the PE sample analysis are rejected (R) for this round.

There were qualifications for some non-target compounds in April (acetone and carbon tetrachloride). While there were some minor issues pertaining to laboratory documentation and data presentation, none of them had a direct effect on the validity of the analytical data.

3.4 Recommendations

Due to the continuing presence of chlorinated VOCs in the overburden aquifer as described in Section 2.0, WEM recommends continuing the supply well monitoring program as specified in the Work Plan and FLCM-Water. The next sampling event is scheduled for April 2012.

4.0 SURFACE WATER SAMPLING

Surface water sampling was conducted by WEM on July 28, 2011. Sampling was conducted in accordance with WEM's Work Plan and with the FLCM-Water. Details and results are described below.

As dictated by the Work Plan, there had been at least 36 hours without precipitation prior to the collection of surface water samples (weather tracking data from Knapp State Airport in Barre, Vermont).

Details and results of the water sampling event are described below.

4.1 Surface Water Sample Collection

WEM collected four (4) surface water samples on July 28, 2011. Sampling locations, labeled as WQ-1, WQ-2, WQ-3, WQ-4 in the Site Plan in Appendix A, are along a small stream that is a tributary to the Rouleau Brook, which eventually flows into the Stevens Branch. The stream was flowing on the day of sampling, so all four samples were successfully collected.

After each sample was collected, flow gauging was conducted at each surface water sampling location. Measured flow rates, in gallons per minute (gpm), for WQ-1, WQ-2, WQ-3, and WQ-4 were 11 gpm, 1.8 gpm, 3.8 gpm, and 3.8 gpm, respectively.

Sampling times are noted in the field data sheets included in Appendix C. All samples were delivered by WEM to TA under chain-of-custody procedures for analysis of volatile organic compounds via EPA Method 8260B. Results for PCE, TCE, cis-1,2-DCE and trans-1,2-DCE are discussed below.

4.2 Discussion of Results

Surface water sampling results from July 2011 are summarized in Table 4.0 in Appendix B. These results have been validated by an independent validator (see Section 4.3). Full copies of the laboratory report and the data validation package are presented in the data validation report [9] on file in Waterbury. The laboratory results indicate that VOCs were not reported above quantitation limits during the July 2011 sampling event. Based on results dating back to the early 1990s (see Table 4.0 for data back to 2001), it is only on rare occasions that target VOCs have been detected in the Brook. The last time a target VOC was reported was for PCE (0.39 ppb) at location WQ-1 in July 2007.

4.2.1 QA/QC Samples

As part of the QA/QC program, WEM collected one (1) field duplicate sample (WQ-X) on July 28, 2011. This sample was collected in conjunction with the sample WQ-4 and analyzed by TA using the same method (EPA Method 8260B). No target compounds were detected in sample WQ-4 or WQ-X, so precision could not be evaluated in this field duplicate pair.

WEM also submitted one (1) trip blank (TB-1) and prepared one (1) field blank (FB-1) on July 28, 2011. No target compounds were reported in either sample, indicating that the effect of spurious influences on sample quality was non-existent during the July 2011 sampling event.

4.3 Discussion of Data Validation

The laboratory data for the July sampling event were validated by Phoenix Chemistry Services, an independent data validator. The validation was performed in accordance with Tier III guidelines as described by the USEPA Region I. Details are presented in the data validation report [9] on file at the VT DEC offices in Waterbury.

The findings of the validation effort resulted in no qualifications of sample results.

While there were some minor documentation issues, these issues do not directly affect the validity of the analytical data.

4.4 Recommendations

Due to the continuing presence of chlorinated VOCs in the overburden aquifer as described in Section 2.0, WEM recommends continuing the surface water monitoring program as specified in the Work Plan and FLCM-Water. The surface water sampling should continue to proceed on a bi-annual basis on odd years, with the event to be scheduled for July 2013.

5.0 INDOOR & OUTDOOR AIR SAMPLING

Indoor and outdoor air sampling was conducted by WEM in January and July 2011. Sampling was conducted in accordance with WEM's Work Plan and the FLCM-Air. Details and results of the air sampling events are described below.

5.1 Air Sample Collection

As part of the regular indoor air sampling program, thirteen (13) indoor air samples were collected from six (6) buildings in Williamstown on January 31-February 1, 2011, and again on July 29, 2011. On both occasions, three (3) outdoor locations were sampled. The indoor air sampling locations are inside buildings along Brush Hill Road and Construction Hill Road, and from within the Williamstown Elementary School. The outdoor air samples were collected from locations on the Williamstown Elementary School grounds. All air sampling locations are summarized in the tables below on the following page, and are shown on the Site Plan in Appendix A.

Sampling is no longer conducted in the former Golebioswki/Lincoln residence (AQ-4), the Masonic Lodge (AQ-2A). Sampling at the Orange North Supervisory Union building (AQ-2B) is sampled on an annual basis during the 1st quarter event, but this building was not sampled during the 1st Quarter 2011.

Samples were collected by WEM using 6-liter stainless steel Silco air canisters. The canisters and flow controllers were procured by WEM from TestAmerica Laboratory (TA) of South Burlington, Vermont prior to sampling. The flow controllers were all calibrated by TA to provide a flow rate that allowed a final canister pressure between -7.0 and -2.0 inches of Mercury (in Hg) below ambient pressure after a run time of approximately 4 hours. The cleanliness of each canister was individually certified by TA. Prior to use of the canisters, WEM reviewed the "Air Canister Cleaning Logs and Clean Canister Certification Report" and the "Mass Flow Controller Set Flow Rate & Leak Check Record" and did not find any problems.

The sampling procedure at each site involved setting up the canister at the designated sampling location, attaching a digital pressure gauge to measure initial pressure and comparing it to the pressure recorded by laboratory, attaching the flow controller, recording initial canister pressure from the analog pressure gauge, recording ambient pressure and temperature, and then opening the valve to initiate the sample collection. Ambient pressure values were obtained in the morning and afternoon from the Knapp State Airport, and ambient temperature was recorded using a digital thermometer or the thermostat in the sampling location. Samples were allowed to run for approximately 4 hours. Upon completion, a second digital pressure gauge measurement is made and recorded along with the analog pressure gauge measurement.

INDOOR AIR SAMPLING LOCATIONS
UniFirst Plant Site, Williamstown, Vermont

Air Sampling Locations	Laboratory Sample Designation	Sample Location Owner
Audio/Video Gym NE Corner	AVRM GYM NECRNR	Williamstown Elementary School
AQ-1	AQ11FLR AQ1BSMT	Noury Residence
AQ-2B	AQ2B1FLR	New ONSU Building
AQ-3	AQ31FLR AQ3BSMT	Peruse Residence
AQ-5	AQ51FLR AQ5BSMT	Owen Residence
AQ-6	AQ61FLR AQ6BSMT	Jeffords Residence
AQ-7	AQ71FLR AQ7BSMT	St. Onge Residence

Notes

1. The designations "BSMT" and "1FLR" signify that the sample is collected either in the basement or the first floor of the building.

OUTDOOR AIR SAMPLING LOCATIONS
UniFirst Plant Site, Williamstown, Vermont

Air Sampling Locations	Laboratory Sample Designation	Sample Location Owner
North Side	NORTHSIDE	Williamstown Elementary School
Air Site 3	AS-3	
Air Site 4	AS-4	

No significant problems were encountered during either sampling event, and all sampling procedures were in general accordance with the *Work Plan*.

All samples were delivered by WEM to TA under chain-of-custody procedures for analysis of the four target volatile organic compounds: tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and trans-1,2-dichloroethene (trans-1,2-DCE). Analysis was by Method TO-15 (Low Level). Results, in parts per billion (ppbv), are discussed below.

5.2 Discussion of Results

Air sampling results from January and July 2011 are summarized in Tables 5.0 and 6.0 in Appendix B. These results have been validated by an independent validator (see Section 5.3). Full copies of the laboratory reports are presented in the data validation reports [7,10].

The **indoor air sampling results** indicate that one or more of the target compounds were detected in twelve (12) samples during the January event and in eleven (11) samples during the July event. Results for these target compounds are summarized below:

- **AV Room:** the target compound PCE was detected in January (0.015 ppbv) but not during July.
- **GYM:** the target compound PCE was detected in January (0.012 ppbv) but not during July.
- **Northeast Corner Classroom:** the target compound PCE was not detected in January but was detected in July (0.012 ppbv).
- **Noury Residence:** the target compound PCE was detected in January (0.050 ppbv) but not during July on the first floor, and in January (0.027 ppbv) and July (0.16 ppbv) in the basement.
- **New ONSU Building:** not sampled during January or July.
- **Peruse Residence:** the target compound PCE was detected in January (0.20 ppbv) and July (0.012 ppbv) on the first floor, and in January (0.31 ppbv) and July (0.15 ppbv) in the basement. The target compound TCE was detected in January only (0.076 ppbv) on the first floor, and in January (0.086 ppbv) and July (0.031 ppbv) in the basement.
- **Owen Residence:** the target compound PCE was detected in January (0.016 ppbv) and in July (0.012 ppbv) on the first floor. PCE was also detected in January (0.014 ppbv) and July (0.012 ppbv) in the basement. The target compound TCE was July only (0.012 ppbv) on the first floor, and in July only (0.045 ppbv) in the basement.
- **Jeffords Residence:** the target compound PCE was detected in January (0.11 ppbv) and July (0.26 ppbv) on the first floor, and in January (0.050 ppbv) and July (0.12 ppbv) in the basement. The target compound TCE was detected in January (0.026 ppbv) and July (0.11 ppbv) on the first floor, and in July only (0.046 ppbv) in the basement.
- **St. Onge Residence:** the target compound PCE was detected in January (0.029 ppbv) and July (0.022 ppbv) on the first floor, and in January (0.014 ppbv) and July (0.011) in the basement.

Neither the compound cis-1,2-DCE nor trans-1,2-DCE were not detected at any of the air sampling locations in 2011.

The Vermont Department of Health (DOH) has developed indoor air guidance levels of 1.0 ppbv for PCE and TCE (based on statewide study titled *Indoor Ambient Air Survey Results, Yearly Sampling Between 12/21/91 and 12/20/92*). The PCE and/or TCE concentrations detected at all locations are well below the DOH guidance level.

Based on historical results dating back to 1996, the presence of target compounds at the Noury, Owen, Peruse, Jeffords and St. Onge residences is not unusual. These compounds have been detected during prior sampling events, often at concentrations well in excess of those reported during the 2011 events. In general, airborne concentrations have been decreasing with time. The trends can be seen in the graphs presented in Appendix C. The exception to the decreasing trend is at the Peruse residence, where the January 2010 concentrations spiked upward. The source of the high detections in 2010 was postulated to be due to the wood stove use. Since then, the concentrations have reduced to more typical levels.

Results of the **outdoor air sampling** event in January 2011 indicate that no target compounds were present in any of the three outdoor air locations at the Site. Results of the July 2011 event indicate the target compound PCE was detected at two of the three outdoor locations sampled, NORTHSIDE and AS-3. The reported PCE concentrations were well below the applicable guidance level. The presence of PCE at location on the north side of the School (NORTHSIDE) has been reported previously in 2009 and 2004. Until this event, PCE had never been detected at the location northeast of the School (AS-3) since sampling began at this location in 2002. No target compounds were detected at the location southeast of the school (AS-4).

5.2.1 QA/QC Samples

As part of the quality assurance/quality control (QA/QC) program, WEM collected one (1) field duplicate sample during both the January and July air sampling events. This sample was collected in conjunction with the AV Room at the Elementary School (AVRM) during January 2011, and in conjunction with the St. Onge basement (AQ7BSMT) in July 2011.

During the January 2011 event, PCE was reported at less than twice the quantitation limit in sample AVRM (0.015 ppbv), but was not detected (<0.010 ppbv) in sample FD-1. Since PCE was detected at less than twice the quantitation limit in AVRM, the results did not warrant qualification on the basis of the lack of precision in this field duplicate pair.

During the July 2011 event, PCE was reported 0.011 ppbv in AQ7BSMT, but at 0.140 ppbv in the field duplicate FD-1. TCE was not reported in sample AQ7-BSMT, but was reported 0.018 ppbv in sample FD-1. Since only one sample of the field duplicate pair had results greater than twice the quantitation limit, relative percent difference (RPD) values are not evaluated. However, examination of the chromatograms and all raw data results of these samples indicate that the samples were similar, but variably higher in sample FD-1 than in AQ7-BSMT. On the basis of professional judgment and the overall higher concentrations reported in the field duplicate FD-1, results for PCE and TCE in AQ7-BSMT and FD-1 were qualified as estimated (J, UJ).

WEM also submitted trip blanks during the sampling events, one for each day of sampling. No target compounds were detected in any of the trip blanks.

5.3 Discussion of Data Validation

The laboratory data for the three sampling events were validated by Phoenix Chemistry Services, an independent data validator. The validation was performed in accordance with Tier III guidelines as described by the USEPA Region I. Details are presented in the data validation reports [7,10] on file at the VT DEC offices in Waterbury.

Results for the target VOCs were determined to be valid as detected for all indoor/outdoor air collected in January (SDG No. 200-3621) and in July (SDG No. 200-6293) with the exception of the following:

- On the basis of professional judgment and the overall higher concentrations reported in the January 2011 field duplicate FD-1, results PCE and TCE in AQ7-BSMT and FD-1 were qualified as estimated (J, UJ).

While there were some documentation issues, these issues do not directly affect the validity of the 2011 analytical data.

5.4 Vapor Collection System Operation

Vapor collection systems are in operation at three (3) of the residences: the Owen residence (AQ-5), the Jeffords residence (AQ-6), and the St. Onge residence (AQ-7). While WEM is not involved with the operation and maintenance of these systems, WEM checks the operational status in conjunction with the air sampling events. These systems are in use to mitigate contaminant migration into the homes via vacuum extraction from the foundation and discharge to the atmosphere outside each home. Vacuum gauges are installed in the exposed piping within each residence.

During the indoor air sampling events in January and July 2011, WEM observed that all three systems were operational.

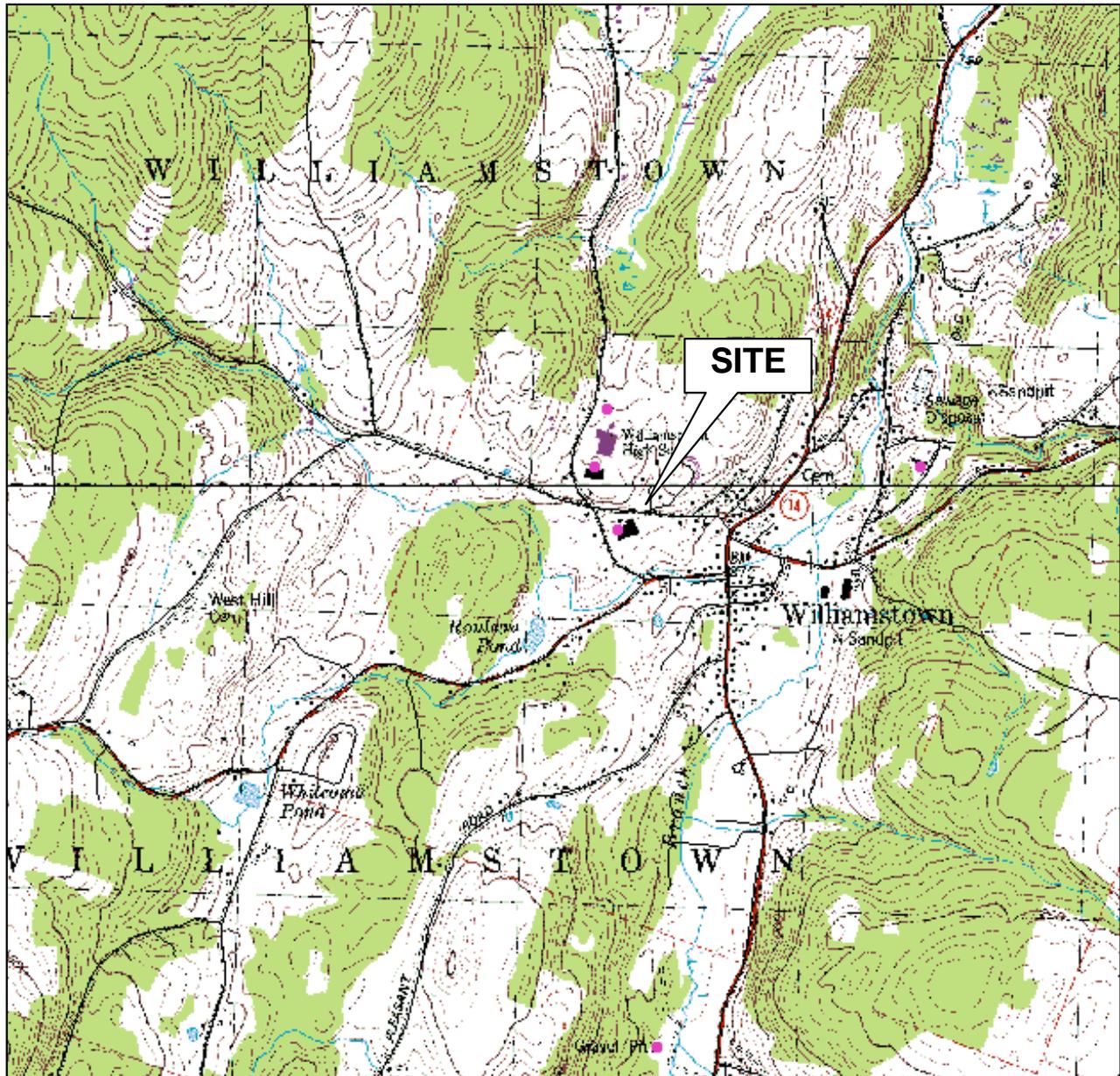
5.5 Recommendations

Due to the continuing presence of chlorinated VOCs in the indoor as described in Section 5.0, WEM recommends continuing the air sampling program as specified in the Work Plan and FLCM-Air, with the exception of discontinuing the sampling at the former Golebiowski/Lincoln residence and the Masonic Lodge. The next air sampling event is scheduled for January 2012. WEM also recommends continued pursuit of the installation of basement vapor control systems in the Peruse, Noury, and Jeffords residences.

6.0 REFERENCES

1. Waite Environmental Management, LLC, *Work Plan for Environmental Monitoring at the UniFirst Plant Site, Williamstown, Vermont, Wheatley Farm Site, Brookfield, Vermont, Bressett Site, Randolph, Vermont*, December 31, 2007.
2. Phoenix Chemistry Services, *Field/Lab Coordination Memorandum for Water Monitoring, UniFirst Plant Site, Williamstown, Vermont, Wheatley Farm Site, Brookfield, Vermont, Bressett Site, Randolph, Vermont*, April 2, 2004.
3. Phoenix Chemistry Services, *Field/Lab Coordination Memorandum for Air Monitoring, UniFirst Plant Site, Williamstown, Vermont, Wheatley Farm Site, Brookfield, Vermont, Bressett Site, Randolph, Vermont*, December 22, 2007.
4. Waite Environmental Management, LLC, *1st Quarter 2011 Monitoring Report, Bressett Site, Randolph, Vermont*, April 14, 2011.
5. Waite Environmental Management, LLC, *2nd Quarter 2011 Monitoring Report, Bressett Site, Randolph, Vermont*, August 8, 2011.
6. Waite Environmental Management, LLC, *3rd Quarter 2011 Monitoring Report, Bressett Site, Randolph, Vermont*, November 16, 2011.
7. Phoenix Chemistry Services, *Data Validation for the UniFirst Project, Williamstown and Bressett Sites, Williamstown and Randolph, VT, Organic Analysis Data, Selected Volatiles in Air Samples (Sample Delivery Group No. 200-3621, March 22, 2011.*
8. Phoenix Chemistry Services, *Data Validation for the UniFirst Project, Bressett and UniFirst Sites, Randolph and Williamstown, VT, Organic Analysis Data, Volatile Organics in Water Samples, Sample Delivery Group Nos. BRES49 and UNIF40, June 16, 2011.*
9. Phoenix Chemistry Services, *Data Validation for the UniFirst Project, Bressett and UniFirst Sites, Randolph and Williamstown, VT, Organic Analysis Data, Volatile Organics in Water Samples, Sample Delivery Group Nos. BRES50 and UNIF41, September 15, 2011.*
10. Phoenix Chemistry Services, *Data Validation for the UniFirst Project, Williamstown and Bressett Sites, Williamstown and Randolph, VT, Organic Analysis Data, Selected Volatiles in Air Samples (Sample Delivery Group No.200-6293), September 21, 2011.*
11. Phoenix Chemistry Services, *Data Validation for the UniFirst Project, Bressett, Wheatley and UniFirst Sites, Randolph, Brookfield and Williamstown, VT, Organic Analyses Data, Volatile Organics in Water Samples, Sample Delivery Group Nos. BRES51, UNIF42, and WHEA17, January 4, 2012.*
12. State of Vermont, Agency of Natural Resources, Department of Environmental Conservation, *Chapter 12, Groundwater Protection Rule and Strategy*, February, 2005.

**APPENDIX A:
FIGURES**



LEGEND

- State-Listed Hazardous Waste Site
- Roadway



Map Source: USGS Mapping 7.5 Minute Quadrangles: Barre West (1988), Brookfield (1983).
 Data Source: Vermont DEC databases, updated August 2003.



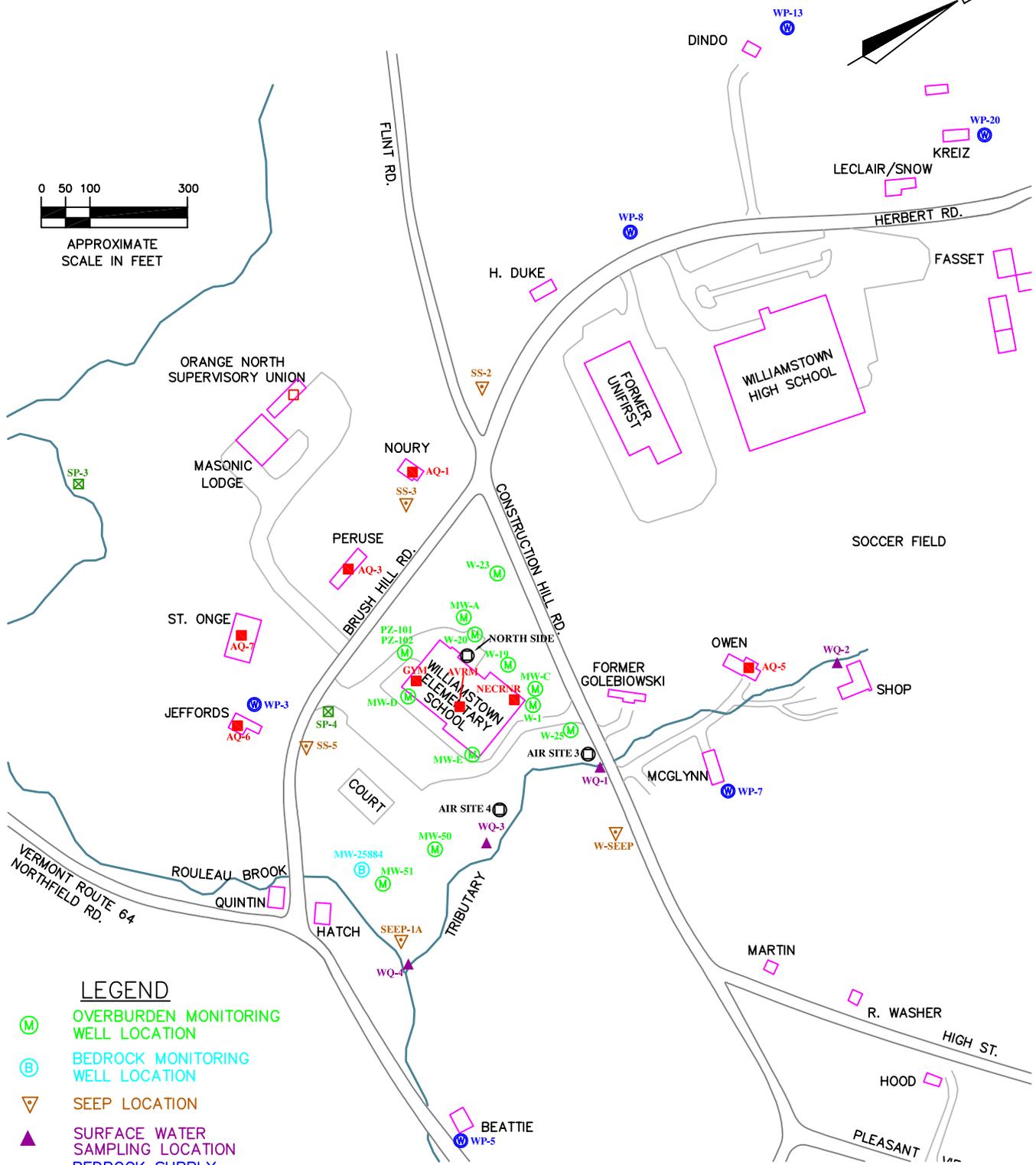
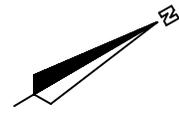
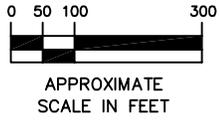
Waite Environmental Management, LLC

SITE LOCATION MAP

UniFirst Plant Site
Williamstown, Vermont

Date: 01/04/05 Drawing No. 1 Scale: 1:24,000 By: MEW

NOTE: ALL LOCATIONS ARE APPROXIMATE



LEGEND

- (M) OVERBURDEN MONITORING WELL LOCATION
- (B) BEDROCK MONITORING WELL LOCATION
- ▽ SEEP LOCATION
- ▲ SURFACE WATER SAMPLING LOCATION
- (W) BEDROCK SUPPLY WELL LOCATION
- X SPRING OR OVERFLOWING SHALLOW WELL LOCATION
- INDOOR AIR SAMPLING LOCATION
- OUTDOOR AIR SAMPLING LOCATION

NOTE: BASEMAP PROVIDED BY THE JOHNSON COMPANY, INC, ENTITLED "SSOMSW.DWG", DATED 4/21/99 AND UPDATED 2/24/06. MAP HAS BEEN ANNOTED/MODIFIED BY W.E.M.

WEM

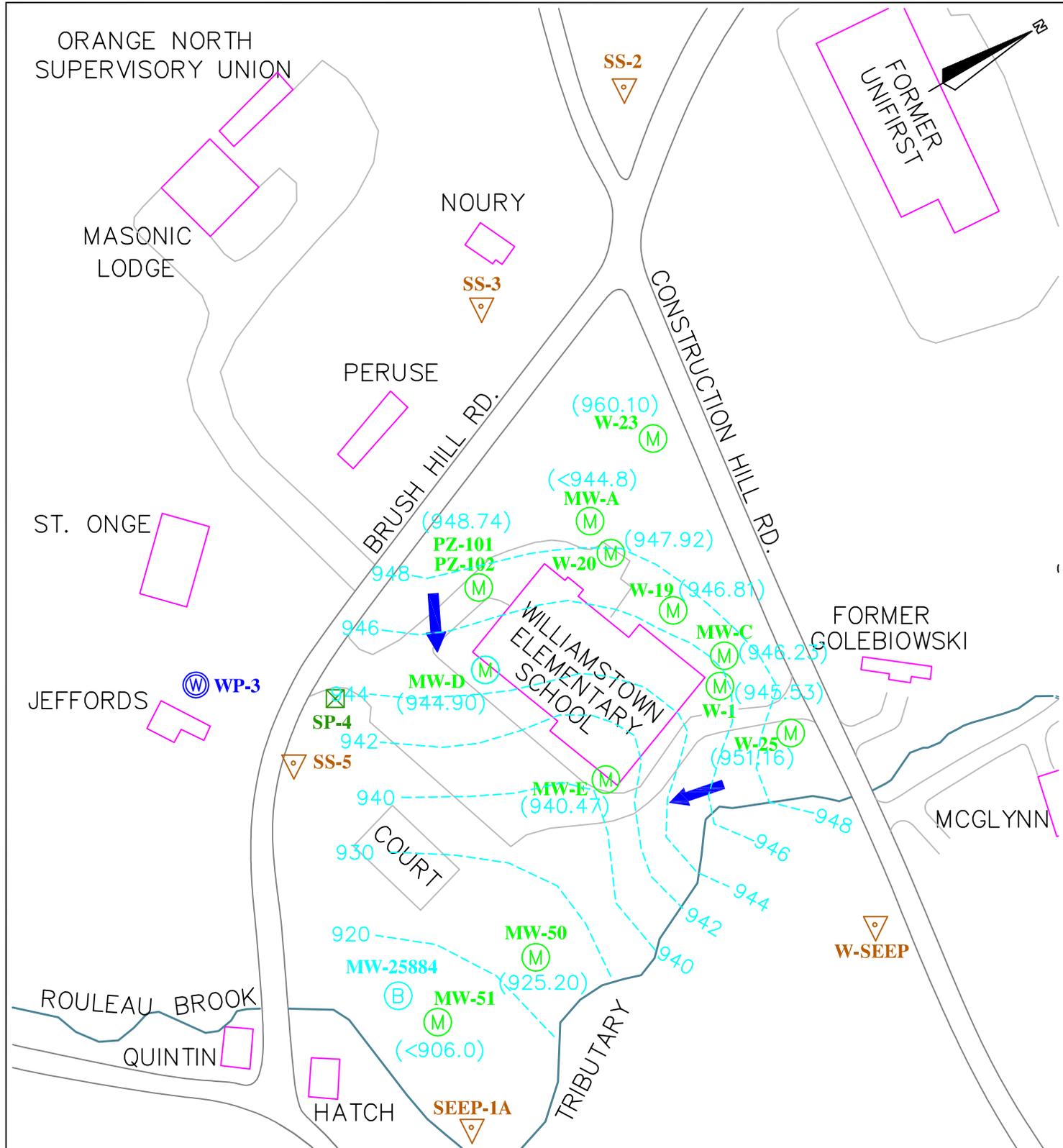
WAITE ENVIRONMENTAL MANAGEMENT

P.O. BOX 4602
BURLINGTON, VT 05406

(P) 802-860-9400
(F) 802-860-9440

SCALE: 1" = 300'	REVISION:	DRAWN BY: SEE NOTE
DATE: 4/14/11	DATE:	PROJECT #: 110320012

SITE PLAN	2 OF 4
UNIFIRST PLANT SITE WILLIAMSTOWN, VERMONT	



LEGEND

- (M) OVERBURDEN MONITORING WELL LOCATION
- (924.76) OVERBURDEN GROUNDWATER ELEVATION (FT NGVD)
- 940-- GROUNDWATER ELEVATION CONTOUR (FT NGVD)
- ➔ GROUNDWATER FLOW DIRECTION

NOTES:
 1. BASEMAP PROVIDED BY THE JOHNSON COMPANY, INC, ENTITLED "SSOMWSW.DWG", DATED 4/21/99 AND UPDATED 2/24/06. MAP HAS BEEN ANNOTED/MODIFIED BY W.E.M.
 2. GROUNDWATER ELEVATIONS MEASURED BY W.E.M. ON 10/19/11

WEM		WAITE ENVIRONMENTAL MANAGEMENT
P.O. BOX 4602 BURLINGTON, VT 05406		(P) 802-860-9400 (F) 802-860-9440
SCALE: 1" = 150'	REVISION:	DRAWN BY: SEE NOTE
DATE: 1/25/12	DATE:	PROJECT #: 110320012

GROUNDWATER ELEVATION CONTOUR MAP: OCTOBER 2011 UNIFIRST PLANT SITE WILLIAMSTOWN, VERMONT		3 OF 4
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ORANGE NORTH
SUPERVISORY UNION

MASONIC
LODGE

NOURY

PERUSE

ST. ONGE

JEFFORDS

BRUSH HILL RD.

CONSTRUCTION HILL RD.

FORMER
UNIFIRST

FORMER
GOLEBIOWSKI

MCGLYNN

COURT

WILLIAMSTOWN
ELEMENTARY
SCHOOL

ROULEAU BROOK

QUINTIN

HATCH

TRIBUTARY

(ND<3)
SS-2

SS-3
(3.8)

(04/11:85)
W-23 (M)

MW-A (M) (dry)

PZ-101 (M) (9.8)

PZ-102 (M) (9.8)

W-20 (M) (69)

W-19 (M) (5.9)

MW-C (M) (15)

MW-D (M) (74)

W-1 (M) (24)

MW-E (M) (34)

W-25 (M) (12)

SS-5 (2.7)

(2.3)
W-SEEP

MW-25884 (B)

MW-50 (M) (4.9)

MW-51 (M) (dry)

SEEP-1A (3.5)

LEGEND

(M) OVERBURDEN MONITORING WELL LOCATION

(30) TOTAL REPORTED VOC CONCENTRATION (PPB)

---50--- VOC CONCENTRATION CONTOUR (PPB)

NOTES:
1. BASEMAP PROVIDED BY THE JOHNSON COMPANY, INC, ENTITLED "SSOMWSW.DWG", DATED 4/21/99 AND UPDATED 2/24/06. MAP HAS BEEN ANNOTED/MODIFIED BY W.E.M.
2. TOTAL REPORTED VOC CONCENTRATION IS CALCULATED AS THE SUM OF PCE, TCE, AND 1,2-DCE CONCENTRATIONS; FOR NON-DETECT VALUES, THE REPORTING LIMIT IS INCLUDED IN THE SUMMATION.
3. ANALYTICAL METHOD = EPA METHOD 8260B. ALL RESULTS HAVE BEEN VALIDATED.

WEM WAITE ENVIRONMENTAL MANAGEMENT
11 KILBURN ST., SUITE 212 BURLINGTON, VT 05406 (P) 802-860-9400 (F) 802-860-9440

SCALE: 1" = 150'	REVISION:	DRAWN BY: SEE NOTE
DATE: 1/25/12	DATE:	PROJECT #: 110320012

TOTAL REPORTED VOCs IN GROUNDWATER: OCTOBER 2011 UNIFIRST PLANT SITE WILLIAMSTOWN, VERMONT	4 OF 4
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APPENDIX B:
TABLES



TABLE 1.1
Groundwater Elevation Measurements: 2008 - 2011
UniFirst Plant Site, Williamstown, Vermont

Location	Type	Units	Apr-08	Oct-08	May-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11
MW-A	Monitoring Well	FT	< 944.8	< 944.8	< 944.8	< 944.8	< 944.8	< 944.8	< 944.8	< 944.8
MW-C	Monitoring Well	FT		946.02		945.86		946.18		946.23
MW-D	Monitoring Well	FT		943.17		943.23		944.83		944.90
MW-E	Monitoring Well	FT		939.64		939.65		940.64		940.47
MW-50	Monitoring Well	FT		926.61		924.40		925.79		925.20
MW-51	Monitoring Well	FT	< 906.0	< 906.0	< 906.0	< 906.0	< 906.0	< 906.0	< 906.0	< 906.0
W-1	Monitoring Well	FT		945.47		945.41		945.50		945.53
W-19	Monitoring Well	FT		946.81		946.70		946.84		946.81
W-20	Monitoring Well	FT		948.46		947.61		948.00		947.92
W-23	Monitoring Well	FT	960.94	< 956.7	959.93	< 956.7	959.88	959.12	962.98	960.10
W-25	Monitoring Well	FT		949.70		949.25		950.60		951.16
PZ-101	Monitoring Well	FT		947.14		947.15		949.14		948.73
PZ-102	Monitoring Well	FT		946.90		947.20		949.01		948.74
MW-25884	Bedrock MW	FT	905.31	904.46	905.09	904.43	905.73	905.40		905.06

Notes:

-All elevations in feet above NGVD; "NGVD" = National Geodetic Vertical Datum (1988).
 -"<"= less than bottom elevation of well, signifying that the well dry during monitoring event; "NA" =not available; blank = not sampled.



TABLE 1.2
Dissolved Oxygen Field Measurements: 2008 - 2011
UniFirst Plant Site, Williamstown, Vermont

Location	Type	Units	Apr-08	Oct-08	May-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11
MW-A	Monitoring Well	mg/L	DRY							
MW-C	Monitoring Well	mg/L		5.18		7.27		7.48		9.65
MW-D	Monitoring Well	mg/L		5.85		7.57		7.40		9.93
MW-E	Monitoring Well	mg/L		3.10		8.44		6.81		8.69
MW-50	Monitoring Well	mg/L		4.37		6.62		7.11		8.82
MW-51	Monitoring Well	mg/L	DRY							
W-1	Monitoring Well	mg/L		4.67		7.25		6.22		9.24
W-19	Monitoring Well	mg/L		2.24		4.20		6.26		9.14
W-20	Monitoring Well	mg/L		2.37		4.60		6.05		8.53
W-23	Monitoring Well	mg/L	11.68	DRY	2.61	DRY	7.04			
W-25	Monitoring Well	mg/L		4.37		5.23		7.18		7.58
PZ-101	Monitoring Well	mg/L		8.78		8.22		7.33		10.63
PZ-102	Monitoring Well	mg/L		5.48		4.38		7.77		7.63
MW-25884	Bedrock MW	mg/L	0.99	0.00	0.79	0.65	1.41	4.32		6.77
SEEP-1A	Seep	mg/L	10.17	4.07	2.20	2.95	7.25	6.98	15.22	8.93
SS-2	Seep	mg/L	9.26	4.25	2.44	4.40	6.62	7.80	13.92	9.37
SS-3	Seep	mg/L	5.90	DRY	DRY	DRY	3.45	6.49	10.55	10.32
SS-5	Seep	mg/L	6.78	8.73	0.49	3.02	7.54	8.67	8.08	9.87
W-SEEP	Seep	mg/L	9.75	4.41	3.10	7.81	5.50	8.82	13.15	9.56
SP-4	Unused Spring	mg/L	7.28	2.89	0.00	4.27	3.30	6.75	10.44	8.71
SP-3	Unused Spring	mg/L	9.84	4.33	2.18	6.01	7.48	8.37	11.74	8.46

Notes:

- "Dry" = well dry during monitoring event; "NA" = not available; blank = not sampled.
- Seep-1 location was moved 20 ft to southeast in 10/04; now called Seep-1A
- Seep SS-1 sampling location was covered with construction fill during the summer of 2006.



TABLE 1.3
Specific Conductance Field Measurements: 2008- 2011
UniFirst Plant Site, Williamstown, Vermont

Location	Type	Units	Apr-08	Oct-08	May-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11
MW-A	Monitoring Well	us/cm	DRY							
MW-C	Monitoring Well	us/cm		661		905		838		1050
MW-D	Monitoring Well	us/cm		801		1060		1150		1170
MW-E	Monitoring Well	us/cm		627		986		889		966
MW-50	Monitoring Well	us/cm		503		704		545		705
MW-51	Monitoring Well	us/cm	DRY							
W-1	Monitoring Well	us/cm		610		990		798		940
W-19	Monitoring Well	us/cm		564		977		718		855
W-20	Monitoring Well	us/cm		540		928		769		858
W-23	Monitoring Well	us/cm	791	DRY	685	DRY	NA		NA	
W-25	Monitoring Well	us/cm		681		980		1090		1060
PZ-101	Monitoring Well	us/cm		741		1200		1330		1180
PZ-102	Monitoring Well	us/cm		410		900		791		937
MW-25884	Bedrock MW	us/cm	707	426	1030	920	NA	825		901
SEEP-1A	Seep	us/cm	651	676	744	900	NA	696	956	885
SS-2	Seep	us/cm	624	598	743	940	NA	868	663	920
SS-3	Seep	us/cm	934	DRY	DRY	DRY	NA	900	967	990
SS-5	Seep	us/cm	1270	205	1380	1220	NA	1060	1170	1050
W-SEEP	Seep	us/cm	1130	676	1260	920	NA	1180	2140	1410
SP-4	Unused Spring	us/cm	189	840	1080	1200	NA	1340	745	952
SP-3	Unused Spring	us/cm	423	315	380	510	NA	460	583	510

Notes:

- "Dry" = well dry during monitoring event; "NA" = not available due to equipment error; blank = not sampled.
- Seep-1 location was moved 20 ft to southeast in 10/04; now called Seep-1A
- Seep SS-1 sampling location was covered with construction fill during the summer of 2006.



TABLE 1.4
Temperature Field Measurements: 2008 - 2011
UniFirst Plant Site, Williamstown, Vermont

Location	Type	Units	Apr-08	Oct-08	May-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11
MW-A	Monitoring Well	deg C	DRY							
MW-C	Monitoring Well	deg C		12.6		11.3		10.7		12.1
MW-D	Monitoring Well	deg C		14.0		14.3		13.0		13.6
MW-E	Monitoring Well	deg C		14.7		14.0		12.0		13.5
MW-50	Monitoring Well	deg C		13.7		10.6		11.5		12.6
MW-51	Monitoring Well	deg C	DRY							
W-1	Monitoring Well	deg C		13.6		11.7		11.1		12.7
W-19	Monitoring Well	deg C		14.2		10.0		11.5		12.9
W-20	Monitoring Well	deg C		15.2		10.9		11.2		13.3
W-23	Monitoring Well	deg C	6.5	DRY	8.9	DRY	10.2			
W-25	Monitoring Well	deg C		13.6		10.5		11.7		12.8
PZ-101	Monitoring Well	deg C		14.7		10.6		11.2		12.7
PZ-102	Monitoring Well	deg C		15.5		11.9		11.5		12.6
MW-25884	Bedrock MW	deg C	8.9	10.4	11.8	10.0	10.5	11.0		10.7
SEEP-1A	Seep	deg C	7.5	14.2	11.3	7.7	8.5	9.7	10.5	12.1
SS-2	Seep	deg C	10.1	14.8	14.7	9.6	10.2	8.8	12.0	11.3
SS-3	Seep	deg C	9.2	DRY	DRY	DRY	10.1	10.2	11.9	12.7
SS-5	Seep	deg C	9.0	15.1	15.6	6.9	10.3	9.0	12.8	11.9
W-SEEP	Seep	deg C	9.2	15.1	14.2	9.7	9.3	9.3	10.9	11.9
SP-4	Unused Spring	deg C	8.0	16.8	9.0	13.0	8.0	13.5	6.1	15.3
SP-3	Unused Spring	deg C	7.3	13.0	9.5	10.3	8.3	10.3	9.8	11.5

Notes:

- "Dry" = well dry during monitoring event; "NA" = not available; blank = not sampled.
- Seep-1 location was moved 20 ft to southeast in 10/04; now called Seep-1A
- Seep SS-1 sampling location was covered with construction fill during the summer of 2006.



TABLE 1.5
pH Field Measurements: 2008 - 2011
UniFirst Plant Site, Williamstown, Vermont

Location	Type	Units	Apr-08	Oct-08	May-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11
MW-A	Monitoring Well	unitless	DRY							
MW-C	Monitoring Well	unitless				6.46		6.46		7.39
MW-D	Monitoring Well	unitless				6.62		6.57		7.46
MW-E	Monitoring Well	unitless				6.64		6.32		7.36
MW-50	Monitoring Well	unitless				6.51		6.30		7.10
MW-51	Monitoring Well	unitless	DRY							
W-1	Monitoring Well	unitless				6.53		6.47		7.57
W-19	Monitoring Well	unitless				6.22		6.20		7.17
W-20	Monitoring Well	unitless				6.85		6.43		7.11
W-23	Monitoring Well	unitless	7.53		7.45	DRY	7.49		NA	
W-25	Monitoring Well	unitless				6.45		6.27		6.81
PZ-101	Monitoring Well	unitless				6.26		5.79		5.95
PZ-102	Monitoring Well	unitless				6.66		5.79		6.55
MW-25884	Bedrock MW	unitless	7.41		7.42	7.39	7.45	7.02		7.62
SEEP-1A	Seep	unitless	7.37		7.32	6.72	7.37	6.39	7.45	7.99
SS-2	Seep	unitless	7.66		7.55	6.37	7.48	6.47	7.93	7.92
SS-3	Seep	unitless	6.93	DRY	DRY	DRY	7.13	6.34	8.04	7.66
SS-5	Seep	unitless	7.41		7.23	7.02	7.63	6.52	7.91	7.89
W-SEEP	Seep	unitless	7.69		7.45	6.54	7.31	6.31	7.42	7.53
SP-4	Unused Spring	unitless	7.34		7.23	6.43	7.20	6.43	8.24	7.55
SP-3	Unused Spring	unitless	7.32		7.43	6.86	7.40	6.72	8.29	8.22

Notes:

- "Dry" = well dry during monitoring event; "NA" = not available; blank = not sampled.
- Seep-1 location was moved 20 ft to southeast in 10/04; now called Seep-1A
- Seep SS-1 sampling location was covered with construction fill during the summer of 2006.



TABLE 1.6
Turbidity Field Measurements: 2008 - 2011
UniFirst Plant Site, Williamstown, Vermont

Location	Type	Units	Apr-08	Oct-08	May-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11
MW-A	Monitoring Well	NTU	DRY							
MW-C	Monitoring Well	NTU		149		76		NA		0.0
MW-D	Monitoring Well	NTU		229		33		NA		0.4
MW-E	Monitoring Well	NTU		76		151		NA		165
MW-50	Monitoring Well	NTU		27		52		NA		8
MW-51	Monitoring Well	NTU	DRY							
W-1	Monitoring Well	NTU		294		24		NA		0.0
W-19	Monitoring Well	NTU		24		1.6		NA		0.0
W-20	Monitoring Well	NTU		425		31		NA		0.0
W-23	Monitoring Well	NTU	8.1	DRY	37.8	DRY	108		NA	
W-25	Monitoring Well	NTU		128		95		NA		158
PZ-101	Monitoring Well	NTU		48		40		NA		18
PZ-102	Monitoring Well	NTU		93		19		NA		13
MW-25884	Bedrock MW	NTU	NA	97	24	0.0	41.4	NA		0.0
SEEP-1A	Seep	NTU	47	374	123	978	221	NA	232	>1000
SS-2	Seep	NTU	10.0	21	31.9	93	165	NA	27.6	302
SS-3	Seep	NTU	3.5	DRY	DRY	DRY	223	NA	122	100
SS-5	Seep	NTU	2.2	60	68	71	219	NA	323	46
W-SEEP	Seep	NTU	3.2	> 1000	285	124	259	NA	10.0	279
SP-4	Unused Spring	NTU	4.7	24	55	12	161	NA	64.8	0.0
SP-3	Unused Spring	NTU	0.0	4.4	23	1.6	129	NA	35.8	8.8

Notes:

- "Dry" = well dry during monitoring event; "NA" = not available due to equipment error; blank = not sampled.
- Seep-1 location was moved 20 ft to southeast in 10/04; now called Seep-1A
- Seep SS-1 sampling location was covered with construction fill during the summer of 2006.



TABLE 1.7
Redox Potential Field Measurements: 2008 - 2011
UniFirst Plant Site, Williamstown, Vermont

Location	Type	Units	Apr-08	Oct-08	May-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11
MW-A	Monitoring Well	mV	DRY							
MW-C	Monitoring Well	mV		113		118		191		32
MW-D	Monitoring Well	mV		119		111		164		59
MW-E	Monitoring Well	mV		110		56		167		53
MW-50	Monitoring Well	mV		113		100		178		95
MW-51	Monitoring Well	mV	DRY							
W-1	Monitoring Well	mV		110		102		176		42
W-19	Monitoring Well	mV		113		145		177		102
W-20	Monitoring Well	mV		3		6		162		-21
W-23	Monitoring Well	mV	149	DRY	149	DRY	163			
W-25	Monitoring Well	mV		124		106		176		97
PZ-101	Monitoring Well	mV		99		63		181		118
PZ-102	Monitoring Well	mV		105		49		177		104
MW-25884	Bedrock MW	mV	-104	-265	-120	-140	-153	-155		-190
SEEP-1A	Seep	mV	178	81	88	-8	164	158	70	-105
SS-2	Seep	mV	162	59	55	117	169	184	63	-139
SS-3	Seep	mV	187	DRY	DRY	DRY	140	148	37	-1
SS-5	Seep	mV	93	90	69	-32	161	147	-22	-25
W-SEEP	Seep	mV	162	11	152	106	182	186	80	-58
SP-4	Unused Spring	mV	137	125	-73	58	141	166	2	3
SP-3	Unused Spring	mV	112	84	-3	37	71	45	5	-36

Notes:

- "Dry" = well dry during monitoring event; "NA" = not available; blank = not sampled.
- Seep-1 location was moved 20 ft to southeast in 10/04; now called Seep-1A
- Seep SS-1 sampling location was covered with construction fill during the summer of 2006.



TABLE 2.0
MONITORING WELL & SEEP RESULTS: 2009-2011
UniFirst Plant Site, Williamstown, Vermont

Location	Parameter Method 8280B	Groundwater Enforcement Standard	Units	May-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11
W-1	PCE	5.0	ug/L		25		21		22
	TCE	5.0	ug/L		0.64 J		0.82 J		0.93 J
	cis-1,2-DCE	70.0	ug/L		1.0 U		1.0 U		1.0 U
	trans-1,2-DCE	100.0	ug/L		1.0 U		1.0 U		1.0 U
W-19	PCE	5.0	ug/L		8.7		2.7		3.9
	TCE	5.0	ug/L		2.0		0.33 J		1.0 U
	cis-1,2-DCE	70.0	ug/L		1.0 U		1.0 U		1.0 U
	trans-1,2-DCE	100.0	ug/L		1.0 U		1.0 U		1.0 U
W-20	PCE	5.0	ug/L		24		22		33
	TCE	5.0	ug/L		22		20		31
	cis-1,2-DCE	70.0	ug/L		3.4		3.0		4.5
	trans-1,2-DCE	100.0	ug/L		1.0 U		1.0 U		1.0 U
W-23	PCE	5.0	ug/L	69	DRY	120		82	
	TCE	5.0	ug/L	1.8 J	DRY	3.0		2.3	
	cis-1,2-DCE	70.0	ug/L	1.0 U	DRY	0.24 J		1.0 U	
	trans-1,2-DCE	100.0	ug/L	1.0 U	DRY	1.0 U		1.0 U	
W-25	PCE	5.0	ug/L		7.5		8.1		8.9
	TCE	5.0	ug/L		1.2 U		1.6		1.9
	cis-1,2-DCE	70.0	ug/L		0.27 J		0.19 J		1.0 U
	trans-1,2-DCE	100.0	ug/L		1.0 U		1.0 U		1.0 U
MW-50	PCE	5.0	ug/L		2.0		2.7		2.3
	TCE	5.0	ug/L		2.9		3.1		2.2
	cis-1,2-DCE	70.0	ug/L		0.61 J		0.51 J		0.42 J
	trans-1,2-DCE	100.0	ug/L		1.0 U		0.25 J		1.0 U
MW-51	PCE	5.0	ug/L	DRY	DRY	DRY	DRY	DRY	DRY
	TCE	5.0	ug/L	DRY	DRY	DRY	DRY	DRY	DRY
	cis-1,2-DCE	70.0	ug/L	DRY	DRY	DRY	DRY	DRY	DRY
	trans-1,2-DCE	100.0	ug/L	DRY	DRY	DRY	DRY	DRY	DRY
MW-A	PCE	5.0	ug/L	DRY	DRY	DRY	DRY	DRY	DRY
	TCE	5.0	ug/L	DRY	DRY	DRY	DRY	DRY	DRY
	cis-1,2-DCE	70.0	ug/L	DRY	DRY	DRY	DRY	DRY	DRY
	trans-1,2-DCE	100.0	ug/L	DRY	DRY	DRY	DRY	DRY	DRY
MW-C	PCE	5.0	ug/L		16		11		13
	TCE	5.0	ug/L		0.84 J		0.85 J		0.85 J
	cis-1,2-DCE	70.0	ug/L		1.0 U		1.0 U		1.0 U
	trans-1,2-DCE	100.0	ug/L		1.0 U		1.0 U		1.0 U
MW-D	PCE	5.0	ug/L		77 J		40		54
	TCE	5.0	ug/L		30 J		13		18
	cis-1,2-DCE	70.0	ug/L		3.3 J		1.3		1.8
	trans-1,2-DCE	100.0	ug/L		0.35 J		0.41 J		0.26 J
MW-E	PCE	5.0	ug/L		20		12		23
	TCE	5.0	ug/L		6.4		4.4		8.8
	cis-1,2-DCE	70.0	ug/L		0.79 J		1.2		0.99 J
	trans-1,2-DCE	100.0	ug/L		1.5		1.1		1.3
PZ-101	PCE	5.0	ug/L		5.6		3.3		6.3
	TCE	5.0	ug/L		1.0 U		1.0 U		1.0 U
	cis-1,2-DCE	70.0	ug/L		1.0 U		1.0 U		1.0 U
	trans-1,2-DCE	100.0	ug/L		1.0 U		1.0 U		1.0 U



**TABLE 2.0
MONITORING WELL & SEEP RESULTS: 2009-2011
UniFirst Plant Site, Williamstown, Vermont**

Location	Parameter Method 8280B	Groundwater Enforcement Standard	Units	May-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11
PZ-102	PCE	5.0	ug/L		15		13		8.6
	TCE	5.0	ug/L		0.33 J		0.34 J		0.21 J
	cis-1,2-DCE	70.0	ug/L		1.0 U		1.0 U		1.0 U
	trans-1,2-DCE	100.0	ug/L		1.0 U		1.0 U		1.0 U
MW-25884	PCE	5.0	ug/L	0.65 J	0.36 J	0.40 J	0.61 J		0.51 J
	TCE	5.0	ug/L	0.85 J	0.80 J	0.88 J	0.82 J		0.75 J
	cis-1,2-DCE	70.0	ug/L	0.57 J	0.59 J	0.59 J	0.54 J		0.49 J
	trans-1,2-DCE	100.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U		1.0 U
W-SEEP	PCE	5.0	ug/L	1.0 U	0.26 J	1.0 U	1.0 U	1.0 U	0.25 J
	TCE	5.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	cis-1,2-DCE	70.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-DCE	100.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SEEP-1A	PCE	5.0	ug/L	2.3	2.3	1.8	1.5	1.4	1.4
	TCE	5.0	ug/L	1.3	1.7	1.1	0.79 J	0.88 J	1.1
	cis-1,2-DCE	70.0	ug/L	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-DCE	100.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SS-2	PCE	5.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	TCE	5.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	cis-1,2-DCE	70.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-DCE	100.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SS-3	PCE	5.0	ug/L	DRY	DRY	5.8	4.2	4.2	2.2 J
	TCE	5.0	ug/L	DRY	DRY	0.49 J	1.0 U	0.33 J	0.56 J
	cis-1,2-DCE	70.0	ug/L	DRY	DRY	1.0 U	1.0 U	1.0 U	0.26 J
	trans-1,2-DCE	100.0	ug/L	DRY	DRY	1.0 U	1.0 U	1.0 U	1.0 U
SS-5	PCE	5.0	ug/L	0.92 J	1.0 U	0.66 J	0.39 J	0.77 J	0.25 J
	TCE	5.0	ug/L	2.3	0.85 J	0.75 J	0.59 J	0.51 J	1.2
	cis-1,2-DCE	70.0	ug/L	0.75 J	2.3	0.25 J	0.30 J	1.0 U	1.2
	trans-1,2-DCE	100.0	ug/L	1.0 U	0.24 J	1.00 U	1.0 U	1.0 U	1.0 U
SP-3	PCE	5.0	ug/L	0.99 J	1.0 U	1.8	0.73 J	9.9	0.31 J
	TCE	5.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	0.69 J	1.0 U
	cis-1,2-DCE	70.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-DCE	100.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SP-4	PCE	5.0	ug/L	6.9	5.6	8.6	11.0	6.4	10.0
	TCE	5.0	ug/L	3.3	1.6	2.7	1.7	2.0	3.4
	cis-1,2-DCE	70.0	ug/L	0.26 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	trans-1,2-DCE	100.0	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

- "PCE" = tetrachlorethene; "TCE" = trichlorethene; "DCE" = dichloroethene.
- "U" = not detected above listed quantitation limit; "J" = reported concentration is an estimated value; "UJ" = reported quantitation limit is an estimated value; "R" = the data are unusable (analyte may or may not be present).
- Bold values are reported above detection limits; shaded cells are above guidance levels.
- "Dry" = well dry during monitoring event; "NA" = not applicable
- Blank spaces indicate that well/seep was not sampled.
- Data entered from the data validation report for each sampling event.
- Groundwater Enforcement Standards referenced from Table 1, Chapter 12 - Groundwater Protection Rule and Strategy, February 2005



**TABLE 3.0
SUPPLY WELL RESULTS: 2007-2011
UniFirst Plant Site, Williamstown, Vermont**

Owner	Location	Parameter Method 524.2	Groundwater Enforcement Standard	Units	May-07	Oct-07	Apr-08	Oct-08	May-09	Oct-09	Apr-10	Oct-10	Apr-11	Oct-11
Jeffords	WP-3	PCE	0.7	ug/L	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U				
		TCE	5.0	ug/L	0.5 U	0.22 J	0.5 U	0.18 J	0.5 U	0.18 J				
		cis-1,2-DCE	70.0	ug/L	0.5 U									
		trans-1,2-DCE	100.0	ug/L	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U				
Beattie	WP-5	PCE	0.7	ug/L	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U				
		TCE	5.0	ug/L	0.5 U									
		cis-1,2-DCE	70.0	ug/L	0.5 U									
		trans-1,2-DCE	100.0	ug/L	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U				
McGlynn	WP-7	PCE	0.7	ug/L	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U				
		TCE	5.0	ug/L	0.5 U									
		cis-1,2-DCE	70.0	ug/L	0.5 U									
		trans-1,2-DCE	100.0	ug/L	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U				
Duke	WP-8	PCE	0.7	ug/L	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U				
		TCE	5.0	ug/L	0.5 U									
		cis-1,2-DCE	70.0	ug/L	0.5 U									
		trans-1,2-DCE	100.0	ug/L	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U				
Evelyn	WP-13	PCE	0.7	ug/L	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U				
		TCE	5.0	ug/L	0.5 U									
		cis-1,2-DCE	70.0	ug/L	0.5 U									
		trans-1,2-DCE	100.0	ug/L	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U				
Kreisz	WP-20	PCE	0.7	ug/L	0.5 U	0.5 U	0.5 U	0.5 U						
		TCE	5.0	ug/L	0.5 U	0.5 U	0.5 U	0.5 U						
		cis-1,2-DCE	70.0	ug/L	0.5 U	0.5 U	0.5 U	0.5 U						
		trans-1,2-DCE	100.0	ug/L	0.5 U	0.5 U	0.5 U	0.5 U						

Notes:

- "PCE" = tetrachlorethene; "TCE" = trichlorethene; "DCE" = dichloroethene.
- "U" = not detected above listed quantitation limit; "J" = reported concentration is an estimated value; "UJ" = reported quantitation limit is an estimated value.
- "Dry" = well dry during monitoring event; "NA" = not applicable; blank = no sample collected.
- All samples analyzed by EPA Method 524.2.
- Data entered from the data validation report for each sampling event.
- Enforcement Standard for PCE is the Vermont Action Level, taken from the Vermont Department of Health Drinking Water Guidance, December 2002.
- Enforcement Standard for TCE, cis-1,2-DCE, and trans-1,2-DCE is the Federal Maximum Contaminant Level (MCL), December 2002.



**TABLE 4.0
SURFACE WATER QUALITY RESULTS: 2001 - 2011
UniFirst Plant Site, Williamstown, Vermont**

Location	Parameter <small>Method 8260B</small>	Water Quality Standard	Units	Jul-01	Jul-02	Jul-03	Jul-04	Jul-05	Jul-07	Jul-09	Jul-11
WQ-1	PCE	0.8	ug/L	1.0 U	0.65 J	1.0 UJ	1.0 U	1.0 U	0.39 J	1.0 U	1.0 U
	TCE	2.7	ug/L	1.0 U	1.0 U	1.0 J	1.0 U				
	cis-1,2-DCE	NA	ug/L	1.0 U							
	trans-1,2-DCE	NA	ug/L	1.0 U							
WQ-2	PCE	0.8	ug/L	1.0 U	1.0 U	1.0 UJ	1.0 U				
	TCE	2.7	ug/L	1.0 U	1.0 U	1.0 J	1.0 U				
	cis-1,2-DCE	NA	ug/L	1.0 U							
	trans-1,2-DCE	NA	ug/L	1.0 U							
WQ-3	PCE	0.8	ug/L	DRY	1.0 U	1.0 UJ	1.0 U				
	TCE	2.7	ug/L	DRY	1.0 U	1.0 J	1.0 U				
	cis-1,2-DCE	NA	ug/L	DRY	1.0 U						
	trans-1,2-DCE	NA	ug/L	DRY	1.0 U						
WQ-4	PCE	0.8	ug/L	1.0 U	1.0 U	1.0 UJ	1.0 U				
	TCE	2.7	ug/L	1.0 U	1.0 U	1.0 J	1.0 U				
	cis-1,2-DCE	NA	ug/L	1.0 U							
	trans-1,2-DCE	NA	ug/L	1.0 U							

Notes:

- "PCE" = tetrachlorethene; "TCE" = trichlorethene; "DCE" = dichloroethene.
- "U" = not detected above listed quantitation limit; "J" = reported concentration is an estimated value; "UJ" = reported quantitation limit is an estimated value; "R" = the data are unusable (analyte may or may not be present).
- "Dry" = stream dry during monitoring event; "NA" = not applicable; "NS" = not sampled.
- Data (qualified) from 2001-2003 was collected by Tighe & Bond and was entered from tabulated data from annual reports.
- Data (qualified) from 2004- was collected by Waite Environmental Management and was entered from the data validation report for each sampling event.
- Water Quality Standard referenced from Appendix C of "Vermont Water Quality Standards" (water & organisms) , effective July 2, 2000.

TABLE 5.0
INDOOR AIR QUALITY RESULTS: 2008-2011
UniFirst Plant Site, Williamstown, Vermont

Owner	Location	Parameter Method TO-14A/TO-15LL	Guidance Level	Units	Jul-08	Jan-09	Jul-09	Feb-10	Jul-10	Jan-11	Jul-11	
Williamstown Elementary School	AVRM	Tetrachloroethene	1.0	ppbv	0.019	0.013	0.017	0.022	0.012	0.015	0.010 U	
		Trichloroethene	1.0	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
	GYM	Tetrachloroethene	1.0	ppbv	0.010 U	0.010	0.010 U	0.010 U	0.010	0.010 U	0.012	0.010 U
		Trichloroethene	1.0	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
	NECRNR	Tetrachloroethene	1.0	ppbv	0.010 U	0.010 U	0.013	0.010 U	0.025	0.011	0.010 U	0.012
		Trichloroethene	1.0	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Noury	AQ11FLR	Tetrachloroethene	1.0	ppbv	0.010 U	0.010 U	0.086	0.018	0.082	0.022	0.050	
		Trichloroethene	1.0	ppbv	0.010 U	0.010 U	0.012	0.016	0.011	0.010 U	0.010 U	
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
	AQ1BSMT	Tetrachloroethene	1.0	ppbv	0.17	0.20	0.18	0.090 J	0.11	0.027	0.16	
		Trichloroethene	1.0	ppbv	0.010 U	0.015	0.27	0.010 U	0.010 U	0.010 U	0.010 U	
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
Masonic Lodge	AQ2ABSMT	Tetrachloroethene	1.0	ppbv	0.012	0.022	0.018	NS	NS	NS	NS	
		Trichloroethene	1.0	ppbv	0.010 U	0.010 U	0.010 U	NS	NS	NS	NS	
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U	0.010 U	0.010 U	NS	NS	NS	NS	
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U	0.010 U	0.010 U	NS	NS	NS	NS	
ONSU New Building	AQ2B1FLR	Tetrachloroethene	1.0	ppbv	0.010 U	0.022	0.010 U	0.010 U	NS	NS	NS	
		Trichloroethene	1.0	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	NS	NS	NS	
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	NS	NS	NS	
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	NS	NS	NS	
Peruse (Former Manning)	AQ31FLR	Tetrachloroethene	1.0	ppbv	0.010 U	0.35	0.20	5.3	0.032	0.20	0.012	
		Trichloroethene	1.0	ppbv	0.010 U	0.085	0.058	0.13	0.010 U	0.076	0.010 U	
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U	0.010 U	0.011	0.010 U	0.010 U	0.010 U	0.010 U	
	AQ3BSMT	Tetrachloroethene	1.0	ppbv	0.047	0.39	0.54	4.8	1.4	0.31	0.15	
		Trichloroethene	1.0	ppbv	0.010 U	0.095	0.077	0.16	0.049	0.086	0.031	
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U	0.010 U	0.013	0.010	0.010 U	0.010 U	0.010 U	

TABLE 5.0
INDOOR AIR QUALITY RESULTS: 2008-2011
UniFirst Plant Site, Williamstown, Vermont

Owner	Location	Parameter Method TO-14A/TO-15LL	Guidance Level	Units	Jul-08	Jan-09	Jul-09	Feb-10	Jul-10	Jan-11	Jul-11
Owen	AQ51FLR	Tetrachloroethene	1.0	ppbv	0.014	0.021	0.023	0.017	0.012	0.016	0.012
		Trichloroethene	1.0	ppbv	0.010 U	0.010 U	0.018	0.19	0.010 U	0.010 U	0.012
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U						
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U						
	AQ5BSMT	Tetrachloroethene	1.0	ppbv	0.026	0.020	0.021	0.012	0.012	0.014	0.012
		Trichloroethene	1.0	ppbv	0.010 U	0.010 U	0.010 U	0.13	0.045	0.010 U	0.045
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U						
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U						
Jeffords	AQ61FLR	Tetrachloroethene	1.0	ppbv	0.22	0.14	0.26	0.14	0.27	0.11	0.26
		Trichloroethene	1.0	ppbv	0.083	0.024	0.078	0.018	0.11	0.026	0.11
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U						
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U						
	AQ6BSMT	Tetrachloroethene	1.0	ppbv	0.077	0.078	0.081	0.070	0.089	0.050	0.12
		Trichloroethene	1.0	ppbv	0.041	0.013	0.021	0.010 U	0.038	0.010 U	0.046
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U						
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U						
St. Onge	AQ71FLR	Tetrachloroethene	1.0	ppbv	0.012	0.018	0.017	0.014	0.010 U	0.029	0.022
		Trichloroethene	1.0	ppbv	0.055	0.022	0.027	0.010 U	0.010 U	0.010 U	0.010 U
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U						
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U						
	AQ7BSMT	Tetrachloroethene	1.0	ppbv	0.011	0.014	0.020	0.016	0.010 U	0.014	0.011 J
		Trichloroethene	1.0	ppbv	0.025	0.017	0.013	0.010 U	0.016	0.010 U	0.010 U
		cis-1,2-Dichloroethene	9.3	ppbv	0.010 U						
		trans-1,2-Dichloroethene	18.4	ppbv	0.010 U						

Notes:
 -"U" = not detected above listed quantitation limit; "J" = reported concentration is an estimated value; "UJ" = reported quantitation limit is an estimated value; "R" = the data are unusable (analyte may or may not be present).
 -"NA" = Not Available; "NS" = No Sample collected
 -Bold values are reported above quantitation limit; shaded cells are in excess of the guidance level.
 -All data shown have been qualified based on the data validation report for each sampling event.
 -Guidance level for tetrachloroethene and trichloroethene based on results of statewide indoor ambient air survey conducted by the Vermont Dept. Health in 1991-92.
 -Guidance level for cis- and trans-1,2-dichloroethene is based on the EPA Region III risk-based concentration for ambient air (2002 RBC table). These guidance values are for comparative purposes only, as they are not enforceable by Vermont.

**TABLE 6.0
OUTDOOR AIR QUALITY RESULTS: 2008-2011
UniFirst Plant Site, Williamstown, Vermont**

Owner	Location	Parameter Method TO-14A/TO-15LL	Guidance Level	Units	Jan-08	Jul-08	Jan-09	Jul-09	Feb-10	Jul-10	Jan-11	Jul-11	
Williamstown Elementary School	NORTH SIDE	Tetrachloroethene	100,000	ppbv	0.010 U	0.010 U	0.010 U	0.14	0.010 U	0.010 U	0.010 U	0.022	
		Trichloroethene	100,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	
		cis-1,2-Dichloroethene	200,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	
		trans-1,2-Dichloroethene	200,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
	AS-3	Tetrachloroethene	100,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.025
		Trichloroethene	100,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	
		cis-1,2-Dichloroethene	200,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 UJ	0.010 U	0.010 U	
		trans-1,2-Dichloroethene	200,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	
	AS-4	Tetrachloroethene	100,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
		Trichloroethene	100,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
		cis-1,2-Dichloroethene	200,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
		trans-1,2-Dichloroethene	200,000	ppbv	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U

Notes:

- "U" = not detected above listed quantitation limit; "J" = reported concentration is an estimated value; "UJ" = reported quantitation limit is an estimated value; "R" = the data are unusable (analyte may or may not be present).

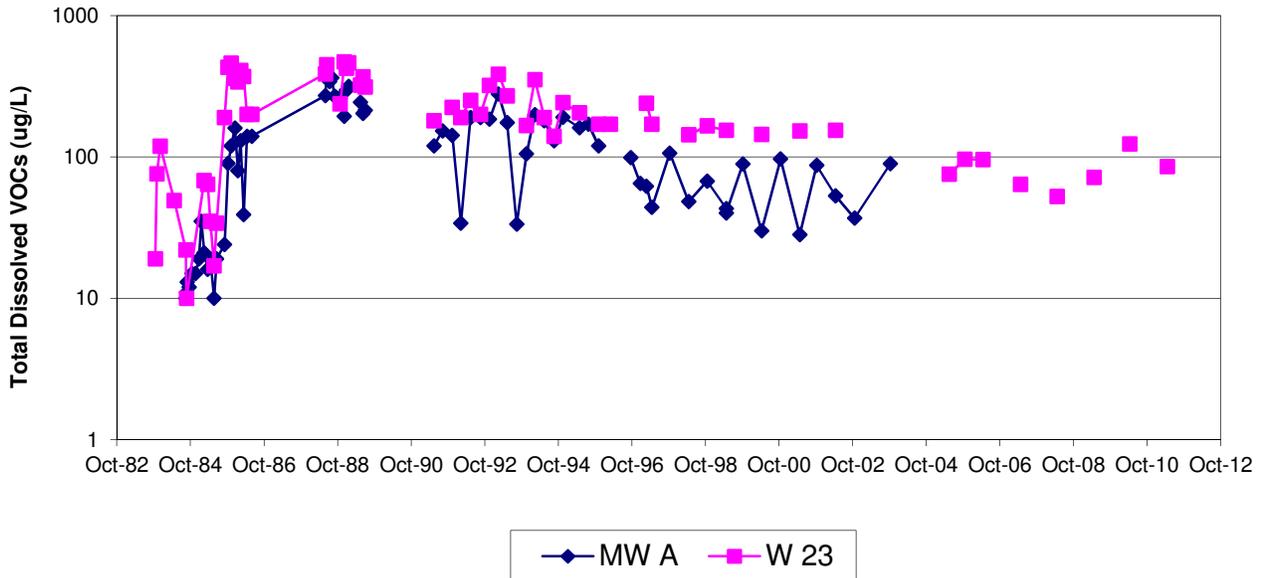
"NA" = Not Available

- All data shown has been qualified based on the data validation report for each sampling event.

Guidance levels are from the Occupational Health and Safety Administration (OSHA), and are based on a time-weighted average exposure (8-hour day, 5 days/week); source: 1910.1000, Tables Z-1 and Z-2, August, 1997.

**APPENDIX C:
GRAPHS**

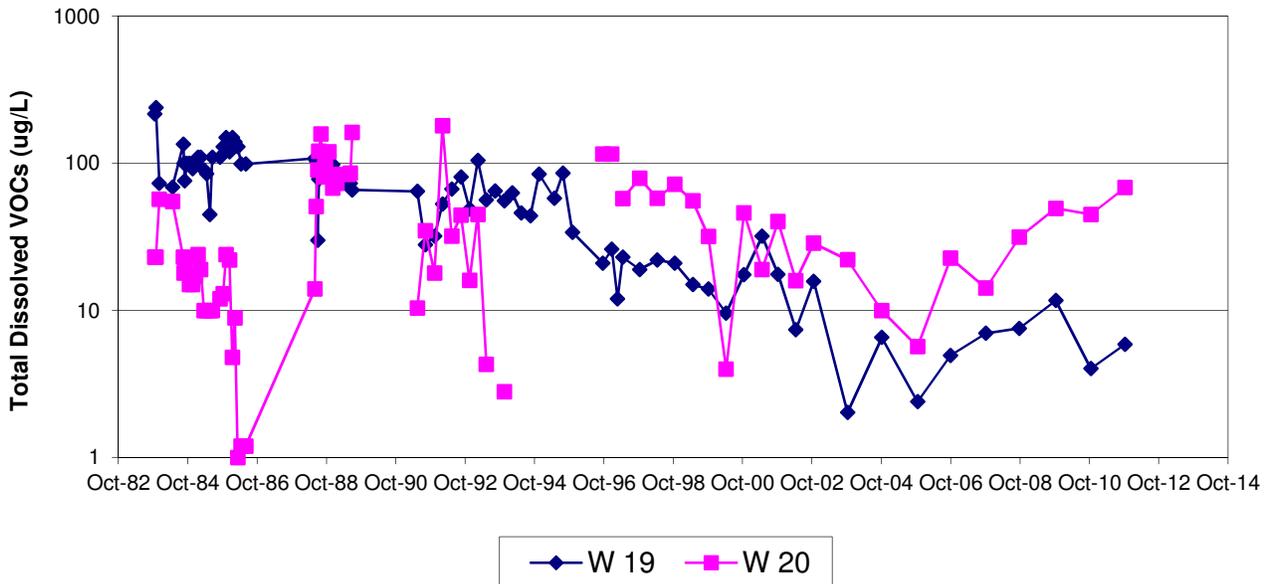
**Total Dissolved VOCs (PCE, TCE, & DCE): MW-A & W-23
UniFirst Plant Site, Williamstown, Vermont**



Notes:

1) Reported concentrations are sums of PCE, TCE, and 1,2-DCE; non-detectable values (i.e. detection limits) are included in the summation process.

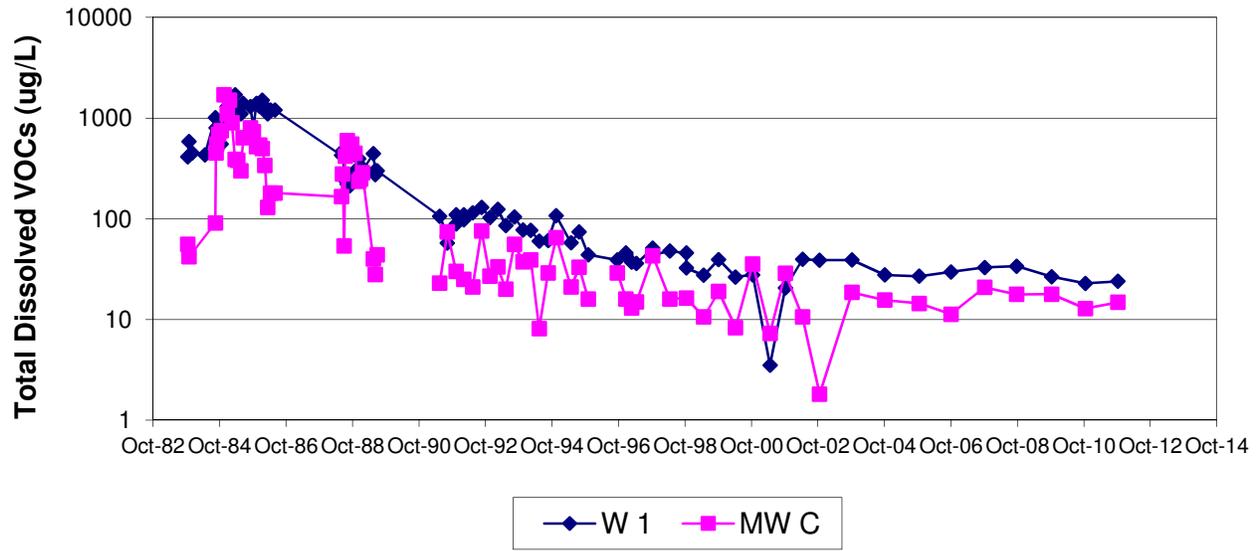
**Total Dissolved VOCs (PCE, TCE, & DCE): W-19 & W-20
UniFirst Plant Site, Williamstown, Vermont**



Notes:

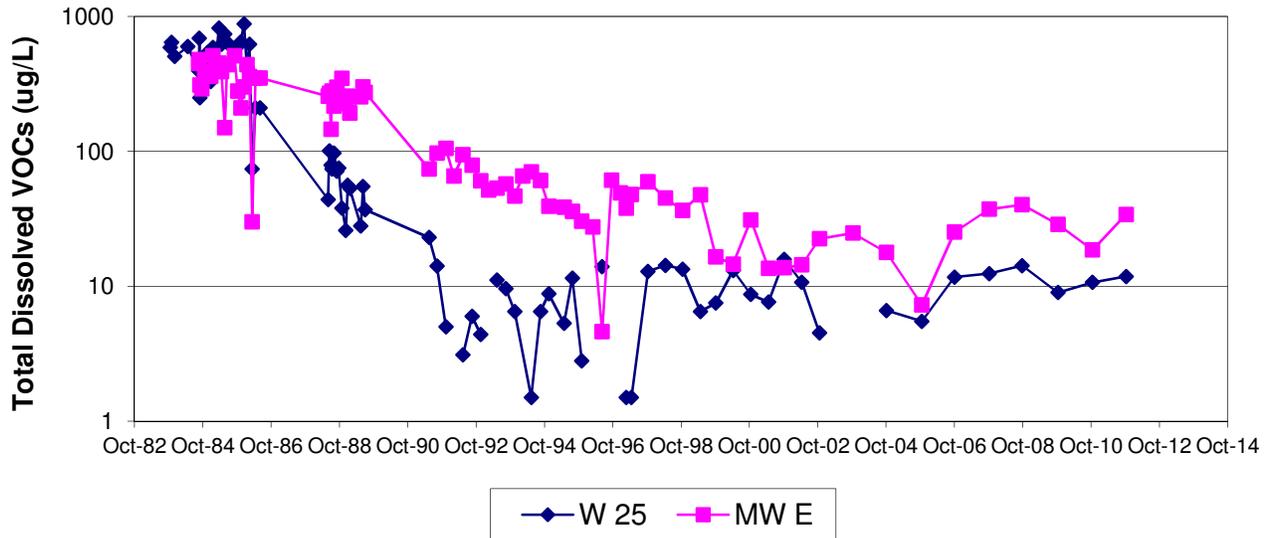
1) Reported concentrations are sums of PCE, TCE, and 1,2-DCE; non-detectable values (i.e. detection limits) are included in the summation process.

**Total Dissolved VOCs (PCE, TCE, & DCE): W-1 & MW-C
UniFirst Plant Site, Williamstown, Vermont**



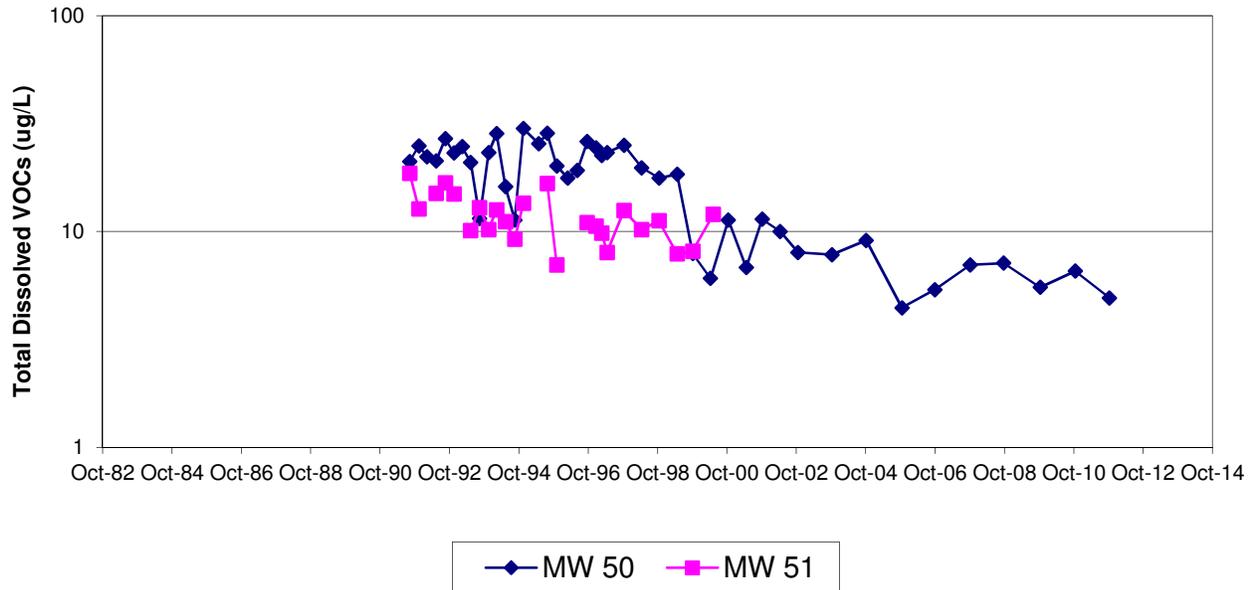
Notes:
1) Reported concentrations are sums of PCE, TCE, and 1,2-DCE; non-detectable values (i.e. detection limits) are included in the summation process.

**Total Dissolved VOCs (PCE, TCE, & DCE): W-25 & MW-E
UniFirst Plant Site, Williamstown, Vermont**



Notes:
1) Reported concentrations are sums of PCE, TCE, and 1,2-DCE; non-detectable values (i.e. detection limits) are included in the summation process.

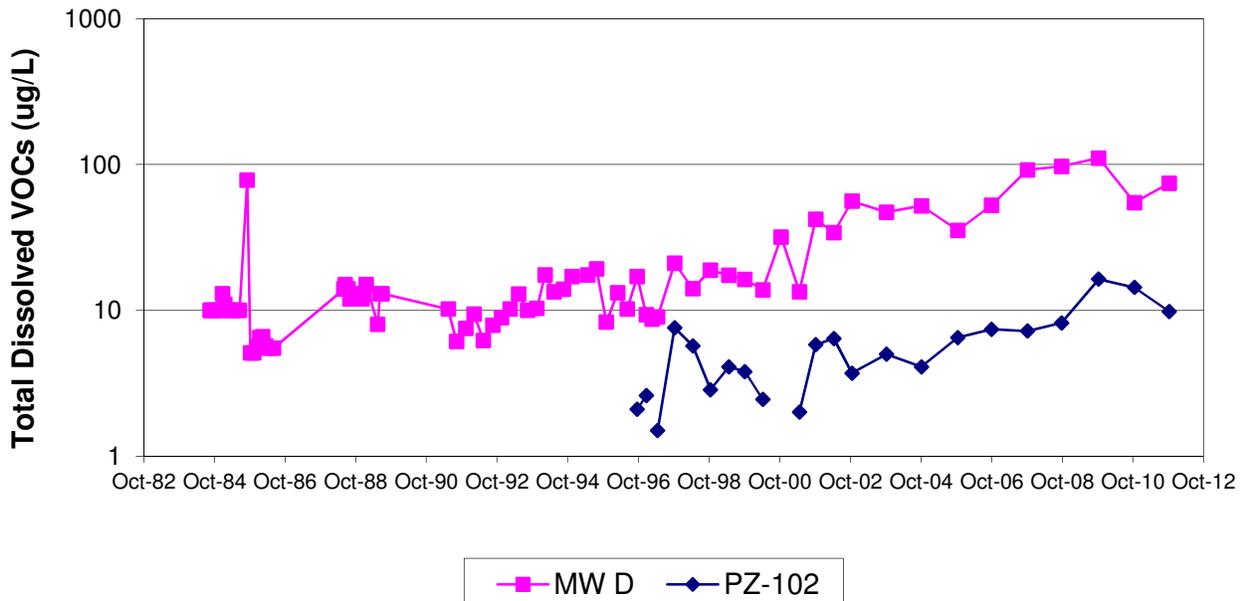
**Total Dissolved VOCs (PCE, TCE, & DCE): MW-50 & MW-51
UniFirst Plant Site, Williamstown, Vermont**



Notes:

1) Reported concentrations are sums of PCE, TCE, and 1,2-DCE; non-detectable values (i.e. detection limits) are included in the summation process.

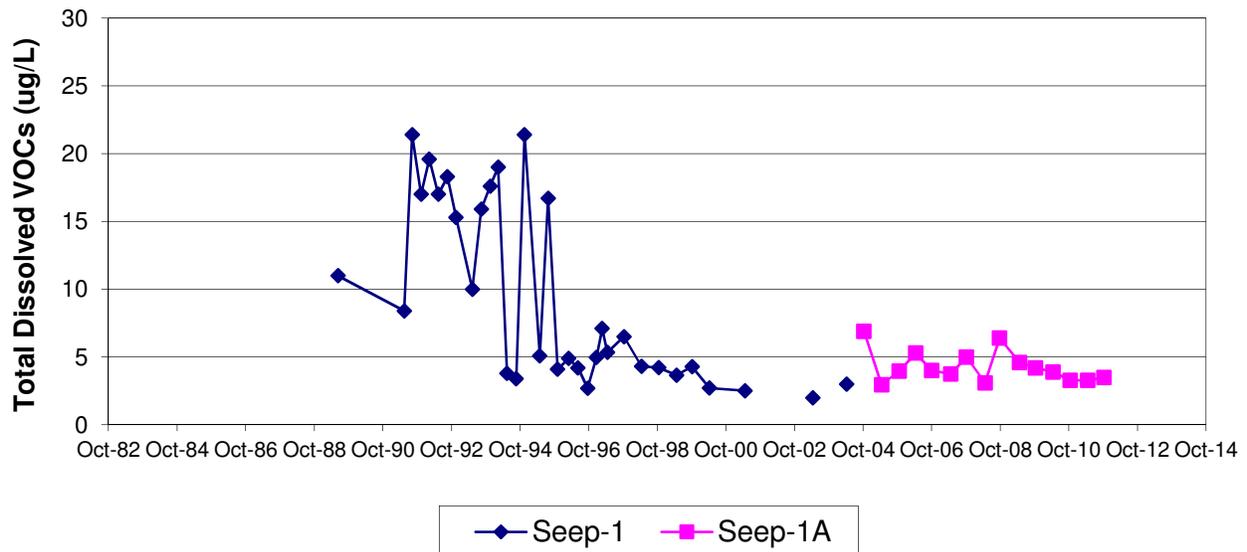
**Total Dissolved VOCs (PCE, TCE, & DCE): MW-D & PZ-102
UniFirst Plant Site, Williamstown, Vermont**



Notes:

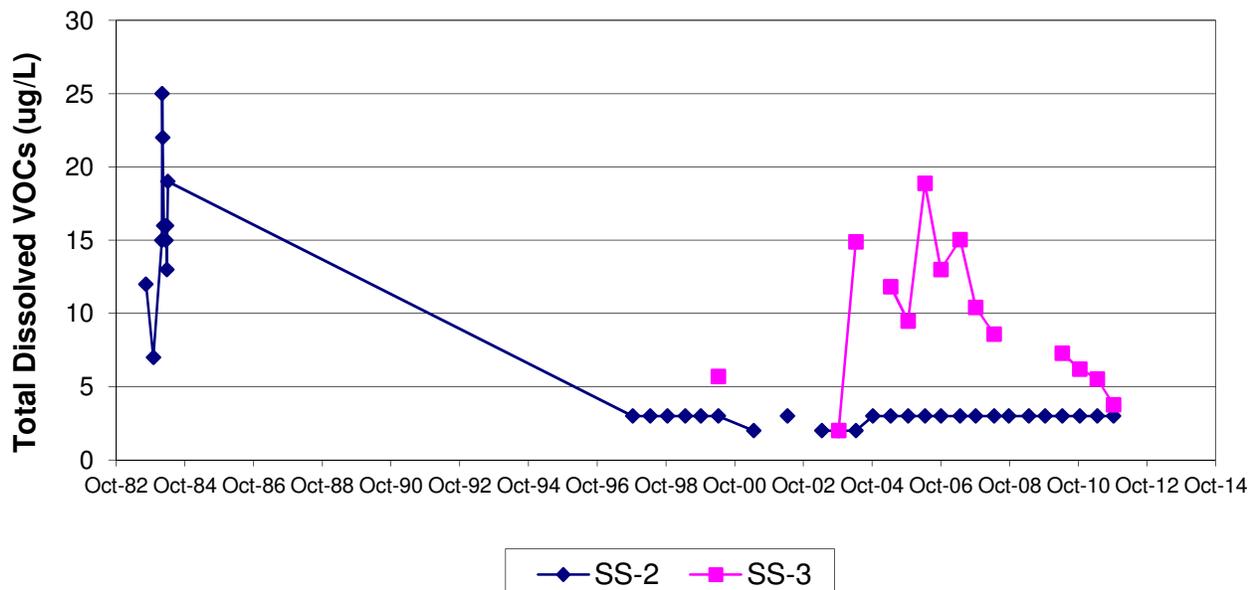
1) Reported concentrations are sums of PCE, TCE, and 1,2-DCE; non-detectable values (i.e. detection limits) are included in the summation process.

Total Dissolved VOCs (PCE, TCE, & DCE): Seep-1 and Seep-1A UniFirst Plant Site, Williamstown, Vermont



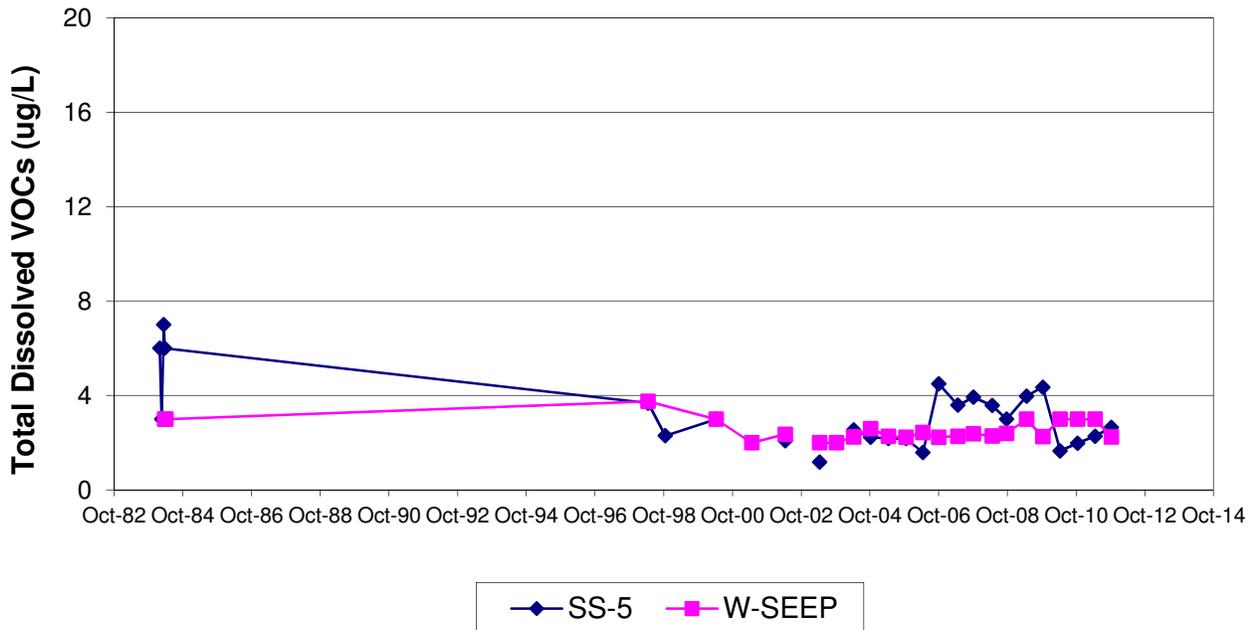
Notes:
1) Reported concentrations are sums of PCE, TCE, and 1,2-DCE; non-detectable values (i.e. detection limits) are included in the summation process.

Total Dissolved VOCs (PCE, TCE, & DCE): SS-2 and SS-3 UniFirst Plant Site, Williamstown, Vermont



Notes:
1) Reported concentrations are sums of PCE, TCE, and 1,2-DCE; non-detectable values (i.e. detection limits) are included in the summation process.

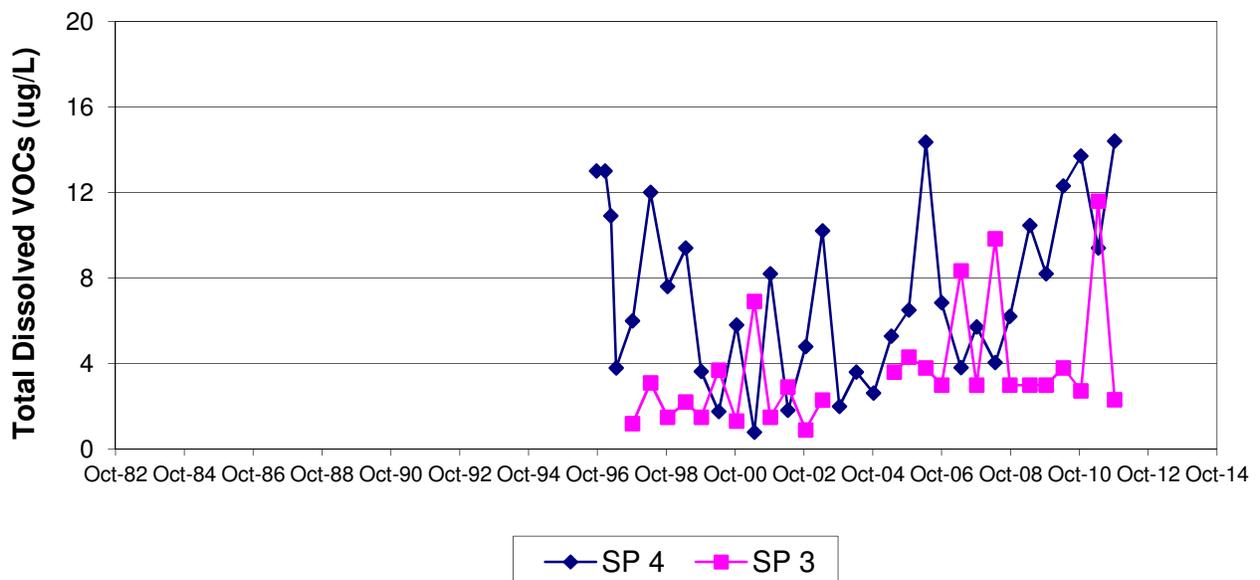
**Total Dissolved VOCs (PCE, TCE, & DCE): SS-5 and W-Seep
UniFirst Plant Site, Williamstown, Vermont**



Notes:

1) Reported concentrations are sums of PCE, TCE, and 1,2-DCE; non-detectable values (i.e. detection limits) are included in the summation process.

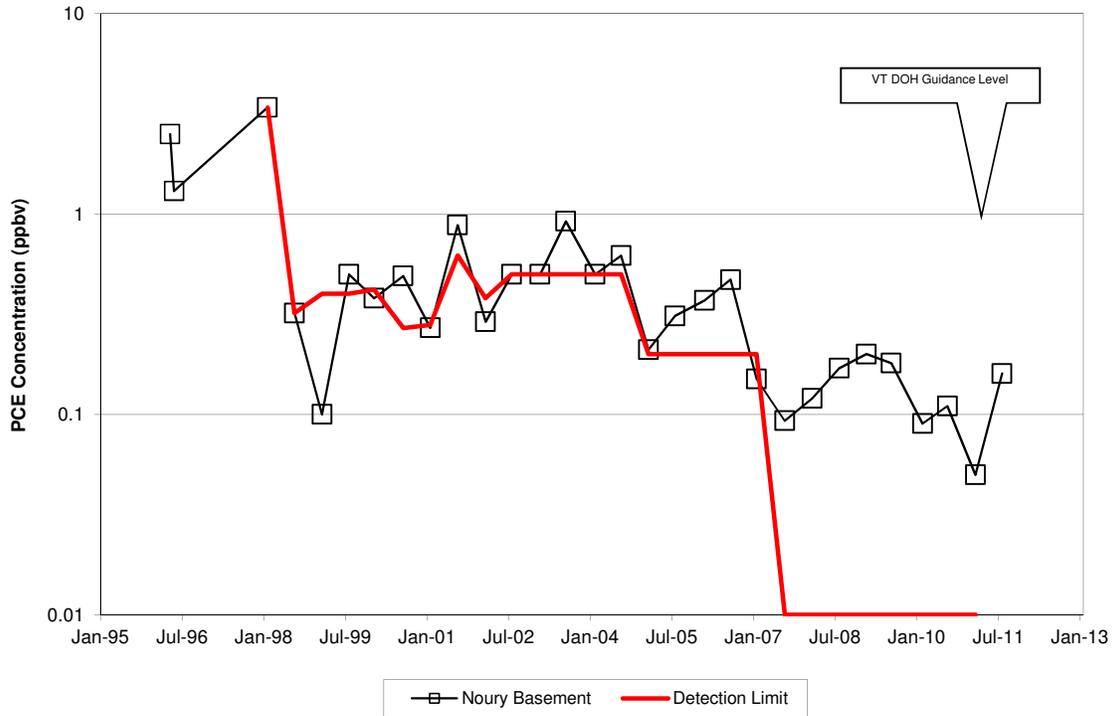
**Total Dissolved VOCs (PCE, TCE, & DCE): SP-4 and SP-3
UniFirst Plant Site, Williamstown, Vermont**



Notes:

1) Reported concentrations are sums of PCE, TCE, and 1,2-DCE; non-detectable values (i.e. detection limits) are included in the summation process.

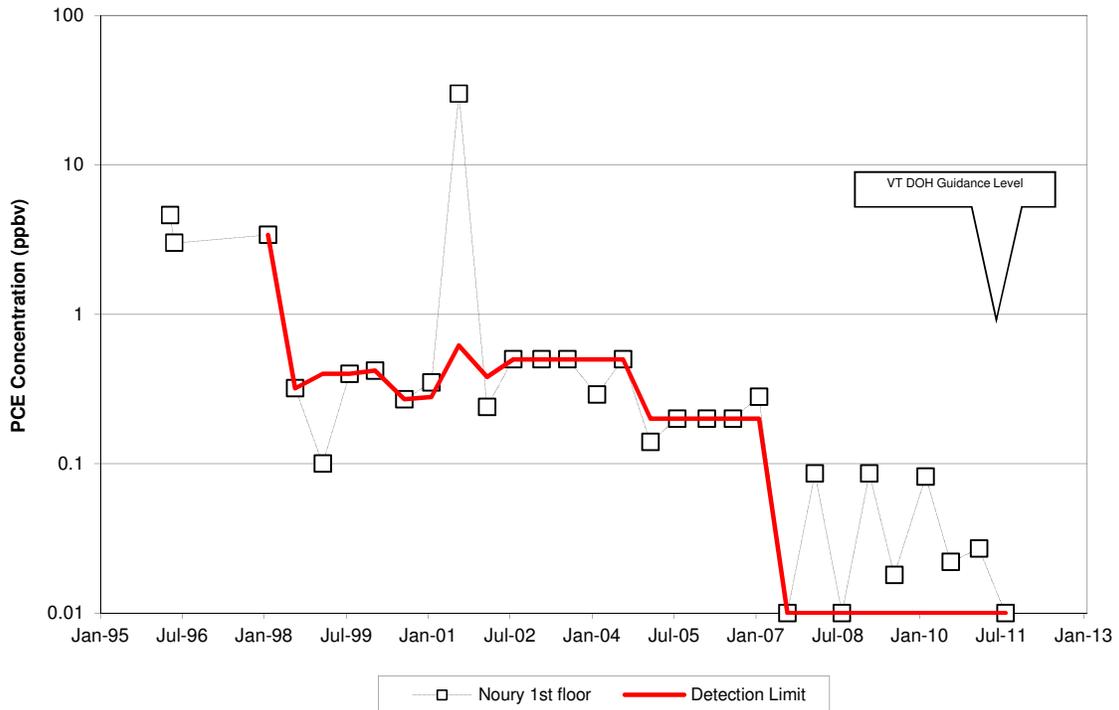
**Indoor Air Summary: PCE (ppbv)
Noury Residence Basement (AQ1BSMT)
UniFirst Plant Site, Williamstown, Vermont**



Notes:

1) Only values above detection limit line are considered positive detections; values below line are estimated only.

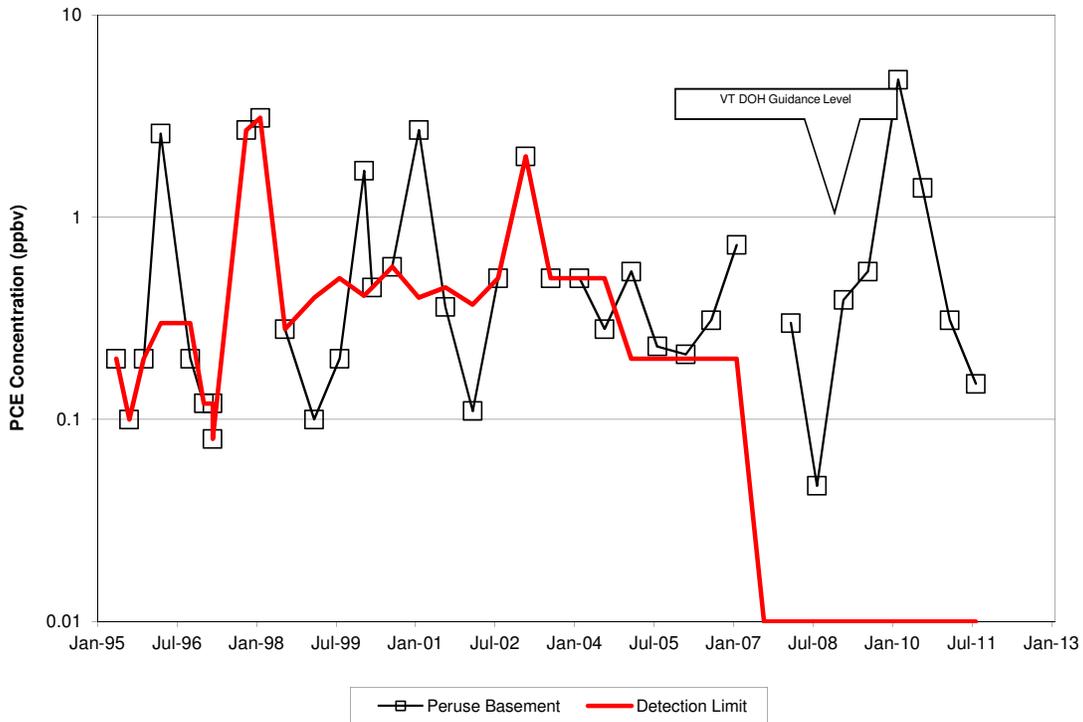
**Indoor Air Summary: PCE (ppbv)
Noury Residence First Floor (AQ11FLR)
UniFirst Plant Site, Williamstown, Vermont**



Notes:

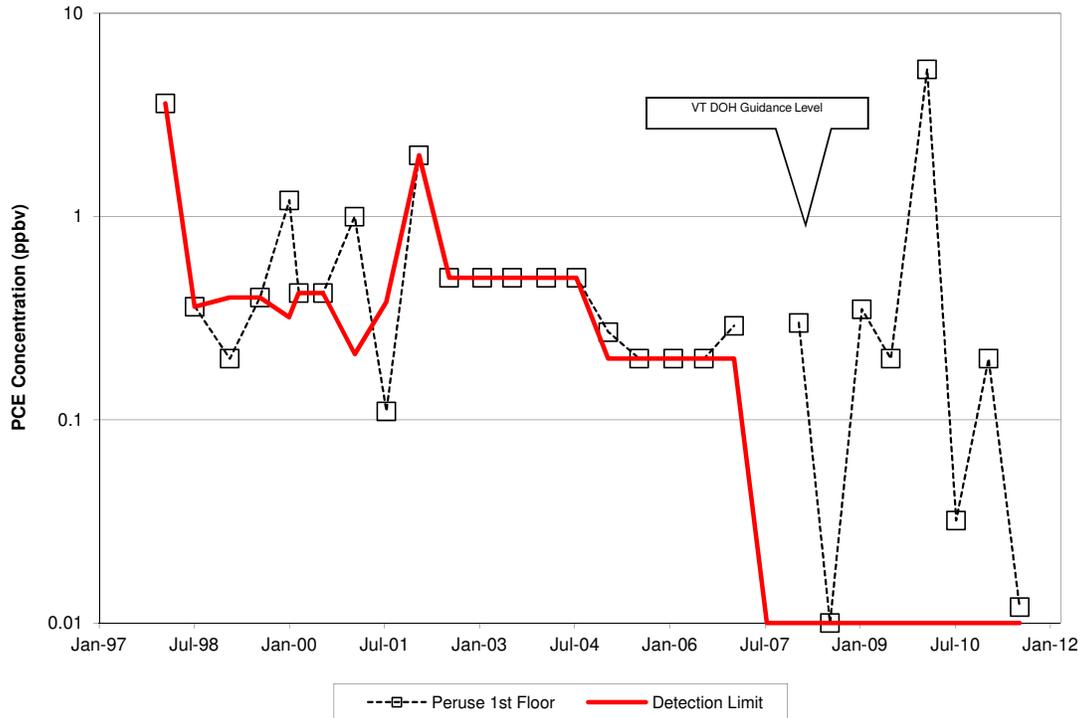
1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: PCE (ppbv)
Peruse Residence Basement (AQ3BSMT)
UniFirst Plant Site, Williamstown, Vermont



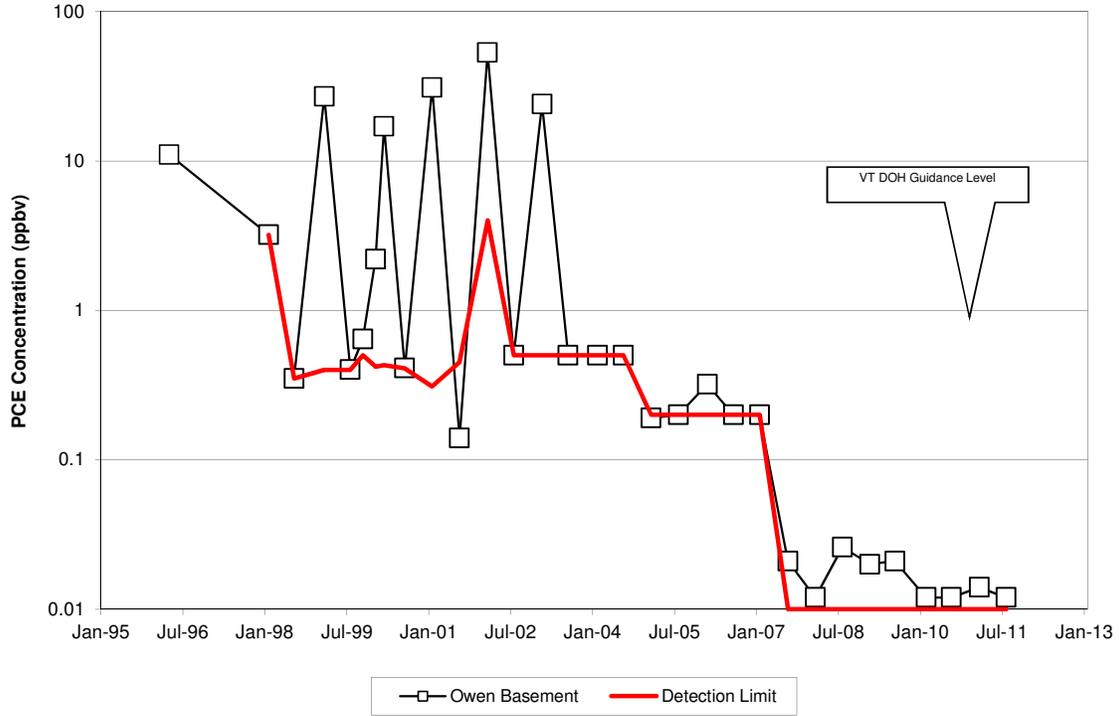
Notes:
 1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: PCE (ppbv)
Peruse Residence First Floor (AQ31FLR)
UniFirst Plant Site, Williamstown, Vermont



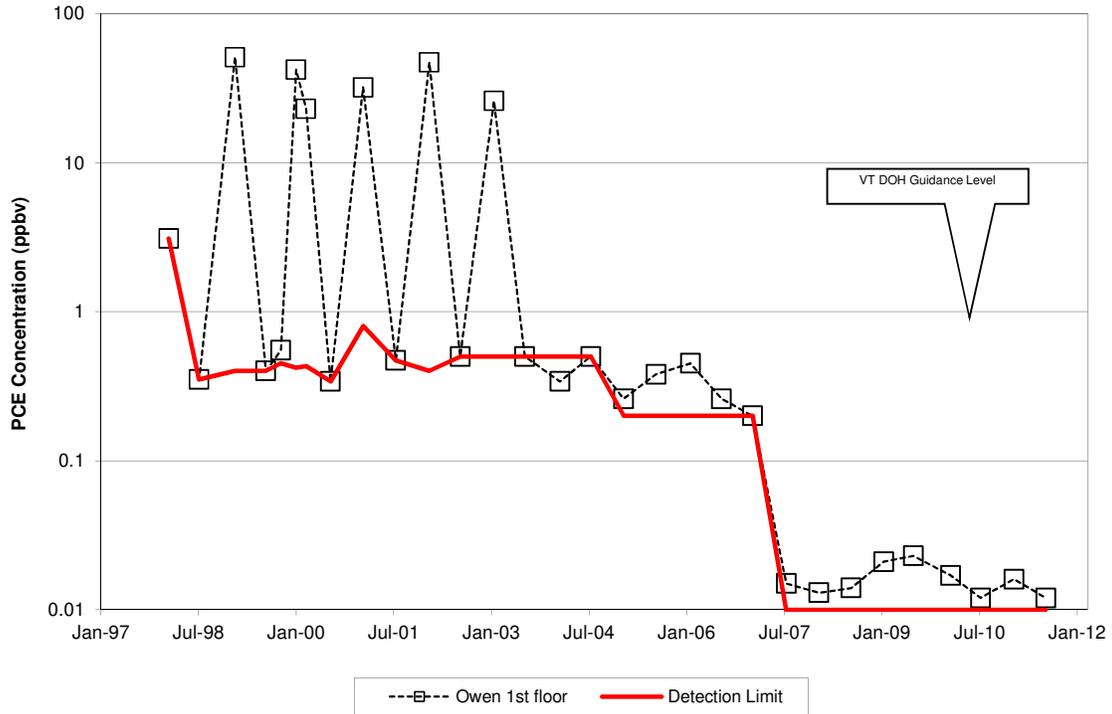
Notes:
 1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: PCE (ppbv)
Owen Residence Basement (AQ5BSMT)
UniFirst Plant Site, Williamstown, Vermont



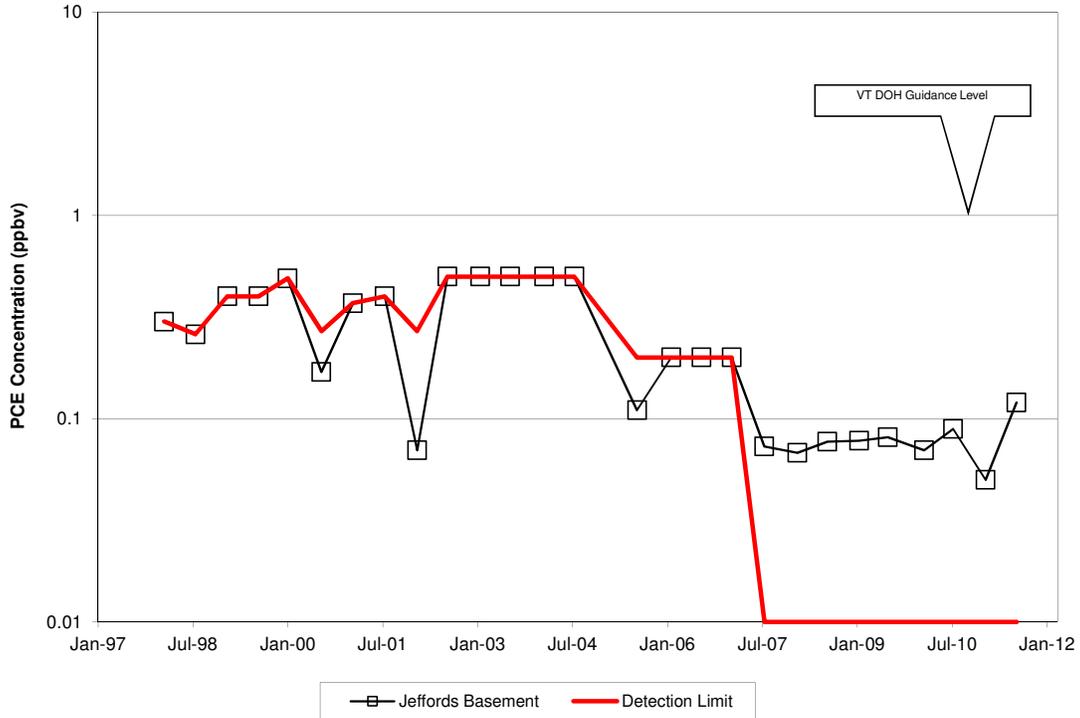
Notes:
 1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: PCE (ppbv)
Owen Residence First Floor (AQ51FLR)
UniFirst Plant Site, Williamstown, Vermont



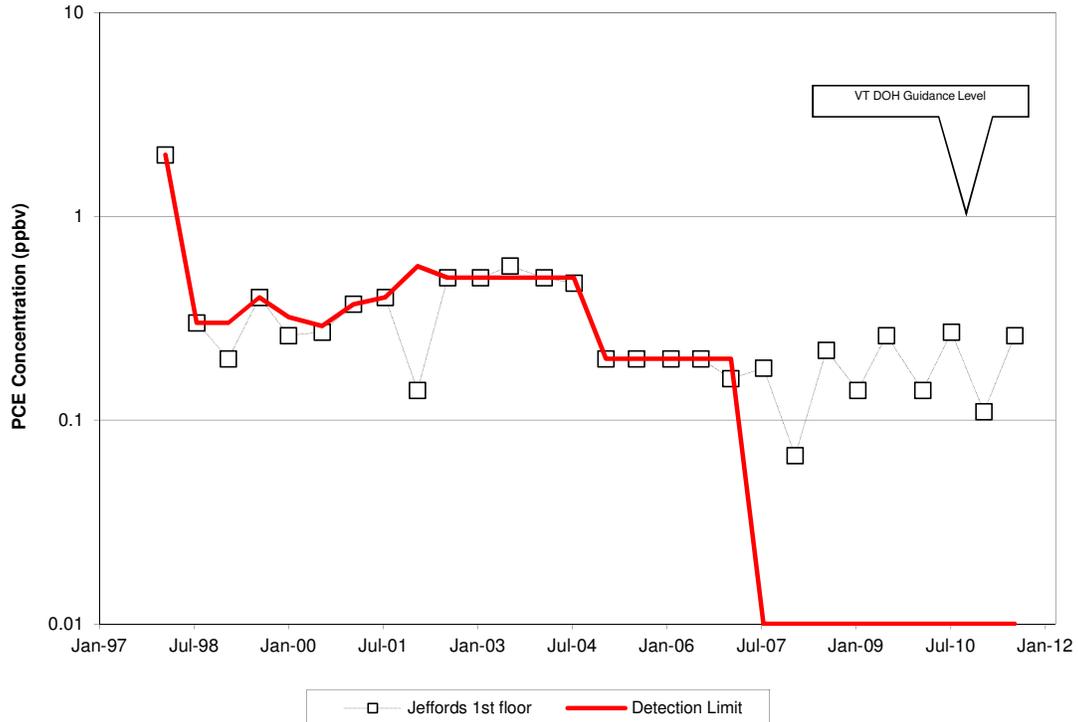
Notes:
 1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: PCE (ppbv)
Jeffords Residence Basement (AQ6BSMT)
UniFirst Plant Site, Williamstown, Vermont



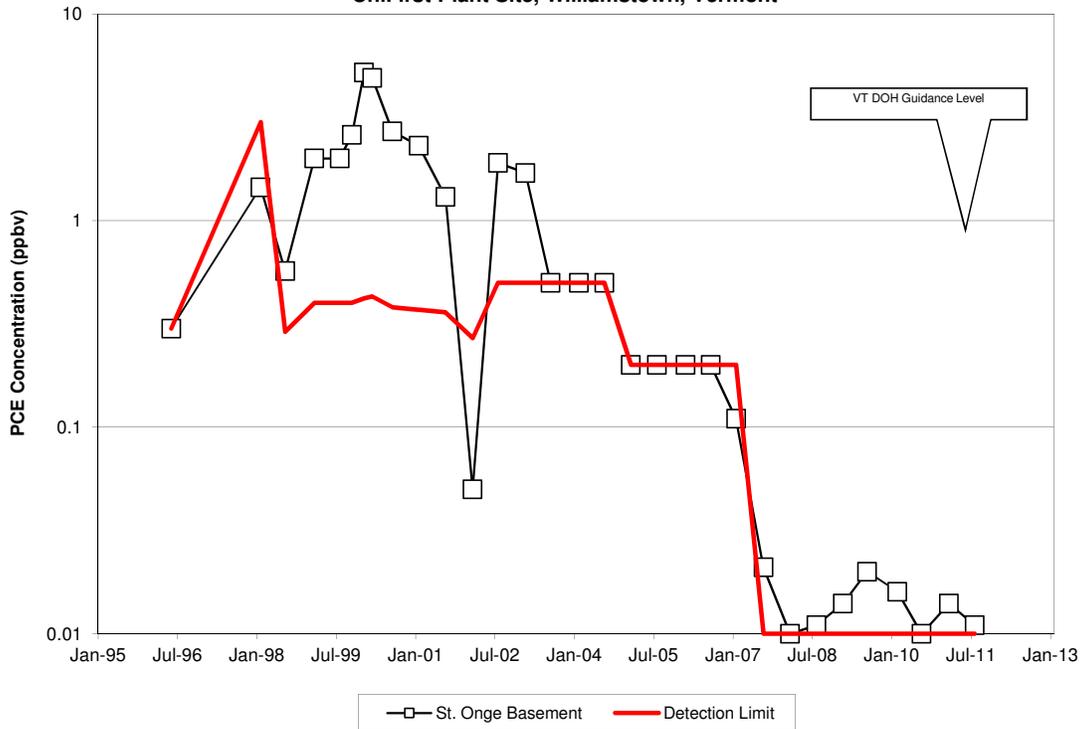
Notes:
 1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: PCE (ppbv)
Jeffords Residence First Floor (AQ61FLR)
UniFirst Plant Site, Williamstown, Vermont



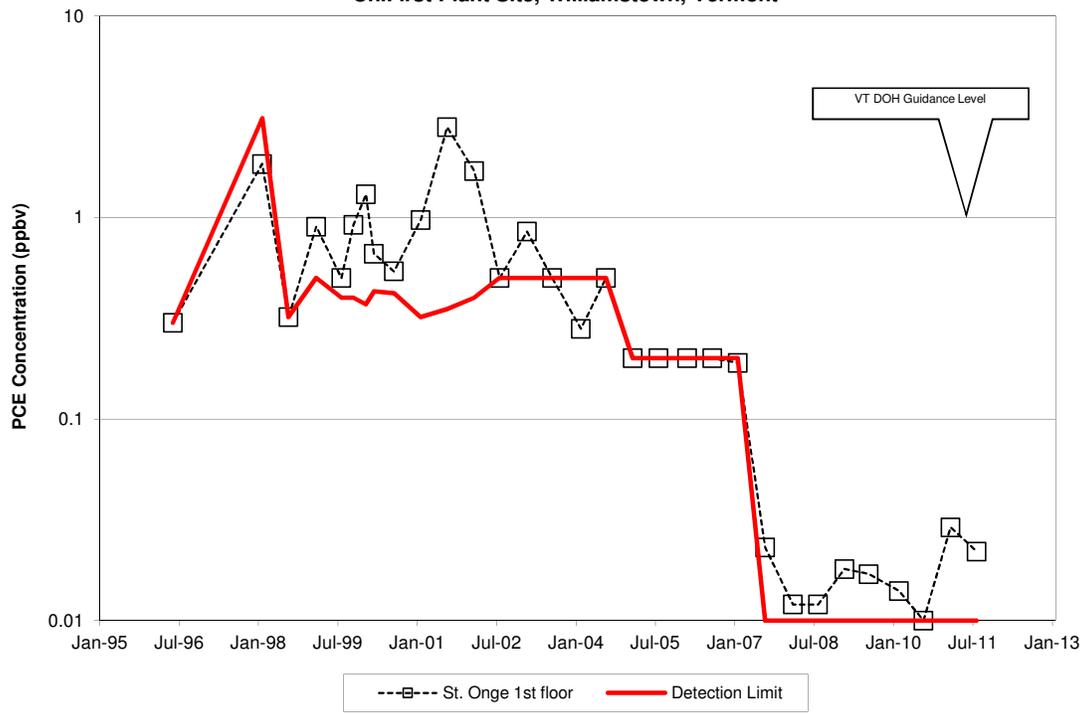
Notes:
 1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: PCE (ppbv)
St. Onge Residence Basement (AQ7BSMT)
UniFirst Plant Site, Williamstown, Vermont



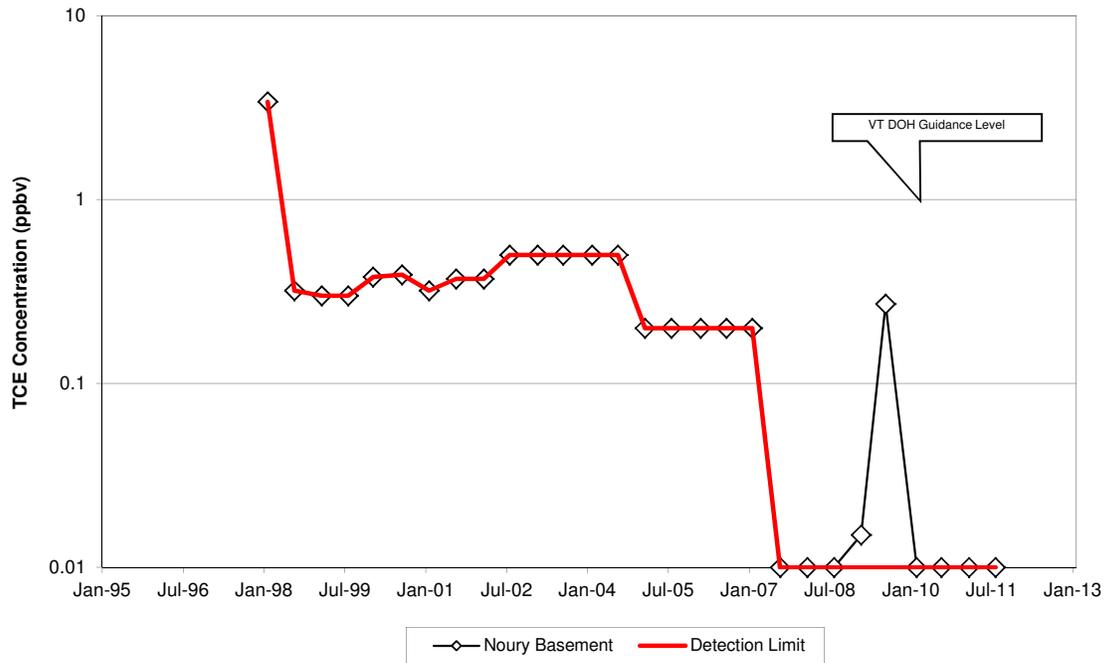
Notes:
 1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: PCE (ppbv)
St. Onge Residence First Floor (AQ71FLR)
UniFirst Plant Site, Williamstown, Vermont



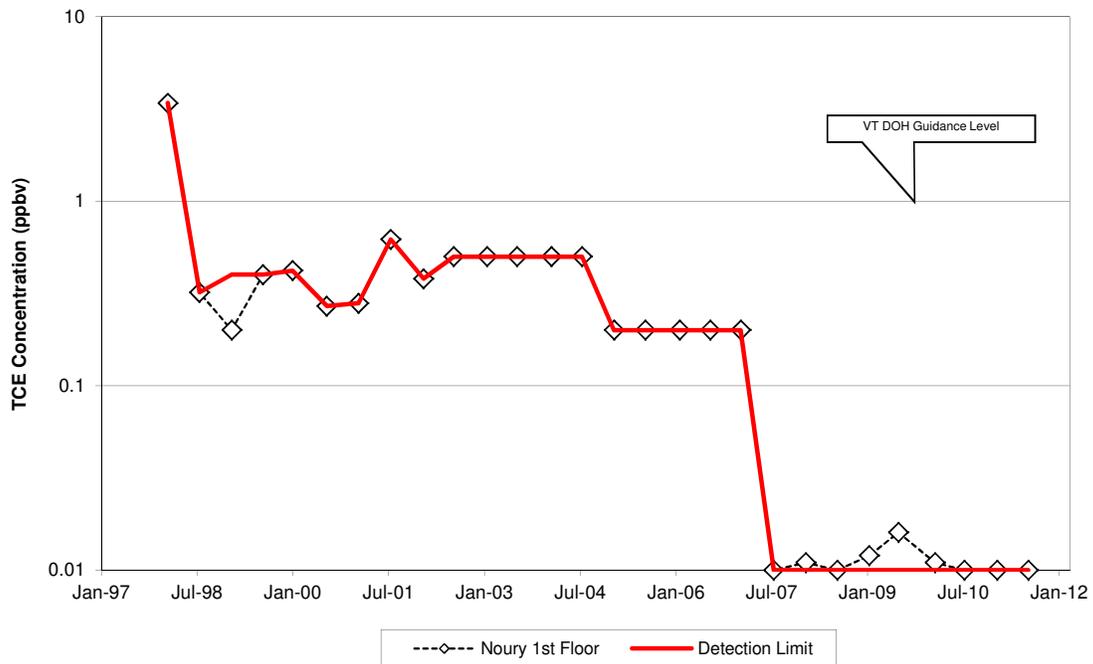
Notes:
 1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: TCE (ppbv)
Noury Residence Basement (AQ1BSMT)
UniFirst Plant Site, Williamstown, Vermont



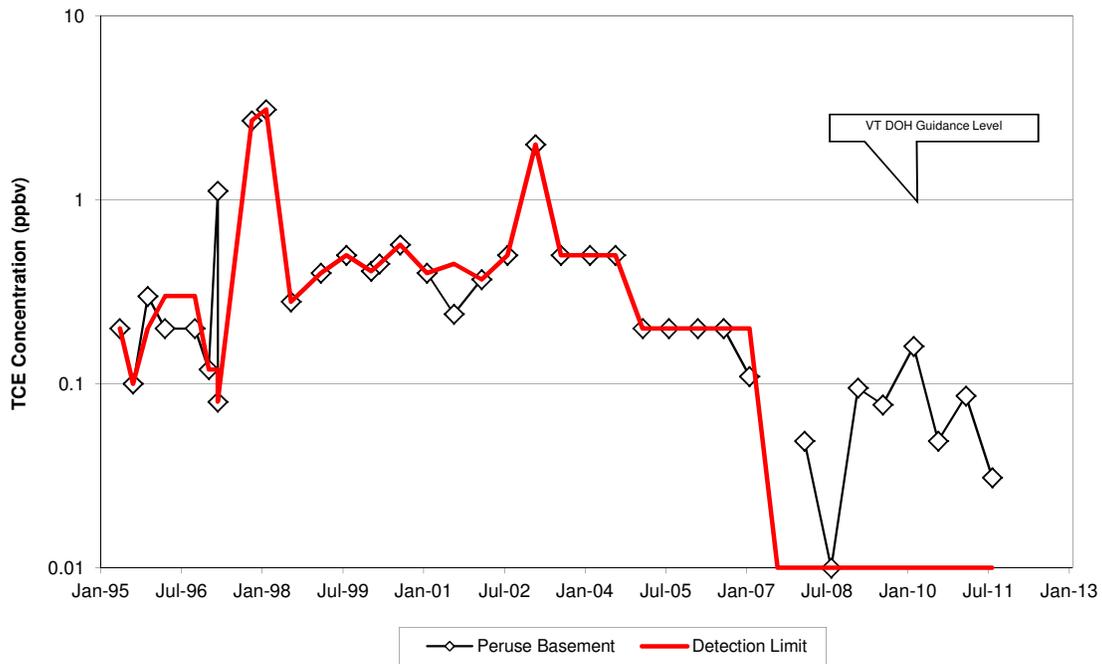
Notes:
 1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: TCE (ppbv)
Noury Residence First Floor (AQ11FLR)
UniFirst Plant Site, Williamstown, Vermont



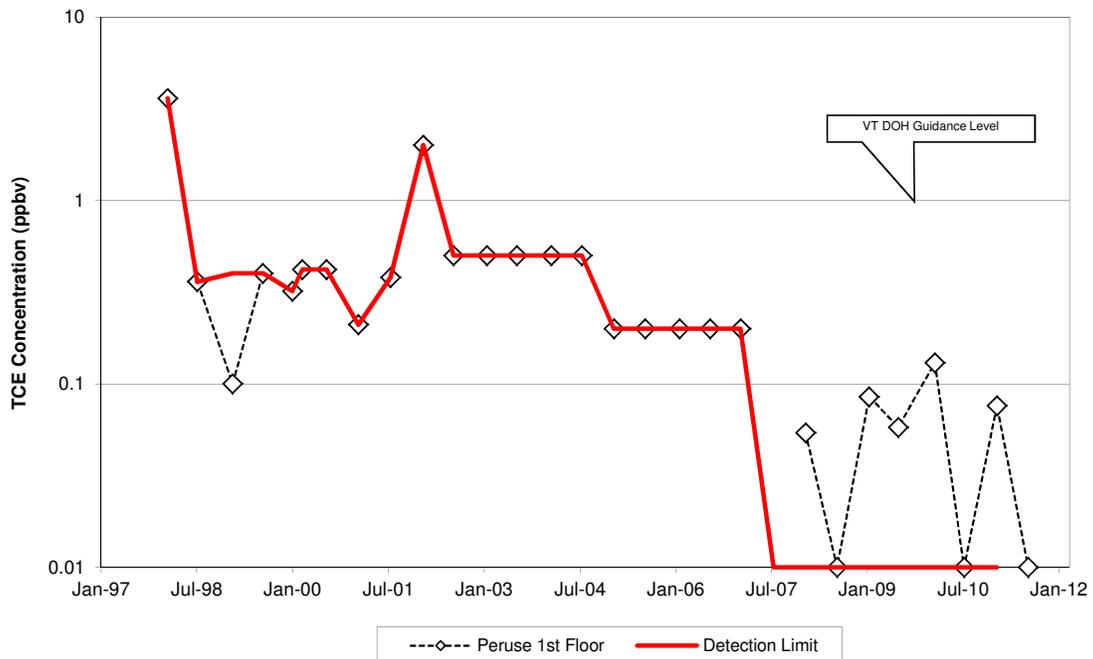
Notes:
 1) Only values above detection limit line are considered positive detections; values below line are estimated only.

**Indoor Air Summary: TCE (ppbv)
Peruse Residence Basement (AQ3BSMT)
UniFirst Plant Site, Williamstown, Vermont**



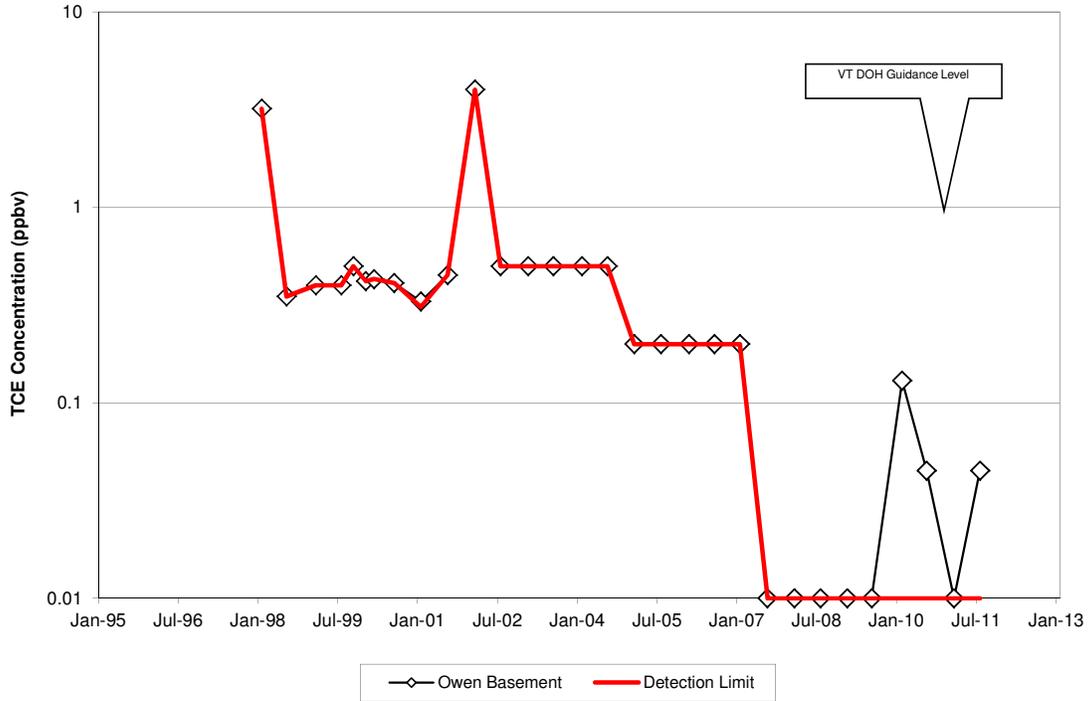
Notes:
1) Only values above detection limit line are considered positive detections; values below line are estimated only.

**Indoor Air Summary: TCE (ppbv)
Peruse Residence First Floor (AQ31FLR)
UniFirst Plant Site, Williamstown, Vermont**



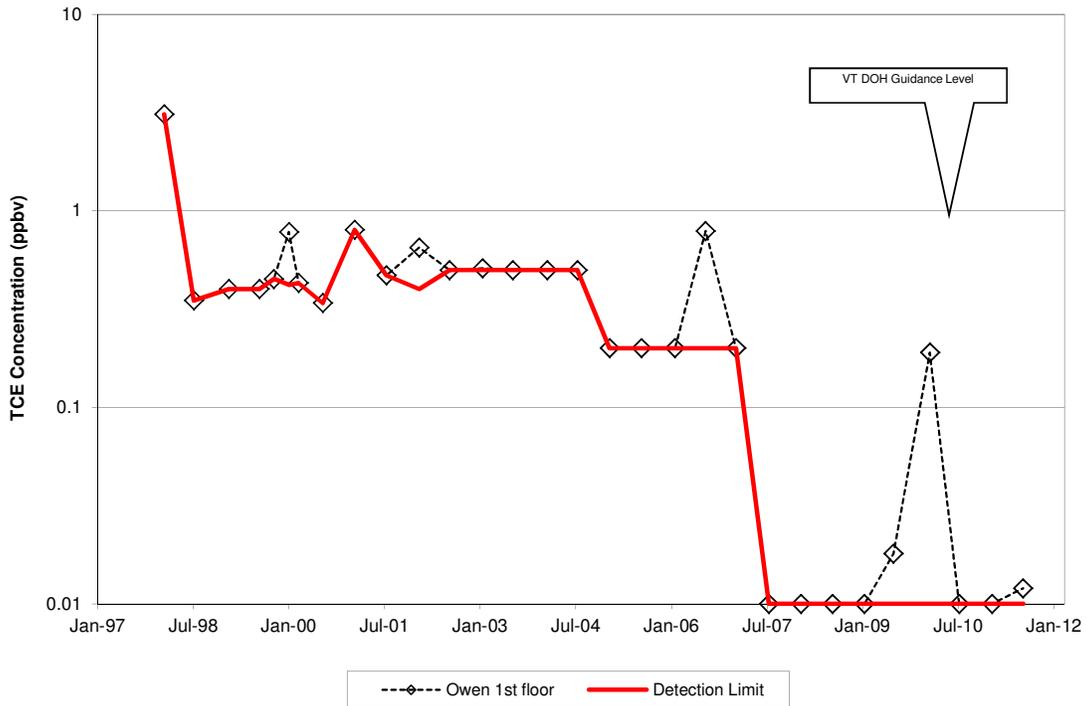
Notes:
1) Only values above detection limit line are considered positive detections; values below line are estimated only.

**Indoor Air Summary: TCE (ppbv)
Owen Residence Basement (AQ5BSMT)
UniFirst Plant Site, Williamstown, Vermont**



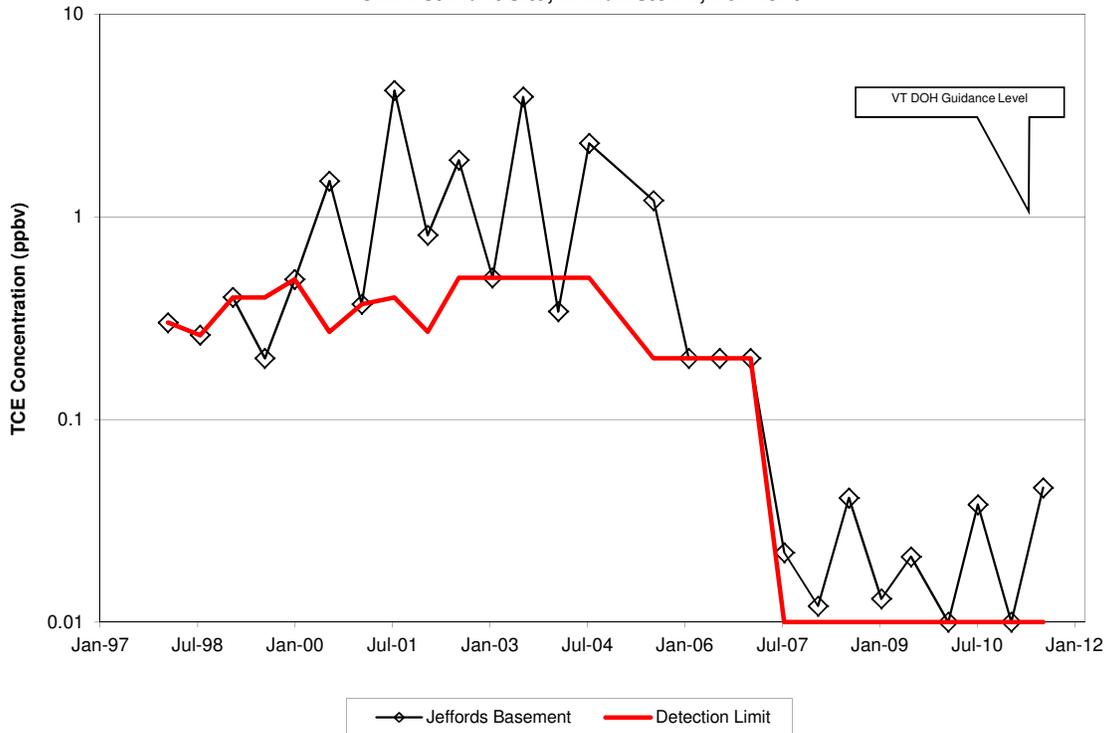
Notes:
1) Only values above detection limit line are considered positive detections; values below line are estimated only.

**Indoor Air Summary: TCE (ppbv)
Owen Residence First Floor (AQ51FLR)
UniFirst Plant Site, Williamstown, Vermont**



Notes:
1) Only values above detection limit line are considered positive detections; values below line are estimated only.

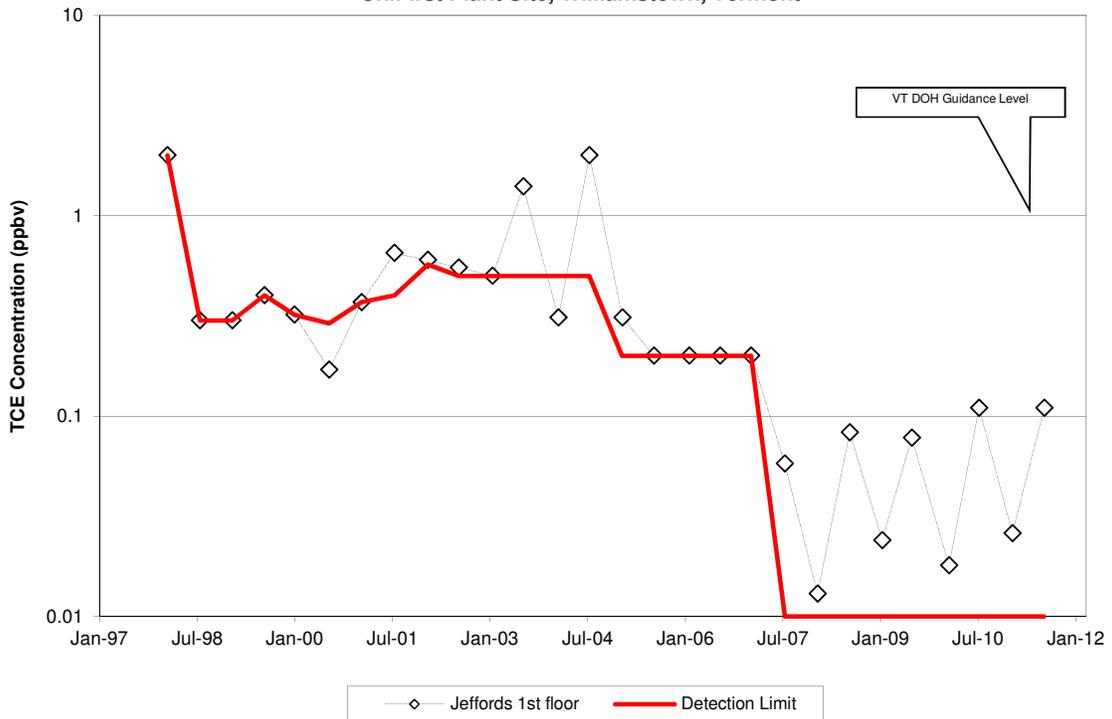
Indoor Air Summary: TCE (ppbv)
Jeffords Residence Basement (AQ6BSMT)
UniFirst Plant Site, Williamstown, Vermont



Notes:

1) Only values above detection limit line are considered positive detections; values below line are estimated only.

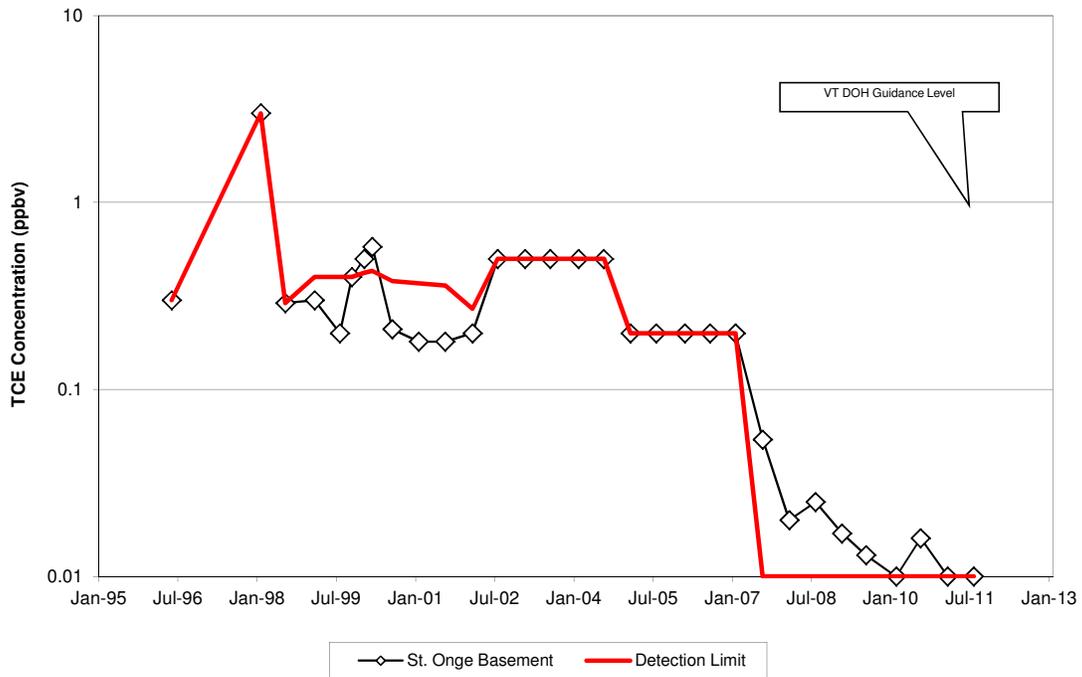
Indoor Air Summary: TCE (ppbv)
Jeffords Residence First Floor (AQ61FLR)
UniFirst Plant Site, Williamstown, Vermont



Notes:

1) Only values above detection limit line are considered positive detections; values below line are estimated only.

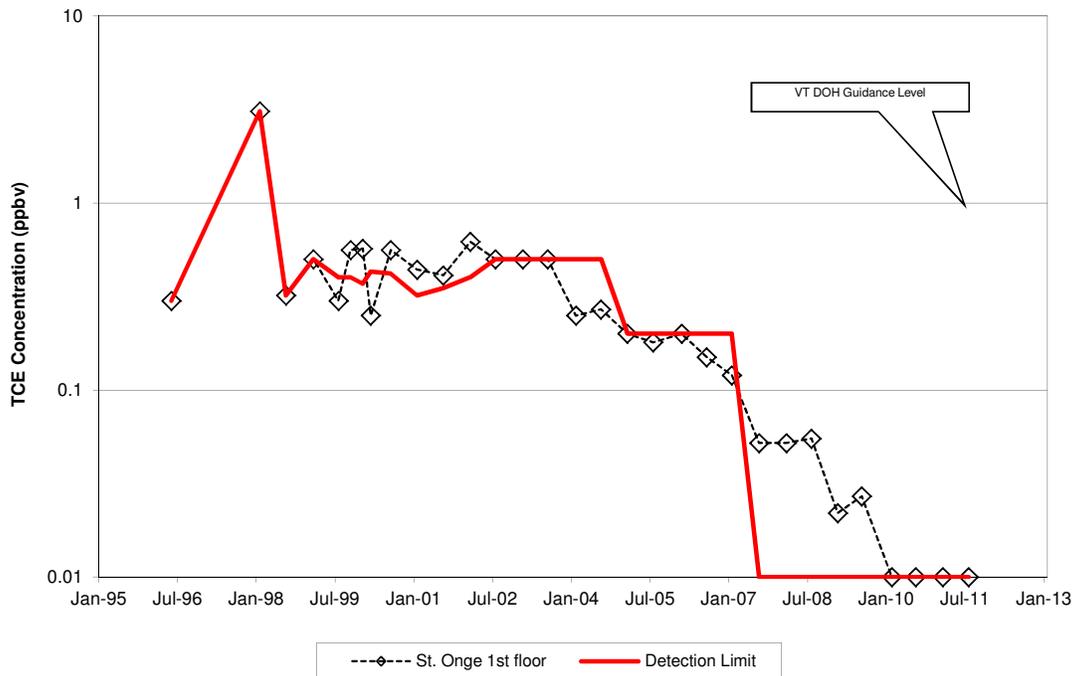
Indoor Air Summary: TCE (ppbv)
St. Onge Residence Basement (AQ7BSMT)
UniFirst Plant Site, Williamstown, Vermont



Notes:

1) Only values above detection limit line are considered positive detections; values below line are estimated only.

Indoor Air Summary: TCE (ppbv)
St. Onge Residence First Floor (AQ71FLR)
UniFirst Plant Site, Williamstown, Vermont



Notes:

1) Only values above detection limit line are considered positive detections; values below line are estimated only.

**APPENDIX D:
FIELD DATA SHEETS**

**UNIFIRST
FIELD WATER COLLECTION SHEET**

SAMPLING LOCATION

MW-25884

Pump Intake Depth

92'

Date

10/17/14

Pump Type

Grundfos

Sampler

AW

Well Diameter

6"

Weather

pc Part

Well Depth

102'

Water Type

SW

Initial Depth to Water

24.55'

Sampling Method

baller

Traditional Purge Vol. / Rate

600 ml/min

LOW FLOW PURGING DATA

within 3% within 3% 1 pH unit 10 mv within 10% within 10%

Time	DTW (ft btp)	Purge Rate (ml/min)	Temp. (deg C)	Specific Cond. (ms/cm) / (us/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Notes
1440	24.55	600	9.7	88.5	7.65	-169	6.25	15.2	
1447	24.80	600	9.8	91.8	7.29	-177	7.28	7.8	
1448	25.31	600	10.1	90.9	7.43	-179	6.88	7.9	
1458	25.85	600	10.3	91.6	7.55	-184	6.86	0.5	
1503	26.04	600	10.6	91.4	7.61	-186	6.90	0.0	
1506	26.14	600	10.7	90.1	7.62	-190	6.77	0.0	sample 1/2 hr
SAMPLE COLLECTION									
	Purge Volume	Temp.	Specific Cond.	pH	ORP	DO	Turbidity		
	12L	10.7	90.1	7.62	-190	6.77	0.0		
Final Measurements:									
Sample Description	Label	Type Container	# Container	Preservative	Analysis Method	Collection Time	COC #		
Sample	MW-25884	1/4	3	HCl	82608	1510			
As Required:									
Field Duplicate	82608	1/4	3	HCl	82608	1530			
Field Blank	FB-2	1/4	2	ND	82608	1520			
MS/MSD									
General Notes:									

FIELD WATER COLLECTION SHEET

SAMPLING LOCATION PZ-101 Pump Intake Depth 6.0
Date 10/19/14 Pump Type pass
Sampler Mr. Alder Well Diameter 3/4
Weather SW Well Depth 3.85
Water Type SW Traditional Purge Vol. 750 m /
Sampling Method grab Supply

SAMPLE COLLECTION

Purge Volume (MP/gal)	Temp. (deg C)	Specific Cond. (µs/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
<u>506/dy</u>	<u>12.7</u>	<u>0.101</u>	<u>5.95</u>	<u>118</u>	<u>10.63</u>	<u>17.0</u>		

Final Measurements:

Sample Description	Label	Type	Container #	Preservative	Analysis Method	Collection Time	COC #
<u>Sample</u>	<u>PZ-101</u>	<u>104</u>	<u>3</u>	<u>H01</u>	<u>8266</u>	<u>0845</u>	

As Required:
 Field Duplicate
 Field Blank
 MS/MSD

General Notes:
add 1 trip block 78.3 to rec'd

SAMPLING LOCATION PZ-102 Pump Intake Depth 7.5
Date 10/10/14 Pump Type pass
Sampler Mr. Alder Well Diameter 3/4
Weather SW Well Depth 7.98
Water Type SW Traditional Purge Vol. 1000 m /
Sampling Method grab Supply

SAMPLE COLLECTION

Purge Volume (MP/gal)	Temp. (deg C)	Specific Cond. (µs/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
<u>1000</u>	<u>12.4</u>	<u>93.7</u>	<u>6.55</u>	<u>104</u>	<u>7.63</u>	<u>12.8</u>		

Final Measurements:

Sample Description	Label	Type	Container #	Preservative	Analysis Method	Collection Time	COC #
<u>Sample</u>	<u>PZ-102</u>	<u>104</u>	<u>3</u>	<u>H01</u>	<u>8266</u>	<u>0905</u>	

As Required:
 Field Duplicate
 Field Blank
 MS/MSD

General Notes:

FIELD WATER COLLECTION SHEET

SAMPLING LOCATION MW-25

Date 10/19/11

Sampler M

Weather CL 1 Cool

Water Type GW SW supply

Sampling Method Dalles low flow grab

Pump Intake Depth —

Pump Type —

Well Diameter 2

Well Depth 12.8

Initial Depth to Water 5.55

Traditional Purge Vol. 4 gal

NOTES

SAMPLE COLLECTION

Purge Volume (ml/gal)	Temp. (deg C)	Specific Cond. (ms/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
4	12.8	106	6.81	97	7.58	158		

Final Measurements:

Sample Description	Label	Type	Container	#	Preservative	Analysis Method	Collection Time	COC #
Sample	MW-25	low flow	3		H ₂ O	FTC	0925	

As Required:								
Field Duplicate:								
Field Blank:								
MS/MSD:								

General Notes:

SAMPLING LOCATION MW-50

Date 10/19/11

Sampler 1

Weather SW supply

Water Type Dalles low flow grab

Sampling Method Dalles low flow grab

Pump Intake Depth —

Pump Type —

Well Diameter 2

Well Depth 15.20

Initial Depth to Water 7.45

Traditional Purge Vol. 4 gal

NOTES

SAMPLE COLLECTION

Purge Volume (ml/gal)	Temp. (deg C)	Specific Cond. (ms/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
4	12.6	70.5	7.10	95	8.82	7.9		

Final Measurements:

Sample Description	Label	Type	Container	#	Preservative	Analysis Method	Collection Time	COC #
Sample	MW-50	low flow	3		H ₂ O	FTC	0945	

As Required:								
Field Duplicate:								
Field Blank:								
MS/MSD:								

General Notes:

FIELD WATER COLLECTION SHEET

SAMPLING LOCATION		W-19		Pump Intake Depth	9.3
Date	10/19/9	Pump Type	PE-1	Well Diameter	3/4
Sampler	MS	Well Depth	9.8	Initial Depth to Water	6.07
Weather	CLD Cal	Traditional Purge Vol.	1000 L	NOTES	
Water Type	SW	Supply			
Sampling Method	bailler	low flow	grab	Preservative	
SAMPLE COLLECTION		Purge Volume (MP/gal)	Temp. (deg C)	Specific Cond. (ms/cm)	pH
Final Measurements:	1000	12.9	85.5	7.17	ORP (mv)
Sample Description	W-19	Container	3	Preservative	Analysis Method
As Required:					8260
Field Duplicate					Collection Time
Field Blank					1020
MS/MSD					COC #
General Notes:					

SAMPLING LOCATION		W-20		Pump Intake Depth	8.8
Date	10/19/9	Pump Type	PE-1	Well Diameter	3/4
Sampler	MS	Well Depth	9.3	Initial Depth to Water	5.92
Weather	CLD Cal	Traditional Purge Vol.	1000 L	NOTES	
Water Type	SW	Supply			
Sampling Method	bailler	low flow	grab	Preservative	
SAMPLE COLLECTION		Purge Volume (MP/gal)	Temp. (deg C)	Specific Cond. (ms/cm)	pH
Final Measurements:	1001	13.3	85.8	7.11	ORP (mv)
Sample Description	W-20	Container	3	Preservative	Analysis Method
As Required:					8260
Field Duplicate					Collection Time
Field Blank					1035
MS/MSD					COC #
General Notes:					

FIELD WATER COLLECTION SHEET

SAMPLING LOCATION: MW-8 Pump Intake Depth: 9.3

Date: 10/19/14 Pump Type: perc

Sampler: cl 1000 Well Diameter: 3/4

Weather: sw Well Depth: 9.8

Water Type: GW Initial Depth to Water: 1000 +/-

Sampling Method: baller Traditional Purge Vol.: 1000 +/-

Supply: perc purge

SAMPLE COLLECTION	Purge Volume (gal)	Temp. (deg C)	Specific Cond. (µs/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
	1000	12.1	105	7.39	32	9.65	0.6		

Sample Description	Label	Type	Container	#	Preservative	Analysis Method	Collection Time	COC #
Sample	MW-C	CUV		3	H2O	P261	1055	

As Required: _____
 Field Duplicate: _____
 Field Blank: _____
 MS/MSD: _____

General Notes: _____

SAMPLING LOCATION: MW-1 Pump Intake Depth: 9.41

Date: 10/19/14 Pump Type: perc

Sampler: baller Well Diameter: 3/4

Weather: sw Well Depth: 5.67

Water Type: GW Initial Depth to Water: 1000 +/-

Sampling Method: baller Traditional Purge Vol.: _____

SAMPLE COLLECTION	Purge Volume (gal)	Temp. (deg C)	Specific Cond. (µs/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
	1000	12.7	94.0	7.57	42	9.24	0.0		

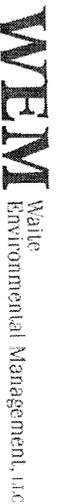
Sample Description	Label	Type	Container	#	Preservative	Analysis Method	Collection Time	COC #
Sample	MW-1	CUV		3	H2O	P260	1115	

As Required: _____
 Field Duplicate: _____
 Field Blank: _____
 MS/MSD: _____

General Notes: _____

5
13
26
3

UNIFIRST



FIELD WATER COLLECTION SHEET

SAMPLING LOCATION MW-E

Date: 10/17/11
 Sampler: MW
 Weather: clear cool
 Water Type: GW
 Sampling Method: (bailer) low flow grab supply

SAMPLE COLLECTION

Purge Volume (ml/gal)	Temp. (deg C)	Specific Cond. (ms/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (v/n)	NOTES
1.5	13.5	96.6	7.36	53	8.69	1.65		

Final Measurements:

Sample Description	Label	Type	Container #	Preservative	Analysis Method	Collection Time	COC #
Sample	MW-E	low flow	3	4ol	8260	1140	
As Required:							
Field Duplicate							
Field Blank							
MS/MSD							

General Notes:

SAMPLING LOCATION MW-D

Date: 10/19/11
 Sampler: GW
 Weather: clear
 Water Type: SW
 Sampling Method: (bailer) low flow grab supply

SAMPLE COLLECTION

Purge Volume (ml/gal)	Temp. (deg C)	Specific Cond. (ms/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (v/n)	NOTES
5								

Final Measurements:

Sample Description	Label	Type	Container #	Preservative	Analysis Method	Collection Time	COC #
Sample	MW-D	low flow	3	4ol	8200	1210	
As Required:							
Field Duplicate	W-E		3			0800	
Field Blank							
MS/MSD							

General Notes:

6

FIELD WATER COLLECTION SHEET

SAMPLING LOCATION JSF-2 Pump Intake Depth _____

Date 10/19/01 Pump Type _____

Sampler HL Well Diameter _____

Weather CLD cool Well Depth _____

Water Type GWL Initial Depth to Water _____

Sampling Method low flow Traditional Purge Vol. _____

SAMPLE COLLECTION

Purge Volume (ml / gal)	Temp. (deg C)	Specific Cond. (ms/cm) (us/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
11.3	11.3	92.0	7.92	-159	9.37	302		

Final Measurements:

Sample Description	Label	Type	Container	#	Preservative	Analysis Method	Collection Time	COC #
Sample	JSF-2	low flow	3	3	HL	8260	1300	

As Required: _____

Field Duplicate _____

Field Blank _____

MS/MSD _____

General Notes: _____

SAMPLING LOCATION W-5 Deep Pump Intake Depth _____

Date 10/19/01 Pump Type _____

Sampler HL Well Diameter _____

Weather GWL Well Depth _____

Water Type low flow Initial Depth to Water _____

Sampling Method supply Traditional Purge Vol. _____

SAMPLE COLLECTION

Purge Volume (ml / gal)	Temp. (deg C)	Specific Cond. (ms/cm) (us/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
11.9	11.9	141	7.53	-58	9.56	279		

Final Measurements:

Sample Description	Label	Type	Container	#	Preservative	Analysis Method	Collection Time	COC #
Sample	W-5 Deep	low flow	3	3	HL	8260	1315	

As Required: _____

Field Duplicate _____

Field Blank _____

MS/MSD _____

General Notes: _____

FIELD WATER COLLECTION SHEET

UNIFIRST

8

SAMPLING LOCATION JS-5 Pump Intake Depth _____

Date 10/19/19 Pump Type _____

Sampler ML Well Diameter _____

Weather clear Well Depth _____

Water Type gw sw supply Initial Depth to Water _____

Sampling Method grab Traditional Purge Vol. _____

SAMPLE COLLECTION

Purge Volume (ml / gal)	Temp. (deg C)	Specific Cond. (ms/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
11.9	10.5	7.89	-25	9.87	46.2			

Final Measurements:

Sample Description	Label	Type	Container	#	Preservative	Analysis Method	Collection Time	COC #
Sample	JS-5	LOW	3		H2O	P260	1330	
As Required:								
Field Duplicate								
Field Blank								
MS/MSD	JS-5			4			1330	

General Notes:

SAMPLING LOCATION JS-1A Pump Intake Depth _____

Date 10/19/19 Pump Type _____

Sampler + Well Diameter _____

Weather + Well Depth _____

Water Type gw sw supply Initial Depth to Water _____

Sampling Method grab Traditional Purge Vol. _____

SAMPLE COLLECTION

Purge Volume (ml / gal)	Temp. (deg C)	Specific Cond. (ms/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
12.1	8.5	7.99	-105	8.95	7100			

Final Measurements:

Sample Description	Label	Type	Container	#	Preservative	Analysis Method	Collection Time	COC #
Sample	JS-1A	LOW	3		H2O	P260	1350	
As Required:								
Field Duplicate								
Field Blank								
MS/MSD								

General Notes:

FIELD WATER COLLECTION SHEET

SAMPLING LOCATION SP-3 Pump Intake Depth _____

Date 10/19/11 Pump Type _____

Sampler AW Well Diameter _____

Weather CLD cool Well Depth _____

Water Type GW Initial Depth to Water _____

Sampling Method low flow Traditional Purge Vol. _____

Supply grab

SAMPLE COLLECTION

Purge Volume (ml / gal)	Temp. (deg C)	Specific Cond. (ms/cm / us/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
—	12.7	99	7.66	-1	10.52	100		
Sample Description	Type Container	# Container	Preservative	Analysis Method	Collection Time	COC #		
<u>SP-3</u>	<u>WAH</u>	<u>3</u>	<u>H01</u>	<u>8260</u>	<u>1420</u>			
As Required:								
Field Duplicate	<u>SP-3</u>	<u>WAH</u>	<u>3</u>	<u>H01</u>	<u>8260</u>	<u>1630</u>		<u>blind</u>
Field Blank								
MS/MSD								

General Notes: _____

SAMPLING LOCATION SP-4 Pump Intake Depth _____

Date 10/19/11 Pump Type _____

Sampler AW Well Diameter _____

Weather CLD Well Depth _____

Water Type GW Initial Depth to Water _____

Sampling Method low flow Traditional Purge Vol. _____

Supply grab

SAMPLE COLLECTION

Purge Volume (ml / gal)	Temp. (deg C)	Specific Cond. (ms/cm / us/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
—	15.3	95.2	7.55	3	8.71	0.0		
Sample Description	Type Container	# Container	Preservative	Analysis Method	Collection Time	COC #		
<u>SP-4</u>	<u>WAH</u>	<u>3</u>	<u>H01</u>	<u>8260</u>	<u>1435</u>			
As Required:								
Field Duplicate								
Field Blank								
MS/MSD								

General Notes: _____

FIELD WATER COLLECTION SHEET

10

SAMPLING LOCATION SP-3 Pump Intake Depth _____

Date 10/19/14 Pump Type _____

Sampler MC Well Diameter _____

Weather W Well Depth _____

Water Type GW Initial Depth to Water _____

Sampling Method baller low flow grab supply Traditional Purge Vol. _____

SAMPLE COLLECTION

Purge Volume (ml / gal)	Temp. (deg C)	Specific Cond. (mS/m) / (uS/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
11.5	51.0	8.22	-36	8.46	8.8			
Sample Description	Label	Type	#	Preservative	Analysis Method	Collection Time	COC #	
SP-3	WA	WA	3	H01	8260	1455		
Field Duplicate								
Field Blank	FB-4	WA	2	H01	8260	1580		
MS/MSD								

General Notes: _____

SAMPLING LOCATION _____ Pump Intake Depth _____

Date _____ Pump Type _____

Sampler _____ Well Diameter _____

Weather _____ Well Depth _____

Water Type _____ Initial Depth to Water _____

Sampling Method _____ Traditional Purge Vol. _____

SAMPLE COLLECTION

Purge Volume (ml / gal)	Temp. (deg C)	Specific Cond. (mS/m) / (uS/cm)	pH	ORP (mv)	DO (mg/L)	Turbidity (NTU)	Filtered (y/n)	NOTES
Sample Description	Label	Type	#	Preservative	Analysis Method	Collection Time	COC #	
Field Duplicate								
Field Blank								
MS/MSD								

General Notes: _____

APPENDIX E:
DATA VALIDATION REPORTS



January 5, 2012

Mr. Gerold Noyes
Waste Management Division
VT Department of Environmental Conservation
103 South Main Street/ West Building
Waterbury, VT 05676-0404

Reference #: 2011-1109-001, -1111-002, and -1121 -001

Dear Gerold,

Attached please find the results of the data validation of Sample Delivery Group (SDG) Nos. BRES51, UNIF42, and WHEA17 from the Environmental Monitoring work at the Bressett Site, in Randolph, the UniFirst Site in Williamstown, and the Wheatley Farm site in Brookfield, VT. No air samples were collected for this sampling round; the water samples in these SDGs were collected on October 17, 18, 19, and 28, 2011. The laboratory analyses were performed by TestAmerica Burlington (formerly STL Burlington) of South Burlington, VT.

The data packages were received on November 9, 11, and 21, 2011, and the validation has been performed by Phoenix Chemistry Services, to the extent possible according to the Tier III guidelines as defined by USEPA Region I, as presented in "Region I EPA-NE Data Validation Manual and Functional Guidelines for Evaluating Environmental Analyses", December, 1996. The EPA's National Functional Guidelines for Organic Data Review (EPA 540/R-99/008, October, 1999), and the Phoenix Chemistry Services Field/Laboratory Coordination Memorandum for Air Monitoring (FLCM), December 22, 2007, and Field/Laboratory Coordination Memorandum for Water Monitoring (FLCM), April 2, 2004 were also considered during the evaluation, and professional judgment was applied as necessary and appropriate. Data qualifiers have been applied in the final validation report as necessary and appropriate, in accordance with these guidelines.

Electronic copies of these reports are being submitted to Waite Environmental Management and TestAmerica Burlington, as well as to your attention. No hard copy of this report is being submitted, unless you direct otherwise.

The year-end quality assurance summary report for air and water analyses will be submitted soon under separate cover.

Thank you for this opportunity to provide data validation services to the Waste Management Division. We look forward to continuing to work with you. If there are any questions or concerns about the material in this report, please do not hesitate to contact me for help and clarification.

Sincerely,

Deborah H. Gaynor, Ph.D.
Principal, Phoenix Chemistry Services

DATA VALIDATION

FOR

**UniFirst Project
Bressett, Wheatley, and UniFirst Sites
Randolph, Brookfield, and Williamstown, VT**

**ORGANIC ANALYSIS DATA
Volatile Organics in Water Samples**

Sample Delivery Group Nos. BRES51, UNIF42, and WHEA17

Chemical Analyses Performed by:

**TestAmerica Burlington
30 Community Drive Dr. Suite 11
South Burlington, VT 05403**

FOR

**Mr. Gerold Noyes
VT Department of Environmental Conservation
Waste Management Division
103 South Main Street, West Building
Waterbury, VT 05676-0404**

Data Validation Report by:

**Phoenix Chemistry Services
126 Covered Bridge Rd.
N. Ferrisburg, VT 05473
(802)-233-2473**

January 4, 2012

Reference #s 2011-1109-001, -1111-002, &-1121-001
VOA Validation Report/BRES51_UNIF42_WHEA17/dhg

EXECUTIVE SUMMARY

Phoenix Chemistry Services (Phoenix) has completed the validation of the volatile organics analysis data prepared by TestAmerica Burlington (formerly STL Burlington) for 41 groundwater samples, 8 potable water samples, 1 performance evaluation (PE) sample, 6 field blanks (FB), and 3 trip blanks (TB) from the Bressett Site in Randolph, VT, the UniFirst Site in Williamstown, VT, and the Wheatley Farm site in Brookfield, VT. The laboratory reported the data under Sample Delivery Group (SDG) Nos. BRES51, UNIF42, and WHEA17, which were submitted as three data packages received by Phoenix on November 9, 11, and 21, 2010. These SDGs include the following samples:

Sample Identifier	Laboratory ID
<i>Method 8260B</i>	
<i>SDG No. BRES51</i>	
BRW-1	200-7553-1
BRW-2	200-7553-2
BRW-3	200-7553-3
TB-1	200-7553-4
MW-103RD	200-7602-1
TB-2	200-7602-2
MW-103RS	200-7602-3
MW-104S	200-7602-4
MW-104D	200-7602-5
MW-102D	200-7602-6
MW-102S	200-7602-7
MW-101S	200-7602-8
MW-101D	200-7602-9
MW-4S	200-7602-10
MW-4D	200-7602-11
MW-3S	200-7602-12
MW-3D	200-7602-13
MW-Z	200-7602-14
<i>SDG No. UNIF42</i>	
MW-25884	200-7555-1
BRW-Z	200-7555-2
FB-2	200-7555-3
TB-3	200-7603-1
PZ-101	200-7603-2
PZ-102	200-7603-3
W-2S	200-7603-4
MW-50	200-7603-5
W-19	200-7603-6
W-20	200-7603-7
MW-C	200-7603-8
W-1	200-7603-9

Sample Identifier	Laboratory ID
MW-D	200-7603-10
MW-E	200-7603-11
W-Z	200-7603-12
SP-4	200-7603-13
SP-3	200-7603-14
SS-2	200-7603-15
W-SEEP	200-7603-16
SS-1A	200-7603-17
SS-3	200-7603-18
SS-5	200-7603-19
SS-Z	200-7603-20
FB-4	200-7603-21
<i>SDG No. WHEA17</i>	
MW-PLX	200-7785-1
MW-PL1	200-7785-2
MW-PL2	200-7785-3
MW-S1	200-7785-4
MW-S2	200-7785-5
FB-6	200-7785-6
TB-4	200-7785-7
<i>Method 524.2</i>	
<i>SDG No. BRES51</i>	
BRESSETT KITCHEN TOP	200-7553-5
SHIELDS	200-7553-6
WELL Z	200-7553-7
FB-1	200-7553-8
<i>SDG No. UNIF42</i>	
WP-3	200-7603-22
WP-Z	200-7603-23
WP-5	200-7603-24
WP-7	200-7603-25
WP-8	200-7603-26
WP-13	200-7603-27
WP-23	200-7603-28
FB-5	200-7603-29

A cross-reference table of sample IDs was provided in the data packages. Sample “BRESSETT KITCHEN TAP” was incorrectly logged in as “BRESSETT KITCHEN TOP”; the validator has not corrected this minor error in any forms or reports.

Findings of the validation effort resulted in the following qualifications of sample results:

- Results for bromomethane in samples MW-PLX, MW-PL1, MW-PL2, MW-S1, MW-S2, and FB-6 were qualified as estimated (UJ).
- Results for cis-1,2-dichloroethene in WP-3 and WP-Z were qualified as not detected at the

reporting limit (U).

- Results for chloromethane, vinyl chloride, and chloroethane in sample MW-4S were qualified as estimated (UJ).
- Results for tetrachloroethene in SS-3 and SS-Z were qualified as estimated (J).
- On the basis of suspected errors in the preparation of the performance evaluation sample (PES) vials, all results from the PES analyses are rejected (R) for this sampling round.
- The laboratory appropriately applied “J” qualifiers to the sample Form 1’s when the concentration of an analyte was less than the sample-specific PQL. The validator did not remove these qualifiers.
- All laboratory-specific qualifiers, such as the asterisk (*), have been removed by the validator.

The Overall Evaluation of Data (Section XVI) summarizes the validation results. The validation findings and conclusions for each analytical parameter are detailed in the remaining sections of this report.

Documentation problems observed in the data packages are described in Section XVII.

This validation report shall be considered part of the data packages for all future distributions of the volatiles (8260B and 524.2) analysis data.

INTRODUCTION

Analyses were performed according to SW-846 Method 8260B Low Level, as documented in TestAmerica SOP BR-MV-005r8, and SDWA Method 524.2 Rev. 4.1, as documented in TestAmerica SOP BR-MV-005r11, and in accordance with requirements in the Field/Laboratory Coordination Memorandum for Water Monitoring (FLCM), April 2, 2004. The target compound list for the Method 8260B analyses was limited to the OLM03.1 CLP target compound list, and the target compound list for Method 52.4.2 was limited to the OLM03.1 CLP target compound list plus methyl-*tert*-butyl ether (MTBE).

Tentative identification of non-target analyte peaks (i.e., tentatively identified compounds, or TICs) was not requested for these analyses.

Phoenix Chemistry Services' validation was performed in conformance with Tier III guidelines as defined by USEPA Region I in the "Region I EPA-NE Data Validation Manual: The Data Quality System", (12/96 Revision). The data were evaluated in accordance with the "Region I EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses", December 1996. EPA's National Functional Guidelines for Organic Data Review (EPA 540/R-99/008, October, 1999) were also considered during the evaluation, and professional judgment was applied as necessary and appropriate.

The data validation process evaluates data on a technical basis for chemical analyses conducted under the CLP or other well-defined methods. Contract compliance is evaluated only in specific situations. Issues pertaining to contractual compliance are noted where applicable. It is assumed that the data package is presented in accordance with the CLP (CLP-like or SW-846) requirements. It is also assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation. In instances where SW-846 or other specific methods have been used for the analyses, the validation effort is modified to acknowledge the differences in methodology while maintaining the goals and quality objectives of the CLP.

Results of sample analyses are reported by the laboratory as either qualified or unqualified; various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. During the validation process, laboratory data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data validator. Raw data is examined in detail to check calculations, compound identification, and/or transcription errors. Validated results are either qualified or unqualified; if results are unqualified, this means that the reported values may be used without reservation. Final validated results are annotated with the following codes, as defined in the EPA Region I Functional Guidelines:

- U - The analyte was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit. The sample quantitation limit accounts for sample specific dilution factors and percent solids corrections or sample sizes that deviate from those required by the method.
- J - The associated numerical value is an estimated quantity.
- UJ - The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.
- R - The data are unusable (analyte may or may not be present). Resampling and reanalysis is

necessary for verification. The R replaces the numerical value or sample quantitation limit. In some instances (e.g., a dilution) a result may be indicated as “rejected” to avoid confusion when a more quantitatively accurate result is available.

EB, TB, BB - An analyte that was identified in an aqueous equipment (field) blank, trip blank, or bottle blank that was used to assess field contamination associated with soil/sediment samples. These qualifiers are to be applied to soil/sediment sample results only.

These codes are assigned during the validation process and are based on the data review of the results. They are recorded in the Data Summary Table contained in Attachment A, the Organic Analysis Data Sheets (Form I) in Attachment B, and the spreadsheet summary files (Attachment C, submitted electronically) of this validation report.

All data users should note two facts. First, **the "R" qualifier means that the laboratory-reported value is completely unusable.** The analysis is invalid due to significant quality control problems, and provides no information as to whether the compound is present or not. Rejected values should not appear on data tables because they have no useful purpose under any circumstances. Second, **no analyte concentration is guaranteed to be accurate even if all associated quality control is acceptable.** While strict quality control conformance provides well-defined confidence in the reported results, any analytical result will always contain some error.

The user is also cautioned that the validation effort is based on the materials provided by the laboratory. Software manipulation, resulting in misleading raw data printouts, cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

Detailed Findings of Measurement Error Associated with the Analytical Analysis

I. Preservation and Technical Holding Times (Sample Integrity)

The samples for volatiles analysis in SDG Nos. BRES51, UNIF42, and WHEA17 were collected on October 13, 14, 19, and 20, 2009. All volatiles analyses were performed within the acceptable holding times for preserved water samples (14 days from collection), as required by Region 1. Although not provided in the case narrative (as required by the CLP SOW), the pH of the samples was measured at the time of analysis, and is recorded in the Sample Preparation sections of the data packages. All recorded sample pH values were <2. The FLCM requires that sample pH be checked at the time of receipt; however, the laboratory noted that the chain of custody records and field sample collection sheets indicate that the samples were appropriately preserved with HCl.

The cooler temperatures on receipt at the laboratory were checked and documented in the data packages, and were 6.1, 2.2, 4.1, 3.9, and 4.5 °C, which are within the acceptance range of 4 °C ±2 °C, with the marginally high exception of the cooler received on Oct. 17, 2011, at 6.1 °C. Since this cooler was delivered to the laboratory within two hours of the last sample collection, cooling had been properly initiated, and this temperature is acceptable.

II. GC/MS Instrument Performance Check (Tuning)

The samples were analyzed on a single GC/MS system identified as instrument L. The tuning of this instrument was demonstrated with analysis of 4-bromofluorobenzene (BFB); tunes were analyzed for each shift (12-hour period) during which the samples or associated standards were analyzed. All eleven (11) BFB tunes were correctly calculated, within acceptance limits, and are reported accurately on the Form V summaries in the data packages.

III. Initial Calibration (IC)

One IC (10/26/11) was performed on instrument L in support of the Method 8260B sample analyses, and one IC (9/28/11) was performed on instrument L in support of the method 524.2 sample analyses reported in these data packages. Documentation of all individual IC standards was present in the data packages and relative response factor (RRF) as well as percent relative standard deviation (%RSD) values were correctly calculated and accurately reported on the Form VI summaries.

One or more target compounds were manually integrated in the ICs and CCs performed for this data set. All manual integrations appear to have been properly performed, and are documented within the data packages, including the date and identification of the responsible analyst.

All % RSDs for all three ICs were below the maximum limit (30%) specified by Region I, and all RRF's were above the 0.05 minimum technical criterion, with the following exceptions:

Instrument	IC	Average RRF	
		acetone	2-butanone
L (8260B)	10/26/11	0.0394	0.0208
L (524.2)	9/28/11	0.0407	0.0217

Pursuant to the Region I validation document, results for acetone and 2-butanone in all samples in this data set warranted rejection (R) based on the low RRFs achieved. However, acetone and 2-butanone were spiked at a concentration of 5 µg/L in the matrix spikes, matrix spike duplicates, laboratory control samples, and laboratory control sample duplicates for both methods analyzed with this data set, and acceptable recoveries for both compounds were achieved in these analyses. Therefore, results for acetone and 2-butanone were not qualified on the basis of the low RRFs in the associated ICs on both instruments.

An ICV was analyzed immediately after each IC, as required, and recoveries were correctly calculated and accurately reported in the data packages. All percent differences (%D) in the submitted ICVs were within laboratory established control limits (± 25 %D for Method 8260B and ± 30 %D for Method 524.2), and Region 1 limits for continuing calibrations (± 25 %D).

IV. Continuing Calibration (CC)

Five continuing calibration (CC) standards were run in support of the Method 8260B sample analyses, and three CC standards were run in support of the Method 524.2 sample analyses reported in this data set. Documentation of the CC standards was present in the data packages and RRF as well as percent difference (%D) values were correctly calculated and accurately reported on the Form VII summaries within the data packages.

The maximum limit for %D in the CC standard allowed by Region 1 is $\pm 25\%$. All %D results were below this limit for the CC standards for both methods, with the single exception of bromomethane, which exhibited a -26.5 %D in the CC standard analyzed by Method 8260B on 11/3/11 at 13:30. All RRFs were above the 0.05 minimum criterion, with the exceptions of acetone and 2-butanone, in all CC standards for both methods (range: acetone, 0.0355 - 0.0409; 2-butanone, 0.0187 - 0.0223)

On the basis of the unacceptable %D value in the associated CC standard, results for bromomethane in samples MW-PLX, MW-PL1, MW-PL2, MW-S1, MW-S2, and FB-6 were qualified as estimated (UJ). For the reasons discussed in Section III, no results for acetone or 2-butanone were qualified on the basis of the low RRFs in the associated ICs, ICVs, and CCs.

It should be noted that negative % difference values will result in a low bias for positive detects, and a positive % difference will result in a high bias for positive detects.

V. Blanks

Results for eight (8) water-matrix laboratory method blanks (MBs) were reported in association with this set of samples. No target compounds were detected in any MB for either method, with the single exception of naphthalene, which was found below the reporting limit at 0.07 ug/L in the Method 524.2 method blank identified as MB 200-27040.

Four trip blanks (TBs) were reported in these SDGs. No target compounds were detected in any TB in this sample set. It should be noted that a trip blank for analysis by Method 524.2, which has lower detection limits, was not submitted with the water supply samples collected from the UniFirst or Bressett sites. However, the laboratory reports down to the method detection limit (MDL) for all analytes for Method 8260B, and for the Method 8260B analysis of the associated trip blanks, this concentration is below the quantitation limit for all Method 524.2 analytes, with the exception of methyl-tert-butyl-ether, which is included for analysis by Method 8260B for these samples.

Six field blanks (FBs) were reported in these SDGs; four were analyzed by Method 8260B and two by Method 524.2. No target analytes were detected in any FB, with the exception of FB-5, which was collected with the potable water samples at the UniFirst sites reported in SDG No. UNIF42. Methylene chloride (0.06), cis-1,2-dichloroethene (0.11), and chlorobenzene (0.10) were all reported in the analysis of FB-5 at concentrations below the quantitation limit. The laboratory investigated this analysis, and determined that the FB was analyzed immediately after a sample (the performance evaluation sample, WP-23) containing moderate to high concentrations of these analytes; methylene chloride was detected at 13 ug/L, cis-1,2-dichloroethene above the upper quantitation limit at 32 ug/L, and chlorobenzene above the upper limit also at 32 ug/L in the analysis of WP-23. It is the opinion of the department manager that these results represent instrument carryover that was overlooked at the time of analysis.

Six holding (storage) blanks (HBs) were reported in these SDGs. No target analytes were detected in any HB for either method.

Since naphthalene was not detected in any water supply sample, and methylene chloride was not detected in any ground water sample, no results for naphthalene or methylene chloride were qualified on the basis of laboratory contamination.

On the basis of laboratory contamination, results for methylene chloride, cis-1,2-dichloroethene, and chlorobenzene detected at concentrations within five-fold of those reported in FB-5 in all samples in this sample set analyzed on instrument L by either method were qualified as not detected at the reporting limit (U). Thus, results for cis-1,2-dichloroethene in WP-3 and WP-Z were qualified as not detected at the reporting limit (U).

VI. Surrogate Compounds

Percent recoveries (%R) for all surrogate compounds in Method 8260B were correctly calculated, accurately reported on the Form II summaries within the data packages, and were within acceptance limits for all sample analyses.

No surrogate recoveries were reported for any Method 524.2 analysis. The laboratory SOP includes four surrogate compounds, and these were present in all sample analyses; however, they were reported in the same manner as internal standard compounds (on the Form VIII), and some were labeled as internal standards in the quantitation reports within the raw data sections of the data packages.

The surrogate compounds in the Method 524.2 sample analyses were evaluated from the Form VIII area responses, and were within the acceptance criteria established by the laboratory SOP ($\pm 30\%$ of the area response in the associated continuing calibration standard). The laboratory SOP also defines recovery criteria relative to the associated initial calibration ($\pm 50\%$ of the ion area for that analyte in the IC; it is not specified whether average area or from the mid-point).

VII. Internal Standards (IS)

All IS areas and retention times (RT) were within the established QC limits for all reported sample analyses in these data packages.

VIII. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Samples W-1, SS-5, MW-4S, and MW-S2 were used for the Method 8260B MS/MSD analyses in this data set. The spiking solutions contained all target compounds at 1 µg/L (except for the ketones at 5 µg/L). Percent recoveries (%R) and relative percent differences (%RPD) between paired recoveries were correctly calculated and accurately reported on the Form III summaries for the spiked analytes.

All recoveries were acceptable (range 85 – 135 %R; overall laboratory-derived control limits: 55 – 150 %R; Region 1 limits 60 – 140 %R) and reproducible (RPD range 0-23%; limit 30% RPD), with the following exceptions:

Parent Sample	Analyte	Native Conc. (ug/L)	% R (MS)	% R (MSD)	Laboratory Limits (%R)	% RPD
W-1	vinyl chloride	nd	124	a	85 - 120	a
	chloroethane	nd	133	a	80 - 125	a
	methylene chloride	nd	123	a	85 - 120	a
	trans-1,2-dichloroethene	nd	123	a	85 - 120	a
	chloroform	nd	121	a	85 - 120	a
	benzene	nd	122	a	85 - 120	a
	1,2-dichloroethane	nd	121	a	80 - 115	a
SS-5	1,1-dichloroethene	nd	a	121	85 - 120	a
	methylene chloride	nd	a	124	85 - 120	a
	trans-1,2-dichloroethene	nd	127	133	85 - 120	a
	cis-1,2-dichloroethene	nd	a	121	85 - 120	a
	1,1,2,2-tetrachloroethane	nd	a	122	85 - 120	a
MW-4S	chloromethane	nd	a	a	65 - 145	36
	vinyl chloride	nd	151	a	85 - 120	40
	chloroethane	nd	171	a	80 - 125	36
MW-S2	chloroethane	nd	a	132	80 - 125	a

a = acceptable nd = not detected

On the basis of recoveries within Region 1 criteria, no qualifications were deemed necessary for recoveries of the analytes shown slightly above laboratory-established limits in the MS or MSD analyses of samples W-1, SS-5, and MW-S2. On the basis of recoveries above both laboratory upper limits and the Region 1 upper acceptance limit, and/or unacceptably poor precision in the associated MS and MSD analyses, results for chloromethane, vinyl chloride, and chloroethane in sample MW-4S were qualified as estimated (UJ).

Samples BRESSETT KITCHEN TOP and WP-8 were used for the Method 524.2 MS/MSD analyses in this data set. The spiking solution contained all target compounds at 1 µg/L (except for the ketones at 5 µg/L) for both MS/MSD pairs. Percent recoveries and relative percent differences between paired recoveries were correctly calculated and accurately reported on the Form III summaries for the spiked analytes.

All recoveries were acceptable (range 78 – 121 %R; limits: 70 – 130 %R) and reproducible (RPD range 0-22.3%; limit 30% RPD).

All analytes were spiked into the MS/MSD analyses; therefore non-spiked target compounds could not be evaluated against the parent samples to evaluate laboratory precision.

IX. Field Duplicates

SDG Nos. BRES51, UNIF42, and WHEA17 contained five groundwater and two potable water field duplicate pairs, which were identified by the field sampler as follows:

Field Sample	Field Duplicate
Groundwater	
MW-3D	MW-Z
MW-25884	BRW-Z
MW-D	W-Z
SS-3	SS-Z
MW-PL1	MW-PLX
Water Supply	
SHIELDS	WELL Z
WP-3	WP-Z

Tetrachloroethene was detected at greater than twice the quantitation limit in MW-D, W-Z, MW-3D, MW-Z, MW-PL1, MW-PLX, and SS-3, and just above the quantitation limit in SS-Z. Trichloroethene was detected at greater than twice the quantitation limit in MW-D, W-Z, MW-3D, and MW-Z, and cis-1,2-dichloroethene and total 1,2-dichloroethene were detected at greater than twice the quantitation limit in MW-3D and MW-Z. Carbon disulfide was detected at greater than twice the quantitation limit in WP-Z, and at just less than twice the quantitation limit in WP-3. No other target compounds greater than 2 times the quantitation limit were detected in any of the remaining samples, so precision could not be evaluated for any other detected and non-detected analytes in these field duplicate pairs.

Precision in the field duplicate pairs MW-3D and MW-Z, MW-D and W-Z, MW-PL1, and MW-PLX, and SS-3 and SS-Z was acceptable (less than 30 % RPD) for all target analytes greater than 2 times the quantitation limit, with the following exceptions:

The relative percent difference (RPD) for tetrachloroethene in SS-3 and SS-Z was 51.4 %RPD. On the basis of unacceptable precision in the field duplicate pair, results for tetrachloroethene in SS-3 and SS-Z were qualified as estimated (J).

X. Sensitivity Check

The aqueous method detection limit (MDL) study for Method 8260B submitted for this project was begun on 11/30/10 and completed on 1/14/11, and the MDL and limit of quantitation (LOQ) verification studies were completed on 2/8/11, which is slightly more than one year prior to the sample analyses in this data set. All analytes had calculated and verified MDLs below the method quantitation limits in the studies.

The aqueous MDL and the MDL verification studies for Method 524.2 submitted for this project were completed on 1/11/11 and 1/14/11, which is also slightly more than one year prior to the sample analyses in this data set. All analytes had calculated and verified MDLs below the method quantitation limits in the MDL study.

More recent verification studies have not been requested for either method. All of the laboratory control samples and the MS and MSD analyses analyzed with the samples for both methods were spiked at 1 µg/L (ketones at 5 µg/L), as required by the FLCM. Recoveries within or above Region 1 acceptance criteria (60 – 140 %R) were obtained for all target analytes in all spiked analyses (except as noted). In addition, the low standard of the initial calibrations for both methods supports the reporting limit for the sample analyses.

XI. Performance Evaluation (PE) Samples/Accuracy Check

Five zero blind PE samples (commonly known as laboratory control sample, LCS) and duplicate (LCSD) pairs, and three LCS and LCSD pairs were prepared and analyzed by the laboratory at 1 µg/L (ketones at 5 µg/L) in support of the Method 8260B and Method 524.2, respectively, sample analyses in this data set. Laboratory established control limits are 55 – 150 %R overall for Method 8260B, and 70 - 130 % for each analyte for Method 524.2; the Region 1 control limits are 60 – 140 %R. A 30 %RPD limit is shown on the Form III summaries for Method 8260B analyses, and a 20 %RPD limit is shown on the Form III summaries for the Method 524.2 paired analyses.

Percent recoveries were correctly calculated and accurately reported on Form III summaries in the data packages, and were acceptable (85 – 132 %R for Method 8260B, and 83 - 117 %R for Method 524.2) and reproducible (0 - 18 %RPD across both methods) with the following exceptions in the Method 8260B LCS and LCSD analyses:

Batch ID (date)	Analyte	LCS %R	LCSD %R	Laboratory Limits (%R)	% RPD
Method 8260B					
200-27669 (10/27/11)	bromomethane	167	164	55 - 150	a
	methylene chloride	a	124	85 - 125	a
	1,2-dichloroethane	a	116	80 - 115	a
200-27759 (10/28/11)	1,1-dichloroethene	a	121	85 - 120	a
	methylene chloride	a	127	85 - 120	a
200-28201 (11/3/11)	methylene chloride	124	127	85 - 120	a

a = acceptable

No reanalysis was performed for the recoveries above the upper acceptance limits in the LCS/LCSD pairs analyzed for Method 8260B. Since all other recoveries were within Region 1 limits, no results were qualified for the slightly high recoveries of methylene chloride, 1,2-dichloroethane, and 1,1,-dichloroethene in the LCS or LCSD analyses on 10/27/11, 10/28/11, and 11/3/11 for Method 8260B.

Since bromomethane was not detected in associated samples, no results warranted qualification on the basis of recoveries above both laboratory and Region 1 limits in the associated LCS and LCSD samples analyzed on 10/27/11 on instrument L for Method 8260B.

One external single-blind PES sample for Method 524.2 was submitted with the samples in this sampling round. The validator noted numerous disagreements with the vendor's reported concentrations, and requested that the laboratory investigate these anomalous results. The validator interviewed the field sampler regarding the shipping and handling of the PES, and could find no indication that any problems were encountered. The laboratory reported that they could not find any errors in the analyses performed. However, the sample was submitted in triplicate, and the laboratory analyzed all three vials, one at a

dilution, and determined that although two of the vials showed good agreement in the reported concentrations of spiked analytes, the third vial exhibited significantly lower concentrations of the spiked analytes than the other two vials. The vendor has been asked to investigate the preparation of these three vials, but has not yet responded.

On the basis of suspected errors in the preparation of the PES vials, all results from these analyses are rejected (R) for this sampling round.

XII. Target Compound Identification

Reported target compounds were correctly identified with supporting spectra present for all samples in these data packages. All analytes in both methods are reported on the calibration summary forms and in the raw data for calibration samples, spiked analyses, and field samples; however, the spiked analysis summary forms and the sample Form 1s present only the requested target compound list.

XIII. Compound Quantitation and Reported Quantitation Limits

Target compound quantitation and practical quantitation limits (PQLs) were accurately reported on the Form I summaries. Based on screen results, dilution analyses were initially performed for samples MW-101D, MW-3S, MW-3D, and MW-Z to bring results for tetrachloroethene within the upper half of the calibration range for Method 8260B. All dilutions were less than 4-fold, so a full-strength analysis was not required. Also on the basis of screen results, sample WP-23 was initially analyzed at a dilution to bring the result for chlorobenzene within the upper half of the calibration range for Method 524.2. A full-strength analysis was performed and submitted only for sample WP-23; the results for both analyses have been previously rejected.

One or more manual integrations were performed on field samples and spiked analyses. The manual integrations appear to be correctly performed, are initialed by the analyst, and are accurately reported with the final area listed on the tabular report and the before and after ion chromatograms included in the data packages.

“E” qualifiers were appropriately applied by the laboratory to sample Form I results when concentrations of target analytes were greater than the instrument calibration range. “D” qualifiers were appropriately applied by the laboratory to positive results from diluted sample analyses. The validator removed all laboratory-applied “D” and “E” qualifiers.

The laboratory appropriately applied “J” qualifiers to the sample Form I’s when the concentration of an analyte was less than the sample-specific PQL. The validator did not remove these qualifiers.

The values and associated qualifiers that the validator has judged to be acceptable are presented on the Form 1s in Attachment B, and in the “Validated_Value” and “Validator_Qualifier” columns, respectively, in both the Data Summary Table in Attachment A and the spreadsheet summary file submitted electronically as Attachment C. The Data Summary Table presents all non-detect results for which the result or qualifier was changed during validation, and all positive results, whether or not the value or qualifier was changed as a result of the validation. All results, positive and non-detect, are listed in the spreadsheet summary. If a value or qualifier was changed, this is indicated by the “Y” (for yes) notation in the “Validator_Change” column in the Data Summary Table and spreadsheet summary; if the value or qualifier was not changed during the validation effort, this field is marked with an “N” to indicate

“no change”. Sample-specific quantitation limits are given in the summaries (“PQL” or “High Limit”), and may also be found on the laboratory-generated Form I for each sample (Attachment B).

All laboratory-specific qualifiers, such as the asterisk (*), have been removed by the validator. This is not noted as a validation change.

XIV. Tentatively Identified Compounds (TICs)

Evaluation of unidentified, non-target analyte peaks was not requested or performed for these samples.

XV. System Performance

The analytical systems appear to have been operating well at the time of these analyses based on the evaluation of the available raw data.

XVI. Overall Evaluation of Data

Results for volatile organic compounds were determined to be valid as reported for all samples in SDG Nos. BRES51, UNIF42, and WHEA17, with the following exceptions:

- On the basis of the unacceptable %D value in the associated CC standard, results for bromomethane in samples MW-PLX, MW-PL1, MW-PL2, MW-S1, MW-S2, and FB-6 were qualified as estimated (UJ).
- On the basis of laboratory contamination, results for cis-1,2-dichloroethene in WP-3 and WP-Z were qualified as not detected at the reporting limit (U).
- On the basis of recoveries above both laboratory upper limits and the Region 1 upper acceptance limit, and/or unacceptably poor precision in the associated MS and MSD analyses, results for chloromethane, vinyl chloride, and chloroethane in sample MW-4S were qualified as estimated (UJ).
- On the basis of unacceptable precision in the field duplicate pair, results for tetrachloroethene in SS-3 and SS-Z were qualified as estimated (J).
- On the basis of suspected errors in the preparation of the PES vials, all results from these analyses are rejected (R) for this sampling round.
- The laboratory appropriately applied “J” qualifiers to the sample Form I’s when the concentration of an analyte was less than the sample-specific PQL. The validator did not remove these qualifiers.
- All laboratory-specific qualifiers, such as the asterisk (*), have been removed by the validator.

Documentation problems observed in the data packages are described in Section XVII.

XVII. Documentation

Chain-of-custody (COC) and internal chain of custody (ICOC) records were present and completed accurately, with the following exceptions:

- Sample “BRESSETT KITCHEN TAP” was incorrectly logged in as “BRESSETT KITCHEN TOP”; the validator has not corrected this minor error in any forms or reports.

Data presentation was acceptable.

This validation report should be considered part of the data packages for all future distributions of the volatiles (8260B and 524.2) analysis data.

ATTACHMENT A

DATA SUMMARY TABLE
SDG Nos. BRES51, UNIF42, and WHEA17
Volatile Organics in Water Samples

Lab ID	Client ID	SDG No.	Analyte	Validated Value	Validator Qualifier	PQL	Units	Dilution	Validator Change
Method 524.2									
200-7603-22	WP-3	UNIF42	Carbon disulfide	0.97		0.5	ug/L	1	N
200-7603-22	WP-3	UNIF42	Trichloroethene	0.18	J	0.5	ug/L	1	N
200-7603-23	WP-Z	UNIF42	Carbon disulfide	1		0.5	ug/L	1	N
200-7603-23	WP-Z	UNIF42	Trichloroethene	0.16	J	0.5	ug/L	1	N
200-7603-27	WP-13	UNIF42	Chloroform	0.41	J	0.5	ug/L	1	N
200-7603-28	WP-23 (PES)	UNIF42	1,1,1-Trichloroethane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	1,1,2,2-Tetrachloroethane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	1,1,2-Trichloroethane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	1,1-Dichloroethane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	1,1-Dichloroethene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	1,2-Dichloroethane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	1,2-Dichloropropane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	2-Butanone		R	5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	2-Hexanone		R	2.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	4-Methyl-2-pentanone (MIBK)		R	2.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Acetone		R	5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Benzene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Bromodichloromethane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Bromoform		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Bromomethane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Carbon disulfide		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Carbon tetrachloride		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Chlorobenzene		R	2	ug/L	4	Y
200-7603-28	WP-23 (PES)	UNIF42	Chloroethane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Chloroform		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Chloromethane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	cis-1,2-Dichloroethene		R	2	ug/L	4	Y
200-7603-28	WP-23 (PES)	UNIF42	cis-1,3-Dichloropropene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Dibromochloromethane		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Ethylbenzene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	m&p-Xylene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Methyl t-butyl ether		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Methylene Chloride		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	o-Xylene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Styrene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Tetrachloroethene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Toluene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	trans-1,2-Dichloroethene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	trans-1,3-Dichloropropene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Trichloroethene		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Vinyl chloride		R	0.5	ug/L	1	Y
200-7603-28	WP-23 (PES)	UNIF42	Xylenes, Total		R	0.5	ug/L	1	Y
200-7603-29	FB-5	UNIF42	Chlorobenzene	0.1	J	0.5	ug/L	1	N
200-7603-29	FB-5	UNIF42	cis-1,2-Dichloroethene	0.11	J	0.5	ug/L	1	N
200-7603-29	FB-5	UNIF42	Methylene Chloride	0.06	J	0.5	ug/L	1	N
Method 8260B									
200-7553-3	BRW-3	BRES51	Acetone	0.96	J	5	ug/L	1	N
200-7555-1	MW-25884	UNIF42	1,2-Dichloroethene, Total	0.49	J	1	ug/L	1	N
200-7555-1	MW-25884	UNIF42	cis-1,2-Dichloroethene	0.49	J	1	ug/L	1	N
200-7555-1	MW-25884	UNIF42	Tetrachloroethene	0.51	J	1	ug/L	1	N
200-7555-1	MW-25884	UNIF42	Trichloroethene	0.75	J	1	ug/L	1	N
200-7555-2	BRW-Z	UNIF42	1,2-Dichloroethene, Total	0.48	J	1	ug/L	1	N

200-7555-2	BRW-Z	UNIF42	cis-1,2-Dichloroethene	0.48	J	1	ug/L	1	N
200-7555-2	BRW-Z	UNIF42	Tetrachloroethene	0.51	J	1	ug/L	1	N
200-7555-2	BRW-Z	UNIF42	Trichloroethene	0.72	J	1	ug/L	1	N
200-7602-1	MW-103RD	BRES51	Acetone	3.4	J	5	ug/L	1	N
200-7602-10	MW-4S	BRES51	Chloroethane	1	UJ	1	ug/L	1	Y
200-7602-10	MW-4S	BRES51	Chloromethane	1	UJ	1	ug/L	1	Y
200-7602-10	MW-4S	BRES51	Tetrachloroethene	1.5		1	ug/L	1	N
200-7602-10	MW-4S	BRES51	Vinyl chloride	1	UJ	1	ug/L	1	Y
200-7602-11	MW-4D	BRES51	Tetrachloroethene	5.1		1	ug/L	1	N
200-7602-12	MW-3S	BRES51	1,2-Dichloroethene, Total	14		1.5	ug/L	1.5	N
200-7602-12	MW-3S	BRES51	cis-1,2-Dichloroethene	13		1.5	ug/L	1.5	N
200-7602-12	MW-3S	BRES51	Tetrachloroethene	100		1.5	ug/L	1.5	N
200-7602-12	MW-3S	BRES51	trans-1,2-Dichloroethene	0.76	J	1.5	ug/L	1.5	N
200-7602-12	MW-3S	BRES51	Trichloroethene	27		1.5	ug/L	1.5	N
200-7602-13	MW-3D	BRES51	1,2-Dichloroethene, Total	25		2.5	ug/L	2.5	N
200-7602-13	MW-3D	BRES51	cis-1,2-Dichloroethene	24		2.5	ug/L	2.5	N
200-7602-13	MW-3D	BRES51	Tetrachloroethene	170		2.5	ug/L	2.5	N
200-7602-13	MW-3D	BRES51	trans-1,2-Dichloroethene	0.98	J	2.5	ug/L	2.5	N
200-7602-13	MW-3D	BRES51	Trichloroethene	19		2.5	ug/L	2.5	N
200-7602-14	MW-Z	BRES51	1,2-Dichloroethene, Total	26		2.8	ug/L	2.8	N
200-7602-14	MW-Z	BRES51	cis-1,2-Dichloroethene	25		2.8	ug/L	2.8	N
200-7602-14	MW-Z	BRES51	Tetrachloroethene	170		2.8	ug/L	2.8	N
200-7602-14	MW-Z	BRES51	trans-1,2-Dichloroethene	1	J	2.8	ug/L	2.8	N
200-7602-14	MW-Z	BRES51	Trichloroethene	20		2.8	ug/L	2.8	N
200-7602-3	MW-103RS	BRES51	Acetone	2.2	J	5	ug/L	1	N
200-7602-7	MW-102S	BRES51	1,2-Dichloroethene, Total	21		1	ug/L	1	N
200-7602-7	MW-102S	BRES51	cis-1,2-Dichloroethene	20		1	ug/L	1	N
200-7602-7	MW-102S	BRES51	Tetrachloroethene	76		1	ug/L	1	N
200-7602-7	MW-102S	BRES51	trans-1,2-Dichloroethene	0.67	J	1	ug/L	1	N
200-7602-7	MW-102S	BRES51	Trichloroethene	15		1	ug/L	1	N
200-7602-8	MW-101S	BRES51	1,2-Dichloroethene, Total	0.57	J	1	ug/L	1	N
200-7602-8	MW-101S	BRES51	cis-1,2-Dichloroethene	0.57	J	1	ug/L	1	N
200-7602-8	MW-101S	BRES51	Tetrachloroethene	6.8		1	ug/L	1	N
200-7602-8	MW-101S	BRES51	Trichloroethene	1.3		1	ug/L	1	N
200-7602-9	MW-101D	BRES51	1,2-Dichloroethene, Total	44		2	ug/L	2	N
200-7602-9	MW-101D	BRES51	cis-1,2-Dichloroethene	43		2	ug/L	2	N
200-7602-9	MW-101D	BRES51	Tetrachloroethene	140		2	ug/L	2	N
200-7602-9	MW-101D	BRES51	trans-1,2-Dichloroethene	0.97	J	2	ug/L	2	N
200-7602-9	MW-101D	BRES51	Trichloroethene	32		2	ug/L	2	N
200-7603-10	MW-D	UNIF42	1,2-Dichloroethene, Total	2.1		1	ug/L	1	N
200-7603-10	MW-D	UNIF42	cis-1,2-Dichloroethene	1.8		1	ug/L	1	N
200-7603-10	MW-D	UNIF42	Tetrachloroethene	54		1	ug/L	1	N
200-7603-10	MW-D	UNIF42	trans-1,2-Dichloroethene	0.26	J	1	ug/L	1	N
200-7603-10	MW-D	UNIF42	Trichloroethene	18		1	ug/L	1	N
200-7603-11	MW-E	UNIF42	1,2-Dichloroethene, Total	2.3		1	ug/L	1	N
200-7603-11	MW-E	UNIF42	cis-1,2-Dichloroethene	0.99	J	1	ug/L	1	N
200-7603-11	MW-E	UNIF42	Tetrachloroethene	23		1	ug/L	1	N
200-7603-11	MW-E	UNIF42	trans-1,2-Dichloroethene	1.3		1	ug/L	1	N
200-7603-11	MW-E	UNIF42	Trichloroethene	8.8		1	ug/L	1	N
200-7603-12	W-Z	UNIF42	1,2-Dichloroethene, Total	1.7		1	ug/L	1	N
200-7603-12	W-Z	UNIF42	cis-1,2-Dichloroethene	1.7		1	ug/L	1	N
200-7603-12	W-Z	UNIF42	Tetrachloroethene	50		1	ug/L	1	N
200-7603-12	W-Z	UNIF42	Trichloroethene	17		1	ug/L	1	N
200-7603-13	SP-4	UNIF42	Tetrachloroethene	10		1	ug/L	1	N
200-7603-13	SP-4	UNIF42	Trichloroethene	3.4		1	ug/L	1	N
200-7603-14	SP-3	UNIF42	Tetrachloroethene	0.31	J	1	ug/L	1	N
200-7603-15	SS-2	UNIF42	Acetone	1	J	5	ug/L	1	N

200-7603-16	W-SEEP	UNIF42	Tetrachloroethene	0.25	J	1	ug/L	1	N
200-7603-17	SS-1A	UNIF42	Acetone	2.2	J	5	ug/L	1	N
200-7603-17	SS-1A	UNIF42	Tetrachloroethene	1.4		1	ug/L	1	N
200-7603-17	SS-1A	UNIF42	Trichloroethene	1.1		1	ug/L	1	N
200-7603-18	SS-3	UNIF42	cis-1,2-Dichloroethene	0.26	J	1	ug/L	1	N
200-7603-18	SS-3	UNIF42	Tetrachloroethene	2.2	J	1	ug/L	1	Y
200-7603-18	SS-3	UNIF42	Trichloroethene	0.56	J	1	ug/L	1	N
200-7603-19	SS-5	UNIF42	1,2-Dichloroethene, Total	1.2		1	ug/L	1	N
200-7603-19	SS-5	UNIF42	cis-1,2-Dichloroethene	1.2		1	ug/L	1	N
200-7603-19	SS-5	UNIF42	Tetrachloroethene	0.25	J	1	ug/L	1	N
200-7603-19	SS-5	UNIF42	Trichloroethene	1.2		1	ug/L	1	N
200-7603-2	PZ-101	UNIF42	Acetone	1.5	J	5	ug/L	1	N
200-7603-2	PZ-101	UNIF42	Tetrachloroethene	6.3		1	ug/L	1	N
200-7603-20	SS-Z	UNIF42	Acetone	1	J	5	ug/L	1	N
200-7603-20	SS-Z	UNIF42	Tetrachloroethene	1.3	J	1	ug/L	1	Y
200-7603-20	SS-Z	UNIF42	Trichloroethene	0.5	J	1	ug/L	1	N
200-7603-3	PZ-102	UNIF42	Tetrachloroethene	8.6		1	ug/L	1	N
200-7603-3	PZ-102	UNIF42	Trichloroethene	0.21	J	1	ug/L	1	N
200-7603-4	W-2S	UNIF42	Tetrachloroethene	8.9		1	ug/L	1	N
200-7603-4	W-2S	UNIF42	Trichloroethene	1.9		1	ug/L	1	N
200-7603-5	MW-50	UNIF42	1,2-Dichloroethene, Total	0.42	J	1	ug/L	1	N
200-7603-5	MW-50	UNIF42	cis-1,2-Dichloroethene	0.42	J	1	ug/L	1	N
200-7603-5	MW-50	UNIF42	Tetrachloroethene	2.3		1	ug/L	1	N
200-7603-5	MW-50	UNIF42	Trichloroethene	2.2		1	ug/L	1	N
200-7603-6	W-19	UNIF42	Tetrachloroethene	3.9		1	ug/L	1	N
200-7603-7	W-20	UNIF42	1,2-Dichloroethene, Total	4.5		1	ug/L	1	N
200-7603-7	W-20	UNIF42	cis-1,2-Dichloroethene	4.5		1	ug/L	1	N
200-7603-7	W-20	UNIF42	Tetrachloroethene	33		1	ug/L	1	N
200-7603-7	W-20	UNIF42	Trichloroethene	31		1	ug/L	1	N
200-7603-8	MW-C	UNIF42	Tetrachloroethene	13		1	ug/L	1	N
200-7603-8	MW-C	UNIF42	Trichloroethene	0.85	J	1	ug/L	1	N
200-7603-9	W-1	UNIF42	Tetrachloroethene	22		1	ug/L	1	N
200-7603-9	W-1	UNIF42	Trichloroethene	0.93	J	1	ug/L	1	N
200-7785-1	MW-PLX	WHEA17	Bromomethane	1	UJ	1	ug/L	1	Y
200-7785-1	MW-PLX	WHEA17	Tetrachloroethene	5.5		1	ug/L	1	N
200-7785-1	MW-PLX	WHEA17	Trichloroethene	0.51	J	1	ug/L	1	N
200-7785-2	MW-PL1	WHEA17	Bromomethane	1	UJ	1	ug/L	1	Y
200-7785-2	MW-PL1	WHEA17	Tetrachloroethene	5.1		1	ug/L	1	N
200-7785-2	MW-PL1	WHEA17	Trichloroethene	0.47	J	1	ug/L	1	N
200-7785-3	MW-PL2	WHEA17	Bromomethane	1	UJ	1	ug/L	1	Y
200-7785-4	MW-S1	WHEA17	Bromomethane	1	UJ	1	ug/L	1	Y
200-7785-5	MW-S2	WHEA17	Bromomethane	1	UJ	1	ug/L	1	Y
200-7785-6	FB-6	WHEA17	Bromomethane	1	UJ	1	ug/L	1	Y

ATTACHMENT B

**ORGANIC ANALYSIS DATA SHEETS (Form I)
SDG Nos. BRES51, UNIF42, and WHEA17
Volatile Organics in Water Samples**

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: BRESSETT KITCHEN TOP

Lab Sample ID: 200-7553-5

Date Sampled: 10/17/2011 1225

Client Matrix: Water

Date Received: 10/17/2011 1705

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method: 524.2	Analysis Batch: 200-27040	Instrument ID: L.i
N/A	Prep Batch: N/A	Lab File ID: lgju06.d
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 10/19/2011 0809		Final Weight/Volume: 5 mL
Prep Date: N/A		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.50	U	0.080	0.50
Methylene Chloride	0.50	U	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.50	U	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.50	U	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.50	U	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: SHIELDS

Lab Sample ID: 200-7553-6

Date Sampled: 10/17/2011 1245

Client Matrix: Water

Date Received: 10/17/2011 1705

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method: 524.2	Analysis Batch: 200-27040	Instrument ID: L.i
N/A	Prep Batch: N/A	Lab File ID: lgju09.d
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 10/19/2011 0946		Final Weight/Volume: 5 mL
Prep Date: N/A		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.50	U	0.080	0.50
Methylene Chloride	0.50	U	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.50	U	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.50	U	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.50	U	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: WELL Z

Lab Sample ID: 200-7553-7

Date Sampled: 10/17/2011 1300

Client Matrix: Water

Date Received: 10/17/2011 1705

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method:	524.2	Analysis Batch:	200-27040	Instrument ID:	Li
	N/A	Prep Batch:	N/A	Lab File ID:	lgju10.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/19/2011 1018			Final Weight/Volume:	5 mL
Prep Date:	N/A				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.50	U	0.080	0.50
Methylene Chloride	0.50	U	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.50	U	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.50	U	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.50	U	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: FB-1

Lab Sample ID: 200-7553-8

Date Sampled: 10/17/2011 1255

Client Matrix: Water

Date Received: 10/17/2011 1705

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method: 524.2	Analysis Batch: 200-27040	Instrument ID: L.i
N/A	Prep Batch: N/A	Lab File ID: lgju11.d
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 10/19/2011 1050		Final Weight/Volume: 5 mL
Prep Date: N/A		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.50	U	0.080	0.50
Methylene Chloride	0.50	U	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.50	U	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.50	U	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.50	U	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: BRW-1

Lab Sample ID: 200-7553-1

Date Sampled: 10/17/2011 1330

Client Matrix: Water

Date Received: 10/17/2011 1705

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27669	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgka07.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/27/2011 1105			Final Weight/Volume:	5 mL
Prep Date:	10/27/2011 1105				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
1/4/12

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	95		85 - 120
1,2-Dichlorobenzene-d4	91		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: BRW-2

Lab Sample ID: 200-7553-2

Date Sampled: 10/17/2011 1205

Client Matrix: Water

Date Received: 10/17/2011 1705

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27669	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgka08.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/27/2011 1138		Final Weight/Volume: 5 mL	
Prep Date: 10/27/2011 1138			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
1/4/12

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	91		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: BRW-3

Lab Sample ID: 200-7553-3

Date Sampled: 10/17/2011 1115

Client Matrix: Water

Date Received: 10/17/2011 1705

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27669	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgka09.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/27/2011 1210		Final Weight/Volume: 5 mL	
Prep Date: 10/27/2011 1210			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	0.96	J	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
1/4/12

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	91		80 - 115
Toluene-d8	91		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	91		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: TB-1

Lab Sample ID: 200-7553-4

Date Sampled: 10/17/2011 0000

Client Matrix: Water

Date Received: 10/17/2011 1705

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27669	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgka10.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/27/2011 1243			Final Weight/Volume:	5 mL
Prep Date:	10/27/2011 1243				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	97		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-103RD

Lab Sample ID: 200-7602-1

Date Sampled: 10/18/2011 0905

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27669	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgka14.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/27/2011 1452			Final Weight/Volume:	5 mL
Prep Date:	10/27/2011 1452				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	3.4	J	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	92		80 - 115
Toluene-d8	91		80 - 115
Bromofluorobenzene	91		85 - 120
1,2-Dichlorobenzene-d4	89		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: TB-2

Lab Sample ID: 200-7602-2

Date Sampled: 10/18/2011 0000

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27669	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgka15.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/27/2011 1524			Final Weight/Volume:	5 mL
Prep Date:	10/27/2011 1524				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	92		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-103RS

Lab Sample ID: 200-7602-3

Date Sampled: 10/18/2011 0945

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27669	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgka16.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/27/2011 1557		Final Weight/Volume: 5 mL	
Prep Date: 10/27/2011 1557			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	2.2	J	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	96		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-104S

Lab Sample ID: 200-7602-4

Date Sampled: 10/18/2011 1025

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27669	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgka17.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/27/2011 1629		Final Weight/Volume: 5 mL	
Prep Date: 10/27/2011 1629			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	96		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	95		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-104D

Lab Sample ID: 200-7602-5

Date Sampled: 10/18/2011 1055

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27669	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgka18.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/27/2011 1702		Final Weight/Volume: 5 mL	
Prep Date: 10/27/2011 1702			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	96		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	97		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-102D

Lab Sample ID: 200-7602-6

Date Sampled: 10/18/2011 1200

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27669	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgka19.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/27/2011 1734			Final Weight/Volume:	5 mL
Prep Date:	10/27/2011 1734				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-102S

Lab Sample ID: 200-7602-7

Date Sampled: 10/18/2011 1235

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27791	Instrument ID: L.i	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkd16.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/29/2011 1554		Final Weight/Volume: 5 mL	
Prep Date: 10/29/2011 1554			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	0.67	J	0.24	1.0
1,2-Dichloroethene, Total	21		0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	20		0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	15		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	76		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	97		80 - 115
Toluene-d8	97		80 - 115
Bromofluorobenzene	99		85 - 120
1,2-Dichlorobenzene-d4	97		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-101S

Lab Sample ID: 200-7602-8

Date Sampled: 10/18/2011 1320

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27791	Instrument ID: L.i	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkd11.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/29/2011 1313		Final Weight/Volume: 5 mL	
Prep Date: 10/29/2011 1313			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	0.57	J	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	0.57	J	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.3		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	6.8		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	95		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	96		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-101D

Lab Sample ID: 200-7602-9

Date Sampled: 10/18/2011 1350

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27791	Instrument ID: L.i	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkd17.d	
Dilution: 2.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/29/2011 1627		Final Weight/Volume: 5 mL	
Prep Date: 10/29/2011 1627			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	2.0	U	0.44	2.0
Vinyl chloride	2.0	U	0.48	2.0
Bromomethane	2.0	U	0.60	2.0
Chloroethane	2.0	U	0.52	2.0
1,1-Dichloroethene	2.0	U	0.42	2.0
Acetone	10	U	0.98	10
Carbon disulfide	2.0	U	0.84	2.0
Methylene Chloride	2.0	U	0.34	2.0
trans-1,2-Dichloroethene	0.97	J	0.48	2.0
1,2-Dichloroethene, Total	44		0.78	2.0
1,1-Dichloroethane	2.0	U	0.30	2.0
cis-1,2-Dichloroethene	43		0.48	2.0
2-Butanone	10	U	2.4	10
Chloroform	2.0	U	0.40	2.0
1,1,1-Trichloroethane	2.0	U	0.38	2.0
Carbon tetrachloride	2.0	U	0.36	2.0
Benzene	2.0	U	0.30	2.0
1,2-Dichloroethane	2.0	U	0.40	2.0
Trichloroethene	32		0.40	2.0
1,2-Dichloropropane	2.0	U	0.36	2.0
Bromodichloromethane	2.0	U	0.32	2.0
cis-1,3-Dichloropropene	2.0	U	0.28	2.0
4-Methyl-2-pentanone	10	U	0.90	10
Toluene	2.0	U	0.32	2.0
trans-1,3-Dichloropropene	2.0	U	0.32	2.0
1,1,2-Trichloroethane	2.0	U	0.70	2.0
Tetrachloroethene	140		0.36	2.0
2-Hexanone	10	U	0.92	10
Dibromochloromethane	2.0	U	0.34	2.0
Chlorobenzene	2.0	U	0.30	2.0
Ethylbenzene	2.0	U	0.38	2.0
m&p-Xylene	2.0	U	0.64	2.0
o-Xylene	2.0	U	0.32	2.0
Xylenes, Total	2.0	U	0.96	2.0
Styrene	2.0	U	0.30	2.0
Bromoform	2.0	U	0.36	2.0
1,1,2,2-Tetrachloroethane	2.0	U	0.30	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	92		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-4S

Lab Sample ID: 200-7602-10

Date Sampled: 10/18/2011 1440

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27669	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgka21.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/27/2011 1839		Final Weight/Volume: 5 mL	
Prep Date: 10/27/2011 1839			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	UJ	0.22	1.0
Vinyl chloride	1.0	UJ	0.24	1.0
Bromomethane	1.0	UJ	0.30	1.0
Chloroethane	1.0	UJ	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	UJ	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	UJ	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.5		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	98		80 - 115
Toluene-d8	98		80 - 115
Bromofluorobenzene	100		85 - 120
1,2-Dichlorobenzene-d4	97		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-4D

Lab Sample ID: 200-7602-11

Date Sampled: 10/18/2011 1510

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27791	Instrument ID: L.i	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkd07.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/29/2011 1104		Final Weight/Volume: 5 mL	
Prep Date: 10/29/2011 1104			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	5.1		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	95		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	96		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-3S

Lab Sample ID: 200-7602-12

Date Sampled: 10/18/2011 1530

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27791	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkd18.d
Dilution:	1.5			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 1659			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 1659				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.5	U	0.33	1.5
Vinyl chloride	1.5	U	0.36	1.5
Bromomethane	1.5	U	0.45	1.5
Chloroethane	1.5	U	0.39	1.5
1,1-Dichloroethene	1.5	U	0.32	1.5
Acetone	7.5	U	0.74	7.5
Carbon disulfide	1.5	U	0.63	1.5
Methylene Chloride	1.5	U	0.26	1.5
trans-1,2-Dichloroethene	0.76	J	0.36	1.5
1,2-Dichloroethene, Total	14		0.59	1.5
1,1-Dichloroethane	1.5	U	0.23	1.5
cis-1,2-Dichloroethene	13		0.36	1.5
2-Butanone	7.5	U	1.8	7.5
Chloroform	1.5	U	0.30	1.5
1,1,1-Trichloroethane	1.5	U	0.29	1.5
Carbon tetrachloride	1.5	U	0.27	1.5
Benzene	1.5	U	0.23	1.5
1,2-Dichloroethane	1.5	U	0.30	1.5
Trichloroethene	27		0.30	1.5
1,2-Dichloropropane	1.5	U	0.27	1.5
Bromodichloromethane	1.5	U	0.24	1.5
cis-1,3-Dichloropropene	1.5	U	0.21	1.5
4-Methyl-2-pentanone	7.5	U	0.68	7.5
Toluene	1.5	U	0.24	1.5
trans-1,3-Dichloropropene	1.5	U	0.24	1.5
1,1,2-Trichloroethane	1.5	U	0.53	1.5
Tetrachloroethene	100		0.27	1.5
2-Hexanone	7.5	U	0.69	7.5
Dibromochloromethane	1.5	U	0.26	1.5
Chlorobenzene	1.5	U	0.23	1.5
Ethylbenzene	1.5	U	0.29	1.5
m&p-Xylene	1.5	U	0.48	1.5
o-Xylene	1.5	U	0.24	1.5
Xylenes, Total	1.5	U	0.72	1.5
Styrene	1.5	U	0.23	1.5
Bromoform	1.5	U	0.27	1.5
1,1,2,2-Tetrachloroethane	1.5	U	0.23	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	91		80 - 115
Toluene-d8	92		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	91		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-3D

Lab Sample ID: 200-7602-13

Date Sampled: 10/18/2011 1610

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27791	Instrument ID: L.i	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkd19.d	
Dilution: 2.5		Initial Weight/Volume: 5 mL	
Analysis Date: 10/29/2011 1732		Final Weight/Volume: 5 mL	
Prep Date: 10/29/2011 1732			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	2.5	U	0.55	2.5
Vinyl chloride	2.5	U	0.60	2.5
Bromomethane	2.5	U	0.75	2.5
Chloroethane	2.5	U	0.65	2.5
1,1-Dichloroethene	2.5	U	0.53	2.5
Acetone	13	U	1.2	13
Carbon disulfide	2.5	U	1.1	2.5
Methylene Chloride	2.5	U	0.43	2.5
trans-1,2-Dichloroethene	0.98	J	0.60	2.5
1,2-Dichloroethene, Total	25		0.98	2.5
1,1-Dichloroethane	2.5	U	0.38	2.5
cis-1,2-Dichloroethene	24		0.60	2.5
2-Butanone	13	U	3.0	13
Chloroform	2.5	U	0.50	2.5
1,1,1-Trichloroethane	2.5	U	0.48	2.5
Carbon tetrachloride	2.5	U	0.45	2.5
Benzene	2.5	U	0.38	2.5
1,2-Dichloroethane	2.5	U	0.50	2.5
Trichloroethene	19		0.50	2.5
1,2-Dichloropropane	2.5	U	0.45	2.5
Bromodichloromethane	2.5	U	0.40	2.5
cis-1,3-Dichloropropene	2.5	U	0.35	2.5
4-Methyl-2-pentanone	13	U	1.1	13
Toluene	2.5	U	0.40	2.5
trans-1,3-Dichloropropene	2.5	U	0.40	2.5
1,1,2-Trichloroethane	2.5	U	0.88	2.5
Tetrachloroethene	170		0.45	2.5
2-Hexanone	13	U	1.2	13
Dibromochloromethane	2.5	U	0.43	2.5
Chlorobenzene	2.5	U	0.38	2.5
Ethylbenzene	2.5	U	0.48	2.5
m&p-Xylene	2.5	U	0.80	2.5
o-Xylene	2.5	U	0.40	2.5
Xylenes, Total	2.5	U	1.2	2.5
Styrene	2.5	U	0.38	2.5
Bromoform	2.5	U	0.45	2.5
1,1,2,2-Tetrachloroethane	2.5	U	0.38	2.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	95		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	96		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: MW-Z

Lab Sample ID: 200-7602-14

Date Sampled: 10/18/2011 1700

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27791	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkd20.d
Dilution:	2.8			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 1804			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 1804				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	2.8	U	0.62	2.8
Vinyl chloride	2.8	U	0.67	2.8
Bromomethane	2.8	U	0.84	2.8
Chloroethane	2.8	U	0.73	2.8
1,1-Dichloroethene	2.8	U	0.59	2.8
Acetone	14	U	1.4	14
Carbon disulfide	2.8	U	1.2	2.8
Methylene Chloride	2.8	U	0.48	2.8
trans-1,2-Dichloroethene	1.0	J	0.67	2.8
1,2-Dichloroethene, Total	26		1.1	2.8
1,1-Dichloroethane	2.8	U	0.42	2.8
cis-1,2-Dichloroethene	25		0.67	2.8
2-Butanone	14	U	3.4	14
Chloroform	2.8	U	0.56	2.8
1,1,1-Trichloroethane	2.8	U	0.53	2.8
Carbon tetrachloride	2.8	U	0.50	2.8
Benzene	2.8	U	0.42	2.8
1,2-Dichloroethane	2.8	U	0.56	2.8
Trichloroethene	20		0.56	2.8
1,2-Dichloropropane	2.8	U	0.50	2.8
Bromodichloromethane	2.8	U	0.45	2.8
cis-1,3-Dichloropropene	2.8	U	0.39	2.8
4-Methyl-2-pentanone	14	U	1.3	14
Toluene	2.8	U	0.45	2.8
trans-1,3-Dichloropropene	2.8	U	0.45	2.8
1,1,2-Trichloroethane	2.8	U	0.98	2.8
Tetrachloroethene	170		0.50	2.8
2-Hexanone	14	U	1.3	14
Dibromochloromethane	2.8	U	0.48	2.8
Chlorobenzene	2.8	U	0.42	2.8
Ethylbenzene	2.8	U	0.53	2.8
m&p-Xylene	2.8	U	0.90	2.8
o-Xylene	2.8	U	0.45	2.8
Xylenes, Total	2.8	U	1.3	2.8
Styrene	2.8	U	0.42	2.8
Bromoform	2.8	U	0.50	2.8
1,1,2,2-Tetrachloroethane	2.8	U	0.42	2.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	92		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7553-1

Sdg Number: BRES51

Client Sample ID: FB-3

Lab Sample ID: 200-7602-15

Date Sampled: 10/18/2011 1620

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27669	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgka20.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/27/2011 1806			Final Weight/Volume:	5 mL
Prep Date:	10/27/2011 1806				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	92		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: WP-3

Lab Sample ID: 200-7603-22

Date Sampled: 10/19/2011 1410

Client Matrix: Water

Date Received: 10/19/2011 1730

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method: 524.2	Analysis Batch: 200-27145	Instrument ID: L.i
N/A	Prep Batch: N/A	Lab File ID: lgjv06.d
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 10/20/2011 0908		Final Weight/Volume: 5 mL
Prep Date: N/A		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.97		0.080	0.50
Methylene Chloride	0.50	U	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	0.50	U	0.37	5.0
Chloroform	0.50	U	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.18	J	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.50	U	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

0.50 ~~0.05~~ U ✓

DHG
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Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: WP-Z

Lab Sample ID: 200-7603-23

Date Sampled: 10/19/2011 1700

Client Matrix: Water

Date Received: 10/19/2011 1730

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method: 524.2	Analysis Batch: 200-27145	Instrument ID: L.i
N/A	Prep Batch: N/A	Lab File ID: lgjv07.d
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 10/20/2011 0941		Final Weight/Volume: 5 mL
Prep Date: N/A		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	1.0		0.080	0.50
Methylene Chloride	0.50	U	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.50	U	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.16	J	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.50	U	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

0.50 ~~0.050~~ U J

DHG
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Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: WP-5

Lab Sample ID: 200-7603-24

Date Sampled: 10/19/2011 1515

Client Matrix: Water

Date Received: 10/19/2011 1730

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method:	524.2	Analysis Batch:	200-27145	Instrument ID:	L.i
	N/A	Prep Batch:	N/A	Lab File ID:	lgjv08.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/20/2011 1013			Final Weight/Volume:	5 mL
Prep Date:	N/A				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.50	U	0.080	0.50
Methylene Chloride	0.50	U	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.50	U	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.50	U	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.50	U	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: WP-7

Lab Sample ID: 200-7603-25

Date Sampled: 10/19/2011 1525

Client Matrix: Water

Date Received: 10/19/2011 1730

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method: 524.2	Analysis Batch: 200-27145	Instrument ID: L.i
N/A	Prep Batch: N/A	Lab File ID: lgjv09.d
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 10/20/2011 1046		Final Weight/Volume: 5 mL
Prep Date: N/A		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.50	U	0.080	0.50
Methylene Chloride	0.50	U	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.50	U	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.50	U	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.50	U	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: WP-8

Lab Sample ID: 200-7603-26

Date Sampled: 10/19/2011 1540

Client Matrix: Water

Date Received: 10/19/2011 1730

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method: 524.2	Analysis Batch: 200-27145	Instrument ID: L.i
N/A	Prep Batch: N/A	Lab File ID: lgjv10.d
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 10/20/2011 1118		Final Weight/Volume: 5 mL
Prep Date: N/A		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.50	U	0.080	0.50
Methylene Chloride	0.50	U	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.50	U	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.50	U	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.50	U	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: WP-13

Lab Sample ID: 200-7603-27

Date Sampled: 10/19/2011 1555

Client Matrix: Water

Date Received: 10/19/2011 1730

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method: 524.2	Analysis Batch: 200-27145	Instrument ID: L.i
N/A	Prep Batch: N/A	Lab File ID: lgjv13.d
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 10/20/2011 1255		Final Weight/Volume: 5 mL
Prep Date: N/A		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.50	U	0.080	0.50
Methylene Chloride	0.50	U	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.41	J	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.50	U	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.50	U	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: **WP-23**

Lab Sample ID: 200-7603-28

Date Sampled: 10/19/2011 1645

Client Matrix: Water

Date Received: 10/19/2011 1730

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method:	524.2	Analysis Batch:	200-27145	Instrument ID:	Li
	N/A	Prep Batch:	N/A	Lab File ID:	lgjv14.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/20/2011 1328			Final Weight/Volume:	5 mL
Prep Date:	N/A				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	3.9		0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	4.2		0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.50	U	0.080	0.50
Methylene Chloride	13		0.030	0.50
trans-1,2-Dichloroethene	6.3		0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	32	E	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.25	J	0.058	0.50
1,1,1-Trichloroethane	11		0.060	0.50
Carbon tetrachloride	9.6		0.046	0.50
Benzene	5.5		0.068	0.50
1,2-Dichloroethane	13		0.055	0.50
Trichloroethene	1.4		0.070	0.50
1,2-Dichloropropane	13		0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	5.1		0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	11		0.11	0.50
Tetrachloroethene	7.3		0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	32	E	0.052	0.50
Ethylbenzene	12		0.063	0.50
m&p-Xylene	13		0.14	0.50
o-Xylene	5.6		0.066	0.50
Xylenes, Total	19		0.060	0.50
Styrene	6.4		0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

DHG
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Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1
Sdg Number: UNIF42

Client Sample ID: WP-23 DL

Lab Sample ID: 200-7603-28

Date Sampled: 10/19/2011 1645

Client Matrix: Water

Date Received: 10/19/2011 1730

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method:	524.2	Analysis Batch:	200-27256	Instrument ID:	LI
	N/A	Prep Batch:	N/A	Lab File ID:	lgjw08.d
Dilution:	4.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/21/2011 1258	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	N/A				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	2.0	U	0.36	2.0
Vinyl chloride	4.1	D	0.24	2.0
Bromomethane	2.0	U	0.68	2.0
Chloroethane	2.0	U	0.56	2.0
1,1-Dichloroethene	4.4	D	0.33	2.0
Acetone	12	J D	4.4	20
Carbon disulfide	2.0	U	0.32	2.0
Methylene Chloride	14	D	0.12	2.0
trans-1,2-Dichloroethene	6.7	D	0.19	2.0
Methyl t-butyl ether	2.0	U	0.24	2.0
1,1-Dichloroethane	2.0	U	0.24	2.0
cis-1,2-Dichloroethene	33	D	0.21	2.0
2-Butanone	20	U	1.5	20
Chloroform	0.32	J D	0.23	2.0
1,1,1-Trichloroethane	11	D	0.24	2.0
Carbon tetrachloride	9.5	D	0.18	2.0
Benzene	5.9	D	0.27	2.0
1,2-Dichloroethane	13	D	0.22	2.0
Trichloroethene	1.6	J D	0.28	2.0
1,2-Dichloropropane	13	D	0.40	2.0
Bromodichloromethane	2.0	U	0.22	2.0
cis-1,3-Dichloropropene	2.0	U	0.36	2.0
4-Methyl-2-pentanone (MIBK)	10	U	1.2	10
Toluene	5.3	D	0.22	2.0
trans-1,3-Dichloropropene	2.0	U	0.34	2.0
1,1,2-Trichloroethane	11	D	0.44	2.0
Tetrachloroethene	7.3	D	0.36	2.0
2-Hexanone	10	U	1.5	10
Dibromochloromethane	2.0	U	0.21	2.0
Chlorobenzene	31	D	0.21	2.0
Ethylbenzene	11	D	0.25	2.0
m&p-Xylene	12	D	0.56	2.0
o-Xylene	5.5	D	0.26	2.0
Xylenes, Total	18	D	0.24	2.0
Styrene	6.1	D	0.20	2.0
Bromoform	2.0	U	0.30	2.0
1,1,2,2-Tetrachloroethane	2.0	U	0.19	2.0

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Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: FB-5

Lab Sample ID: 200-7603-29

Date Sampled: 10/19/2011 1600

Client Matrix: Water

Date Received: 10/19/2011 1730

524.2 Volatile Organic Compounds (GC/MS)

Analysis Method: 524.2	Analysis Batch: 200-27145	Instrument ID: L.i
N/A	Prep Batch: N/A	Lab File ID: lgjv15.d
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 10/20/2011 1400		Final Weight/Volume: 5 mL
Prep Date: N/A		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	0.50	U	0.091	0.50
Vinyl chloride	0.50	U	0.059	0.50
Bromomethane	0.50	U	0.17	0.50
Chloroethane	0.50	U	0.14	0.50
1,1-Dichloroethene	0.50	U	0.083	0.50
Acetone	5.0	U	1.1	5.0
Carbon disulfide	0.50	U	0.080	0.50
Methylene Chloride	0.060	J	0.030	0.50
trans-1,2-Dichloroethene	0.50	U	0.048	0.50
Methyl t-butyl ether	0.50	U	0.061	0.50
1,1-Dichloroethane	0.50	U	0.059	0.50
cis-1,2-Dichloroethene	0.11	J	0.053	0.50
2-Butanone	5.0	U	0.37	5.0
Chloroform	0.50	U	0.058	0.50
1,1,1-Trichloroethane	0.50	U	0.060	0.50
Carbon tetrachloride	0.50	U	0.046	0.50
Benzene	0.50	U	0.068	0.50
1,2-Dichloroethane	0.50	U	0.055	0.50
Trichloroethene	0.50	U	0.070	0.50
1,2-Dichloropropane	0.50	U	0.10	0.50
Bromodichloromethane	0.50	U	0.056	0.50
cis-1,3-Dichloropropene	0.50	U	0.089	0.50
4-Methyl-2-pentanone (MIBK)	2.5	U	0.29	2.5
Toluene	0.50	U	0.056	0.50
trans-1,3-Dichloropropene	0.50	U	0.084	0.50
1,1,2-Trichloroethane	0.50	U	0.11	0.50
Tetrachloroethene	0.50	U	0.091	0.50
2-Hexanone	2.5	U	0.37	2.5
Dibromochloromethane	0.50	U	0.053	0.50
Chlorobenzene	0.10	J	0.052	0.50
Ethylbenzene	0.50	U	0.063	0.50
m&p-Xylene	0.50	U	0.14	0.50
o-Xylene	0.50	U	0.066	0.50
Xylenes, Total	0.50	U	0.060	0.50
Styrene	0.50	U	0.049	0.50
Bromoform	0.50	U	0.076	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.047	0.50

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: MW-25884

Lab Sample ID: 200-7555-1

Date Sampled: 10/17/2011 1510

Client Matrix: Water

Date Received: 10/17/2011 1705

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27669	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgka11.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/27/2011 1315			Final Weight/Volume:	5 mL
Prep Date:	10/27/2011 1315				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	0.49	J	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	0.49	J	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	0.75	J	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	0.51	J	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: BRW-Z

Lab Sample ID: 200-7555-2

Date Sampled: 10/17/2011 1530

Client Matrix: Water

Date Received: 10/17/2011 1705

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27669	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgka12.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/27/2011 1347		Final Weight/Volume: 5 mL	
Prep Date: 10/27/2011 1347			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	0.48	J	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	0.48	J	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	0.72	J	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	0.51	J	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	90		80 - 115
Toluene-d8	92		80 - 115
Bromofluorobenzene	95		85 - 120
1,2-Dichlorobenzene-d4	92		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: FB-2

Lab Sample ID: 200-7555-3

Date Sampled: 10/17/2011 1520

Client Matrix: Water

Date Received: 10/17/2011 1705

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27669	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgka13.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/27/2011 1420			Final Weight/Volume:	5 mL
Prep Date:	10/27/2011 1420				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	95		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	97		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: TB-3

Lab Sample ID: 200-7603-1

Date Sampled: 10/19/2011 0000

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc07.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/28/2011 1847			Final Weight/Volume:	5 mL
Prep Date:	10/28/2011 1847				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	97		85 - 120
1,2-Dichlorobenzene-d4	92		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: PZ-101

Lab Sample ID: 200-7603-2

Date Sampled: 10/19/2011 0845

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc18.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 0043			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 0043				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	1.5	J	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	6.3		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	92		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	92		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: PZ-102

Lab Sample ID: 200-7603-3

Date Sampled: 10/19/2011 0905

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27759	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkc19.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/29/2011 0116		Final Weight/Volume: 5 mL	
Prep Date: 10/29/2011 0116			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	0.21	J	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	8.6		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	98		80 - 115
Toluene-d8	97		80 - 115
Bromofluorobenzene	99		85 - 120
1,2-Dichlorobenzene-d4	98		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: W-2S

Lab Sample ID: 200-7603-4

Date Sampled: 10/19/2011 0925

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc20.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 0148			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 0148				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.9		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	8.9		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: MW-50

Lab Sample ID: 200-7603-5

Date Sampled: 10/19/2011 0945

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27791	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkd06.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 1031			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 1031				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	0.42	J	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	0.42	J	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	2.2		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	2.3		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	92		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	90		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: W-19

Lab Sample ID: 200-7603-6

Date Sampled: 10/19/2011 1020

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc21.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 0220			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 0220				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	3.9		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	98		80 - 115
Toluene-d8	97		80 - 115
Bromofluorobenzene	99		85 - 120
1,2-Dichlorobenzene-d4	96		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: W-20

Lab Sample ID: 200-7603-7

Date Sampled: 10/19/2011 1035

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27791	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkd13.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 1417			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 1417				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	4.5		0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	4.5		0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	31		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	33		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	96		80 - 115
Toluene-d8	96		80 - 115
Bromofluorobenzene	97		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: MW-C

Lab Sample ID: 200-7603-8

Date Sampled: 10/19/2011 1055

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc22.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 0253			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 0253				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	0.85	J	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	13		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	96		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	96		85 - 120
1,2-Dichlorobenzene-d4	95		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: W-1

Lab Sample ID: 200-7603-9

Date Sampled: 10/19/2011 1115

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27791	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkd08.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 1136			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 1136				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	0.93	J	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	22		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	97		80 - 115
Toluene-d8	95		80 - 115
Bromofluorobenzene	96		85 - 120
1,2-Dichlorobenzene-d4	95		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: MW-D

Lab Sample ID: 200-7603-10

Date Sampled: 10/19/2011 1210

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27791	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkd15.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 1522			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 1522				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	0.26	J	0.24	1.0
1,2-Dichloroethene, Total	2.1		0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.8		0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	18		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	54		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	95		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1
Sdg Number: UNIF42

Client Sample ID: MW-E

Lab Sample ID: 200-7603-11
Client Matrix: Water

Date Sampled: 10/19/2011 1140
Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27791	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkd12.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 1345			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 1345				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.3		0.24	1.0
1,2-Dichloroethene, Total	2.3		0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	0.99	J	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	8.8		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	23		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	97		80 - 115
Toluene-d8	95		80 - 115
Bromofluorobenzene	97		85 - 120
1,2-Dichlorobenzene-d4	96		80 - 115

revised
1/23/12
DHG

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: **W-Z**

Lab Sample ID: 200-7603-12

Date Sampled: 10/19/2011 0800

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27791	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkd14.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 1450			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 1450				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.7		0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.7		0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	17		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	50		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	95		85 - 120
1,2-Dichlorobenzene-d4	92		80 - 115

revised

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DHG

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: W-SEEP

Lab Sample ID: 200-7603-16

Date Sampled: 10/19/2011 1315

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc11.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/28/2011 2056			Final Weight/Volume:	5 mL
Prep Date:	10/28/2011 2056				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	0.25	J	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	96		80 - 115
Toluene-d8	96		80 - 115
Bromofluorobenzene	97		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: SP-4

Lab Sample ID: 200-7603-13

Date Sampled: 10/19/2011 1435

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27759	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkc23.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/29/2011 0325		Final Weight/Volume: 5 mL	
Prep Date: 10/29/2011 0325			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	3.4		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	10		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	92		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: SP-3

Lab Sample ID: 200-7603-14

Date Sampled: 10/19/2011 1455

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-27759	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkc09.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 10/28/2011 1951		Final Weight/Volume: 5 mL	
Prep Date: 10/28/2011 1951			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U ↘	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U ↘	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	0.31	J	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	96		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: SS-2

Lab Sample ID: 200-7603-15

Date Sampled: 10/19/2011 1300

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc10.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/28/2011 2024			Final Weight/Volume:	5 mL
Prep Date:	10/28/2011 2024				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	1.0	J	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	95		80 - 115
Toluene-d8	95		80 - 115
Bromofluorobenzene	99		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: W-SEEP

Lab Sample ID: 200-7603-16

Date Sampled: 10/19/2011 1315

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc11.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/28/2011 2056			Final Weight/Volume:	5 mL
Prep Date:	10/28/2011 2056				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	0.25	J	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	96		80 - 115
Toluene-d8	96		80 - 115
Bromofluorobenzene	97		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: SS-1A

Lab Sample ID: 200-7603-17

Date Sampled: 10/19/2011 1350

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc12.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/28/2011 2129			Final Weight/Volume:	5 mL
Prep Date:	10/28/2011 2129				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	2.2	J	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.1		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.4		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	96		85 - 120
1,2-Dichlorobenzene-d4	93		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: SS-3

Lab Sample ID: 200-7603-18

Date Sampled: 10/19/2011 1420

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc13.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/28/2011 2201			Final Weight/Volume:	5 mL
Prep Date:	10/28/2011 2201				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	0.26	J	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	0.56	J	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	2.2	J	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	95		85 - 120
1,2-Dichlorobenzene-d4	92		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: SS-5

Lab Sample ID: 200-7603-19

Date Sampled: 10/19/2011 1330

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc14.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/28/2011 2234			Final Weight/Volume:	5 mL
Prep Date:	10/28/2011 2234				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.2		0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.2		0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.2		0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	0.25	J	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	96		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	96		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: SS-Z

Lab Sample ID: 200-7603-20

Date Sampled: 10/19/2011 1630

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc17.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2011 0011			Final Weight/Volume:	5 mL
Prep Date:	10/29/2011 0011				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	1.0	J	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	0.50	J	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.3	J	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	92		80 - 115
Toluene-d8	91		80 - 115
Bromofluorobenzene	93		85 - 120
1,2-Dichlorobenzene-d4	91		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7555-1

Sdg Number: UNIF42

Client Sample ID: FB-4

Lab Sample ID: 200-7603-21

Date Sampled: 10/19/2011 1500

Client Matrix: Water

Date Received: 10/19/2011 1730

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-27759	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkc08.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/28/2011 1919			Final Weight/Volume:	5 mL
Prep Date:	10/28/2011 1919				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	90		80 - 115
Toluene-d8	91		80 - 115
Bromofluorobenzene	92		85 - 120
1,2-Dichlorobenzene-d4	89		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7785-1

Sdg Number: WHEA17

Client Sample ID: MW-PLX

Lab Sample ID: 200-7785-1

Date Sampled: 10/28/2011 0900

Client Matrix: Water

Date Received: 10/28/2011 1630

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-28201	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkg08.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 11/03/2011 1640		Final Weight/Volume: 5 mL	
Prep Date: 11/03/2011 1640			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	UJ	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	0.51	J	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	5.5		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	81		80 - 115
Toluene-d8	81		80 - 115
Bromofluorobenzene	85		85 - 120
1,2-Dichlorobenzene-d4	80		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7785-1

Sdg Number: WHEA17

Client Sample ID: MW-PL1

Lab Sample ID: 200-7785-2

Date Sampled: 10/28/2011 1025

Client Matrix: Water

Date Received: 10/28/2011 1630

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-28201	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkg09.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/03/2011 1712			Final Weight/Volume:	5 mL
Prep Date:	11/03/2011 1712				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	UJ	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	0.47	J	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	5.1		0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	84		80 - 115
Toluene-d8	88		80 - 115
Bromofluorobenzene	89		85 - 120
1,2-Dichlorobenzene-d4	85		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7785-1

Sdg Number: WHEA17

Client Sample ID: MW-PL2

Lab Sample ID: 200-7785-3

Date Sampled: 10/28/2011 1105

Client Matrix: Water

Date Received: 10/28/2011 1630

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-28201	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkg10.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 11/03/2011 1744		Final Weight/Volume: 5 mL	
Prep Date: 11/03/2011 1744			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	UJ	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	93		80 - 115
Toluene-d8	93		80 - 115
Bromofluorobenzene	95		85 - 120
1,2-Dichlorobenzene-d4	91		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7785-1
Sdg Number: WHEA17

Client Sample ID: MW-S1

Lab Sample ID: 200-7785-4
Client Matrix: Water

Date Sampled: 10/28/2011 1155
Date Received: 10/28/2011 1630

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-28201	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkg11.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/03/2011 1816			Final Weight/Volume:	5 mL
Prep Date:	11/03/2011 1816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	UJ	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	87		80 - 115
Toluene-d8	87		80 - 115
Bromofluorobenzene	89		85 - 120
1,2-Dichlorobenzene-d4	86		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7785-1

Sdg Number: WHEA17

Client Sample ID: MW-S2

Lab Sample ID: 200-7785-5

Date Sampled: 10/28/2011 1225

Client Matrix: Water

Date Received: 10/28/2011 1630

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 200-28201	Instrument ID: Li	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: lgkg12.d	
Dilution: 1.0		Initial Weight/Volume: 5 mL	
Analysis Date: 11/03/2011 1849		Final Weight/Volume: 5 mL	
Prep Date: 11/03/2011 1849			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	UJ	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	83		80 - 115
Toluene-d8	83		80 - 115
Bromofluorobenzene	86		85 - 120
1,2-Dichlorobenzene-d4	83		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7785-1

Sdg Number: WHEA17

Client Sample ID: FB-6

Lab Sample ID: 200-7785-6

Date Sampled: 10/28/2011 1235

Client Matrix: Water

Date Received: 10/28/2011 1630

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-28201	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkg15.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/03/2011 2025			Final Weight/Volume:	5 mL
Prep Date:	11/03/2011 2025				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	UJ	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

DHG
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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	92		80 - 115
Toluene-d8	90		80 - 115
Bromofluorobenzene	94		85 - 120
1,2-Dichlorobenzene-d4	90		80 - 115

Analytical Data

Client: VT Dept of Envir Conservation

Job Number: 200-7785-1
Sdg Number: WHEA17

Client Sample ID: TB-4

Lab Sample ID: 200-7785-7
Client Matrix: Water

Date Sampled: 10/28/2011 0000
Date Received: 10/28/2011 1630

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	200-28379	Instrument ID:	Li
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	lgkj19.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/07/2011 1909			Final Weight/Volume:	5 mL
Prep Date:	11/07/2011 1909				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	1.0	U	0.22	1.0
Vinyl chloride	1.0	U	0.24	1.0
Bromomethane	1.0	U	0.30	1.0
Chloroethane	1.0	U	0.26	1.0
1,1-Dichloroethene	1.0	U	0.21	1.0
Acetone	5.0	U	0.49	5.0
Carbon disulfide	1.0	U	0.42	1.0
Methylene Chloride	1.0	U	0.17	1.0
trans-1,2-Dichloroethene	1.0	U	0.24	1.0
1,2-Dichloroethene, Total	1.0	U	0.39	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
2-Butanone	5.0	U	1.2	5.0
Chloroform	1.0	U	0.20	1.0
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.18	1.0
Benzene	1.0	U	0.15	1.0
1,2-Dichloroethane	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.20	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
Bromodichloromethane	1.0	U	0.16	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
4-Methyl-2-pentanone	5.0	U	0.45	5.0
Toluene	1.0	U	0.16	1.0
trans-1,3-Dichloropropene	1.0	U	0.16	1.0
1,1,2-Trichloroethane	1.0	U	0.35	1.0
Tetrachloroethene	1.0	U	0.18	1.0
2-Hexanone	5.0	U	0.46	5.0
Dibromochloromethane	1.0	U	0.17	1.0
Chlorobenzene	1.0	U	0.15	1.0
Ethylbenzene	1.0	U	0.19	1.0
m&p-Xylene	1.0	U	0.32	1.0
o-Xylene	1.0	U	0.16	1.0
Xylenes, Total	1.0	U	0.48	1.0
Styrene	1.0	U	0.15	1.0
Bromoform	1.0	U	0.18	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.15	1.0

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Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4	94		80 - 115
Toluene-d8	94		80 - 115
Bromofluorobenzene	97		85 - 120
1,2-Dichlorobenzene-d4	94		80 - 115

ATTACHMENT C

SPREADSHEET SUMMARY
SDG Nos. BRES51, UNIF42, and WHEA17
Volatile Organics in Water Samples