2010 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT

United Technologies Corporation
Pratt & Whitney Division
F&H Buildings
East Hartford, Connecticut

January 2011

Volume 3 of 3

Prepared for

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Loureiro Engineering Associates, Inc.

January 17, 2011

State of Connecticut
Department of Environmental Protection
Remediation Division
79 Elm Street
Hartford, CT 06016-5127

Attn: Gil Richards

RE: United Technologies Corporation
Pratt & Whitney Division
Post-Remediation Maintenance and Monitoring
F&H Buildings, Pratt & Whitney East Hartford, Connecticut
LEA Comm. No. 88UT045

Dear Mr. Richards:

In accordance with Appendix B and C of the document entitled *Remedial Action Work Plan and Request for Variance Engineered Control of Polluted Soils, F&H Buildings Remediation Project,* approved by the Department of Environmental Protection on June 8, 2005, attached please find the 2010 Annual Post-Remediation Maintenance and Groundwater Monitoring Report for F&H Buildings. The maintenance and monitoring activities were initiated following the December 6, 2006 completion of remediation activities at F&H Buildings.

If you should have any questions or comments, please contact me at (860) 410-2969 or Joe Tota of United Technologies Corporation at (860) 728-6510.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

FOR

Tom Salimeno, P.E., L.E.P.
Vice President

Attachment

cc: Maurice Hamel, DEP
Juan Perez, EPA
Lauren Levine, UTC
Joseph Tota, UTC
John Wotus, P&W

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ACRONYMS

CSM	Conceptual Site Model
CTDEP	Connecticut Department of Environmental Protection
CT ETPH	Connecticut Extractable Total Petroleum Hydrocarbons
DQA	Data Quality Assessment
DQO	Data Quality Objective
DUE	Data Usability Evaluation
ELUR	Environmental Land Use Restriction
EPA	United States Environmental Protection Agency
GIS	Geographic Information System
GWPC	Groundwater Protection Criteria
IDEC	Industrial/Commercial Direct Exposure Criteria
IVC	Industrial/Commercial Volatilization Criteria
LCS	Laboratory Control Sample
LEA	Loureiro Engineering Associates, Inc.
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethylene
PMC	Pollutant Mobility Criteria
QA/QC	Quality Assurance/Quality Control
RA	Remedial Action
RAWP	Remedial Action Work Plan
RCP	Reasonable Confidence Protocol
RCRA	Resource Conservation and Recovery Act
RCSA	Regulations of Connecticut State Agencies
RDEC	Residential Direct Exposure Criteria
RSR	Remediation Standard Regulation
RVC	Residential Volatilization Criteria
SPLP	Synthetic Precipitate Leaching Procedure
SWPC	Surface Water Protection Criteria
TCA	1,1,1-Trichloroethane
TCE	Trichloroethylene
TCLP	Toxicity Characteristic Leaching Procedure
UTC	United Technologies Corporation
VC	Volatilization Criteria
VOC	Volatile Organic Compound

UNITS

mg/kg	milligrams per kilogram
mg/l	milligrams per liter
µg/l	micrograms per liter

1. INTRODUCTION

United Technologies Corporation (UTC)/Pratt & Whitney retained Loureiro Engineering Associates, Inc. (LEA) to perform the post-remediation groundwater monitoring and maintenance activities associated with the remediation of polychlorinated biphenyl (PCB) contaminated concrete and soil at areas underlying the former F&H Buildings (herein after referred to as the "Project Area") at the UTC/Pratt & Whitney manufacturing facility in East Hartford, Connecticut (herein after referred to as the "Site"). The remediation of concrete and soil underlying the Project Area was undertaken by UTC/Pratt & Whitney on a voluntary basis in accordance with the document entitled *Remedial Action Work Plan and Request for Variance Engineered Control for Polluted Soil* (RAWP), approved by the Connecticut Department of Environmental Protection (CTDEP) on June 8, 2005. The F&H Buildings Remediation Project was completed on December 6, 2006.

The following report has been prepared in accordance with the Post-Remediation Groundwater Monitoring Plan and the Post-Remediation Maintenance and Monitoring Program, which are included as Appendix B and C, respectively, of the CTDEP approved RAWP. This report presents the 2010 annual summary of post-remediation groundwater monitoring and maintenance monitoring of the engineered control. Monitoring was conducted to verify the adequacy of the remediation and long-term effectiveness of the engineered control installed within the Project Area. Six monitoring wells located within and immediately surrounding the Project Area have been sampled on a quarterly basis since June 2007. Semi-annual inspections of the engineered control have also been conducted since that date.

In March 2010, a request was submitted to the CTDEP for approval to modify the F Building and H Building groundwater monitoring program. The proposed modifications to the monitoring program include a reduction in the monitoring frequency from quarterly to semi-annually and the discontinued sampling of five monitoring wells. To date, CTDEP has not issued a decision with respect to the request for a modification to the monitoring program.

As detailed in Section 5, no PCBs were detected in any of the groundwater samples collected in 2010. The absence of detectable concentrations of PCBs in groundwater indicates that the remediation activities performed to date have been effective in eliminating PCBs as a groundwater contaminant source.

The detected concentration of each of the constituents of concern for the Project Area was below the default numeric Surface Water Protection Criteria (SWPC), Residential Volatilization Criteria (RVC) and Industrial Volatilization Criteria (IVC) of the Remediation Standard Regulations (RSRs) for all four quarterly monitoring events in 2010 with the exception of the tetrachloroethylene (PCE) in one groundwater sample. The concentration of PCE detected in the groundwater sample from monitoring well FB-MW-02 in September 2010 exceeded the default numeric SWPC. However, an evaluation with respect to the default numeric SWPC is not appropriate for the F&H Buildings Project Area since multiple downgradient wells exist on the UTC/Pratt & Whitney East Hartford property that could be used to assess compliance. Compliance with the SWPC will be assessed on a site-wide basis at a later date.

2. LOCATION AND SITE DESCRIPTION

The UTC/Pratt & Whitney East Hartford manufacturing facility is located at 400 Main Street in East Hartford, Connecticut. A Site Location Map is presented as Figure 2-1. The facility encompasses approximately 769-acres of contiguous land. Pratt & Whitney initiated aircraft engine manufacturing operations in East Hartford in December 1929. Current operations are conducted in an approximate 4 million square foot complex and include administration and management, manufacturing, testing, research and development and ancillary services. All of these activities take place in the western portion of the 769-acre property.

The Rentschler Airport and the Klondike Area occupy the eastern portion of the Site. UTC/Pratt & Whitney previously used these two areas as an airport and a storage/testing area, respectively. On the northern end of the Airport is a 75-acre portion of the Site that was given to the State of Connecticut and subsequently developed as a football stadium (Rentschler Field). The F&H Buildings Project Area is located in the northern portion of the Site and is approximately 864,000 square feet in size.

3. BACKGROUND

Several investigations have been conducted at the facility. Between June 2002 and September 2003, LEA conducted a comprehensive Phase I/Phase II/Phase III Investigation in the vicinity of F&H Buildings. This investigation was undertaken on a voluntary basis to assess the environmental issues associated with the demolition of F&H Buildings, which was conducted in 2005 and 2006. Additional information pertaining to Site background and previous environmental investigations can be found in the RAWP and in the report entitled *Remedial Action Report - F&H Buildings Remediation Project* (RA Report) prepared by LEA in January 2007 and submitted to the United States Environmental Protection Agency (EPA) and the CTDEP on February 2, 2007.

The overall remedial action objective of the activities that were conducted within the Project Area between August 2005 and December 2006 was to physically remove, via excavation and off-site disposal, concrete containing total PCB concentrations in excess of 10 milligrams per kilogram (mg/kg) and all soil containing total PCB concentrations in excess of 25 mg/kg and the installation of an engineered control over a portion of the Project Area with soil remaining with a total PCB concentration in excess of 10 mg/kg. An additional remedial objective for this project was to meet tabulated numeric criteria of the RSRs. For the areas outside of the engineered control, the additional remedial action objective was to meet the Residential Direct Exposure Criteria (RDEC) for PCBs for soils within 4-feet of the final grade, the Industrial/Commercial Direct Exposure Criteria (IDEC) for PCBs for soils within inaccessible locations and the GB Pollutant Mobility Criteria (GB PMC) for soils above the seasonal high water table.

The remedial action objectives also included the implementation of institutional controls to ensure the long-term protectiveness of the remedy. The institutional controls consist of an Environmental Land Use Restriction (ELUR) to ensure the affected area will not be used for residential purposes and to prohibit excavation of areas deemed environmentally isolated and inaccessible and insure that the engineered control will not be disturbed.

Following the excavation and construction activities, the entire Project Area was restored to be used as a storage area. As part of the restoration, an engineered control was installed within the former Hydraulic Press Area, which contained soil with a residual PCB content of greater than 10 mg/kg. The engineered control consists of a 40-mil thickness high-density polyethylene liner, which was overlain by a minimum of 18-inches of granular fill overlain by a minimum of 3-inches of process aggregate, and overlain by a minimum of 3-inches of bituminous pavement.

Four permanent survey markers were placed at the four corners of the engineered control to delineate the limits of the engineered control.

Post-remediation groundwater sampling of monitoring wells installed in and immediately surrounding the Project Area has been conducted on a quarterly basis since June 2007. Semi-annual inspections of the engineered control have also been conducted since that date.

4. GROUNDWATER MONITORING

Groundwater monitoring activities were performed in accordance with subsection (f) of Section 22a-133k-3 of the RSRs. The groundwater monitoring plan detailed in Appendix B of the RAWP and Appendix R of the RA Report was designed to determine:

- The effectiveness of soil remediation in preventing further pollution of groundwater by substances from the release area.
- The effectiveness of any remediation taken to eliminate or minimize identified health or safety risks associated with such release.
- Whether applicable SWPC and VC have been met.

In May 2007, a total of six groundwater monitoring wells (FB-MW-01, FB-MW-02, and HB-MW-04 through HB-MW-07) were installed within and around the F&H Project Area. The locations of these monitoring wells are depicted on the Site Plan included as Figure 4-1 of this report.

4.1 Description of Groundwater Monitoring Activities

Groundwater samples were collected during four quarterly events in 2010 (March, June, September and December) from the six groundwater monitoring wells installed at the Project Area. All groundwater samples were sent under chain of custody control to Accutest Laboratories (Accutest) of Marlborough, Massachusetts and were analyzed for the following parameters: PCBs by EPA Method 8082; volatile organic compounds (VOCs) by EPA Method 8260B; Connecticut Extractable Total Petroleum Hydrocarbons (CT ETPH) by the DEP approved method; and total metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc). In addition, one duplicate sample, one trip blank, and one equipment blank were analyzed during each sampling event. Copies of field paperwork are included as Appendix A and copies of laboratory reports are included in Appendix B of this report.

4.2 Groundwater Elevations

Depth to groundwater was measured in all six monitoring wells on a quarterly basis using an electronic water level indicator. Groundwater levels were measured to the nearest 0.01 foot. Water level measurements were collected by LEA on the following four dates: March 4, 2010;

June 9, 2010; September 9, 2010; and December 9, 2010. Groundwater-level information was used to evaluate groundwater flow directions and horizontal hydraulic gradients in the upper portion of the unconsolidated aquifer. Generalized groundwater contour maps from the March, June, September and December 2010 monitoring events have been included as Figures 4-2 through 4-5, respectively.

4.3 Quality Assurance and Quality Control Procedures

During the course of the 2010 post-remediation monitoring, a significant amount of information was obtained for the Site. This information included analytical data for groundwater samples; field measurements; sample tracking forms; and other documentation associated with sample collection and analysis. Ensuring that the data generated during the post-remediation monitoring was of sufficient quality to meet the data quality objectives (DQOs) for the project, performance and documentation of quality assurance/quality control (QA/QC) procedures for field and office activities was essential. The following DQOs were developed for the Post-Remediation Groundwater Monitoring Program for the Site:

- Samples collected were of sufficient quality and quantity to assess the groundwater conditions at the Site.
- Data obtained were of sufficient quality and quantity to support a regulatory compliance determination.
- Data were sufficient to determine handling and disposal requirements for purged groundwater and decontamination solutions generated during the post-remediation groundwater monitoring activities.

The various types of QA/QC procedures used to ensure that the quality of data generated during the investigation would be sufficient to meet the DQOs for the project included the analysis of trip blanks, equipment blanks, and field duplicate samples. A detailed description of the methods employed to collect and analyze these QA/QC samples is provided in Appendix C.

All data generated during 2010 post-remediation groundwater sampling were analyzed using the CTDEP Reasonable Confidence Protocols (RCPs), which are enhanced analytical procedures based on the respective EPA or other appropriate methods. The RCPs provide specific QA/QC requirements that the laboratory must follow during analysis of environmental samples. QA/QC information provided by laboratories using the RCP methods was assessed and evaluated in accordance with the guidelines for performing Data Quality Assessments (DQAs) and Data

Usability Evaluations (DUEs). A further explanation of the DQA and DUE process and a discussion of the results of the DQA and DUE are provided in Appendix C.

5. GROUNDWATER QUALITY

5.1 Summary of Analytical Data

A total of 28 groundwater samples (includes monitoring well samples and duplicate samples) were collected in 2010 (March, June, September and December). A summary of sampling and analytical information is included as Table 5-1. A summary of constituents detected in groundwater is provided as Table 5-2. The following is a summary of analytical results for each constituent of concern.

Polychlorinated Biphenyls: No PCBs were detected in any of the 28 groundwater samples that were collected for analysis in 2010.

Volatile Organic Compounds: A total of 28 groundwater samples were submitted for analysis of VOCs. Of the 28 samples analyzed, 20 contained detectable concentrations of one or more VOCs. The maximum concentration of each compound in micrograms per liter (μg/l) is as follows:

1,1-Dichloroethane	1.2 μg/l
cis-1,2-Dichloroethylene	2.9 μg/l
Tetrachloroethylene	109 μg/l
1,1,1-Trichloroethane	6.1 μg/l
Trichloroethylene	2.6 μg/l

Total Petroleum Hydrocarbons: Of the 28 groundwater samples analyzed for CT ETPH, a total of 19 samples contained detectable concentrations. The maximum concentration of CT ETPH was detected in the September 2010 sample from monitoring well FB-MW-01 at 0.774 milligrams per liter (mg/l).

Metals: Of the 28 groundwater samples analyzed for unfiltered metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc), a total of eleven groundwater samples contained detectable concentrations. The maximum concentration of each metal in milligrams per liter (mg/l) is as follows:

Barium	0.251 mg/l
Total Chromium	0.0833 mg/l

5.2 Data Quality Assessment and Data Usability Evaluation

All data were evaluated with respect to quality by conducting a DQA and DUE in accordance with the methodology described in the November 2007 guidance document entitled, *Reasonable Confidence Protocols* and presented in more detail in the May 2009 document entitled *Laboratory Quality Assurance Quality Control, Data Quality Assessment, Data Usability Evaluation Guidance Document*. Both documents were revised in December 2010. The DQA was performed to assess the quality of the analytical data in each laboratory analytical report package.

QA/QC issues identified during the DQA process included:

- Results for Laboratory Control Sample (LCS) for VOCs outside the accepted range of variability;
- Recoveries for Matrix Spike/Matrix Spike Duplicate (MS/MSD) for VOCs outside the accepted range of variability;
- Recoveries for initial calibration curve and continuing calibration curve outside the accepted range of variability for specific VOC constituents; and
- Recovery for surrogates was outside the accepted range of variability for ETPH.

After the laboratory analytical data were evaluated during the DQA, a DUE was performed. The DUE took into account the following:

- The site-specific conceptual site model (CSM);
- Knowledge of the contaminant types, concentrations, and distribution;
- Objectives for the data collection effort and the intended use of the data (i.e. the data quality objectives (DQOs)); and
- Results from field QA/QC sampling.

The DQA worksheets are provided in Appendix C. The DQA resulted in identifying data for which the quality could affect its potential use in decision-making.

In general, the QA/QC deficiencies identified do not pertain to any of the primary constituents of concern for the Project Area. The low surrogate recovery reported for ETPH in groundwater collected from well HB-MW-07 in June 2010 has been identified as an issue that affected data

usability. The ETPH concentrations in groundwater collected from this well should continue to be monitored to assess trends. Taking into consideration multiple lines of evidence, results from the DUE indicated that the data generated during the 2009-2010 quarterly groundwater sampling events were usable for the intended purpose. A more detailed discussion of the DQA and DQE results is included in Appendix C.

5.3 Observed Trends in Groundwater

There are sufficient groundwater data at this time to observe trends in types of contamination at particular monitoring wells as three complete years of quarterly groundwater sampling have been performed. Trend graphs were generated for selected constituents using data from June 2007 to December 2010 and are included in Appendix D. It should be noted that in the generation of constituent concentration graphs, a value of one half of the reporting limit was established for graphing in each instance where a particular constituent or compound was reported as a non-detect. Data trends for the past three years are discussed by analytical group in the paragraphs below.

Polychlorinated Biphenyls: PCBs have not been detected in groundwater samples collected during the post-remediation groundwater monitoring program. However, it should be noted that the reporting limit for total PCBs for all of the groundwater samples collected during 2008 was above the default numeric SWPC of 0.5 μg/l. PCBs were not detected during 2009 or 2010 with reporting limits in the range of 0.25 - 0.29 μg/l.

Total Petroleum Hydrocarbons: CT ETPH has been consistently detected in groundwater samples collected from monitoring wells FB-MW-01 and HB-MW-06. CT ETPH has also been detected periodically in groundwater samples from monitoring wells FB-MW-02, HB-MW-04, HB-MW-05 and HB-MW-07. In general, the highest concentrations of CT ETPH observed in 2010 were detected in groundwater samples collected from monitoring well FB-MW-01. No discernable upward or downward trends were observed for CT ETPH based on analytical data for Project Area monitoring wells, which is consistent with the 2009 observations.

Volatile Organic Compounds: One or more VOCs were detected in the groundwater samples collected from monitoring wells HB-MW-01, HB-MW-02, HB-MW-03, HB-MW-05, and HB-MW-06. The concentrations of 1,1,1-trichloroethane (TCA), trichloroethylene (TCE) and PCE in groundwater samples from monitoring wells FB-MW-01, FB-MW-02, HB-MW-06, and HB-MW-07 are consistent with previous results. There were no VOCs detected in the groundwater samples collected from monitoring well HB-MW-04 during 2010.

Metals: Barium was detected during 2010 in groundwater samples from all six monitoring wells. The reported concentrations of barium detected in each monitoring well were consistent with historical results. Chromium was reported above laboratory detection limits in one groundwater sample collected from well HB-MW-05 in 2010. The reported concentration of chromium appears to be consistent with previous results for monitoring well HB-MW-05.

5.4 Evaluation of Results Relative to the RSRs

Groundwater analytical results obtained for the 2010 post-remediation monitoring were compared to the default numeric criteria of the RSRs. These criteria were established to protect existing uses of groundwater, surface water quality where groundwater plumes discharge into water bodies, and air quality from the effects of vapors emanating from VOCs present in contaminated groundwater.

According to the Ground Water Quality Classification data-layer in the most recent CTDEP Geographic Information system (GIS) database, groundwater beneath the Site and surrounding areas is designated as "GB". According to the CTDEP Water Quality Standards (Ground Water Quality Standards Effective April 12, 1996), groundwater classified as GB is presumed not suitable for human consumption without treatment. In "GB" groundwater quality areas, the groundwater protection aspect of the RSRs is designed to preserve water quality to permit the existing uses of groundwater and prevent further degradation of groundwater quality. No specific Ground Water Protection Criteria (GWPC) exists for groundwater in GB areas.

The groundwater analytical data collected from the Site have been compared to the default numeric SWPC, RVC and IVC. The analytical data were also evaluated relative to the draft VC listed in the *Proposed Revisions – Connecticut's Remediation Standard Regulations - Volatilization Criteria* proposed by the CTDEP in March 2003 was conducted for comparative purposes. If finalized, the draft VC will apply to groundwater within 30 feet of the ground surface or a building.

The groundwater data were compared to both the RVC and IVC, as a draft ELUR prohibiting the use of the Site for residential purposes has been submitted to the CTDEP but has not been reviewed or approved. There were no exceedances of the current or 2003 proposed RVC or IVC for groundwater data obtained during the 2010 groundwater sampling events.

One exceedance of the default numeric SWPC was reported for the groundwater sample collected from monitoring well FB-MW-02 in September 2010 (PCE at a concentration of 109

μg/l). PCE was previously detected in a groundwater sample from this monitoring well in December 2007 at concentration of 113 μg/l. The reported concentration of PCE during the December 2010 monitoring event (25.2 μg/l) was below the default numeric SWPC.

5.4.1 Compliance Determination

This groundwater monitoring program has been designed to determine:

- The effectiveness of soil remediation in preventing further pollution of groundwater by substances from the release area;
- The effectiveness of any remediation taken to eliminate or minimize identified health or safety risks associated with such release;
- Whether applicable surface-water protection criteria and volatilization criteria have been met; and
- Whether any contaminant plumes emanating from the product area interfere with existing use of the groundwater for a drinking water supply or with any other existing use of the groundwater, including but not limited to industrial, agricultural or commercial uses.

PCBs, VOCs, and total metals with the exception of a single exceedance of the default numeric SWPC for PCE, were reported at concentrations that were less than SWPC, RVC and IVC during all four quarterly monitoring events in 2010. However, an evaluation with respect to the default numeric SWPC is not appropriate for the F&H Buildings Project Area since multiple downgradient wells exist on the UTC/Pratt & Whitney East Hartford property that could be used to assess compliance. Compliance with the SWPC will be assessed on a site-wide basis at a later date.

6. MAINTENANCE MONITORING

6.1 Monitoring Requirements

The post remediation maintenance program for the engineered control was developed to ensure that the structural integrity, design permeability, and effectiveness of the engineered control will be maintained. This maintenance program was developed to:

- Periodically inspect the engineered control;
- Identify measures to be taken to prevent run-on and run-off of stormwater from eroding or otherwise damaging the engineered control; and
- Identify measures to be taken to correct the effects of any settling, subsidence, erosion or other damaging events or conditions.

The engineered control and the area surrounding the engineered control were inspected in September and December of 2010 in the following areas:

1. Signs of erosion.
2. Signs of settling.
3. Signs of ponding and run on.
4. Damage to the pavement.
5. Permanent Survey Markers for the Engineered Control.
6. Monitoring well network.

The completed Post-Remediation Maintenance Monitoring forms are included in Appendix E of this report.

6.2 Summary of Maintenance Monitoring Activities

During the September 2010 inspection, areas located just west and outside of the engineered control were identified with small cracks in the pavement. The pavement in this area is used to render soil inaccessible. These areas will continue to be inspected and will be addressed if vegetative growth is observed or the underlying soils get exposed. During the December 2010 inspection, multiple small cracks were observed in pavement within the engineered control area. The pavement in this area is used to prevent migration of rainwater and surface water into underlying soil.

7. CONCLUSIONS

A total of four quarterly groundwater monitoring events were performed in 2010 in accordance with Appendix B and Appendix C of the RAWP (LEA, 2004) for the F&H Buildings Project Area. No PCBs were detected in any of the groundwater samples collected and analyzed in 2010. The continued absence of PCBs in groundwater indicates that the remediation activities within the Project Area have been effective in eliminating PCBs as a groundwater contaminant source.

One exceedance of the default numeric SWPC of the RSRs was reported for the groundwater sample collected from monitoring well FB-MW-02 in September 2010 (tetrachloroethylene at a concentration of 109 μg/l). However, an evaluation with respect to the default numeric SWPC is not appropriate for the F&H Buildings Project Area since multiple downgradient wells exist on the UTC/Pratt & Whitney East Hartford property that could be used to assess compliance. Compliance with the SWPC will be assessed on a site-wide basis at a later date.

Two maintenance monitoring inspections were conducted in 2010 as part of the September 2010 and December 2010 quarterly monitoring events. Minor repairs to the asphalt pavement within the engineered control area are necessary to prevent the infiltration of rainwater and surface water. Additional inspections and corrective action measures, if necessary, will continue to be implemented as part of the 2011 maintenance and monitoring program.

The next scheduled groundwater monitoring event and inspection will be conducted in March of 2011. In March 2010, a request was submitted to the CTDEP for approval to modify the F Building and H Building groundwater monitoring program. The proposed modifications to the monitoring program include a reduction in the monitoring frequency from quarterly to semi-annually and the discontinued sampling of five monitoring wells. To date, CTDEP has not issued a decision with respect to the request for a modification to the monitoring program.

TABLES

Table 5-1
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEAAnalyt. Lab.	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides/ PCBs	Fuels/Oils	Metals	Miscellaneous Analyses
FB-MW-01	1139120	03/04/2010	4.00 - 14.00	GWS		x			x	X	x	
FB-MW-01	1139123	03/04/2010	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-01	1145337	06/09/2010	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-01	1152117	09/09/2010	4.00 - 14.00	GWS		X			x	X	X	
FB-MW-01	1159175	12/09/2010	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-02	1139117	03/04/2010	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-02	1145340	06/09/2010	4.00 - 14.00	GWS		X			x	x	x	
FB-MW-02	1152116	09/09/2010	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-02	1159177	12/09/2010	4.00 - 14.00	GWS		X			x	X	x	
HB-MW-04	1139119	03/04/2010	4.00 - 14.00	GWS		x			x	x	x	
HB-MW-04	1145341	06/09/2010	4.00 - 14.00	GWS		x			x	x	x	
HB-MW-04	1152112	09/09/2010	4.00 - 14.00	GWS		x			x	X	x	
HB-MW-04	1159174	12/09/2010	4.00 - 14.00	GWS		x			x	X	x	
HB-MW-05	1139122	03/04/2010	4.80 - 14.80	GWS		x			x	x	X	
HB-MW-05	1145339	06/09/2010	4.80 - 14.80	GWS		x			x	x	X	
HB-MW-05	1152114	09/09/2010	4.80 - 14.80	GWS		X			x	X	X	
HB-MW-05	1159173	12/09/2010	4.80 - 14.80	GWS		x			x	x	X	
HB-MW-06	1139118	03/04/2010	4.00 - 14.00	GWS		X			x	X	x	
HB-MW-06	1145338	06/09/2010	4.00 - 14.00	GWS		X			x	x	x	
HB-MW-06	1145342	06/09/2010	4.00 - 14.00	GWS		X			x	X	x	
HB-MW-06	1152113	09/09/2010	4.00 - 14.00	GWS		X			x	X	X	
HB-MW-06	1152121	09/09/2010	4.00 - 14.00	GWS		X			x	X	X	
HB-MW-06	1159176	12/09/2010	4.00 - 14.00	GWS		X			x	X	X	
HB-MW-06	1159179	12/09/2010	4.00 - 14.00	GWS		X			x	X	X	
HB-MW-07	1139121	03/04/2010	5.00 - 15.00	GWS		X			x	x	x	
HB-MW-07	1145336	06/09/2010	5.00 - 15.00	GWS		X			x	x	x	
HB-MW-07	1152115	09/09/2010	5.00 - 15.00	GWS		X			x	X	X	
HB-MW-07	1159172	12/09/2010	5.00 - 15.00	GWS		X			x	X	X	

Printed on 12/29/2010

Table 5-2
SUMMARY OF CONSTITUENTS DETECTED IN GROUNDWATER
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	FB-MW-01	FB-MW-01	FB-MW-01	FB-MW-01	FB-MW-01	FB-MW-01	FB-MW-02
	Sample ID	1139120	1139123	1145337	1152117	1152117	1159175	1139117
	Sample Date	03/04/2010	03/04/2010	06/09/2010	09/09/2010	09/09/2010	12/09/2010	03/04/2010
	Sample Time	10:30	10:30	10:17	15:06	15:06	11:12	10:10
	Sample Depth	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00
	Laboratory	ACTM	ACTM	ACTM	ACTM	ACTM	ACTM	ACTM
	Lab. Number	M89656-7	M89656-13	M92105-3	M94153-3	M94153-4	M96492-7	M89656-1
Constituent	Units							
Depth of Well	Ft	13.80	13.80	13.8	13.73	13.73	13.90	13.62
Depth to Water	Ft	9.41	9.41	9.74	10.35	10.35	10.60	8.57
Oxygen, Dissolved (field)	mg/L	4.17	4.17	2.90	0.50	0.50	10.10	4.68
Specific Conductivity (field)	uS/cm	315	315	436	424.4	424.4	320	252
Temperature	C	10.59	10.59	14.81	22.0	22.0	13.14	9.53
Turbidity (field)	NTU	3.66	3.66	4.48	1.28	1.28	3.55	4.08
pH (field measurement)	SU	6.54	6.54	6.25	6.46	6.46	5.58	6.93
Date Metals Analyzed	-					09/14/2010		
Date Organics Analyzed	-		03/05/2010	06/19/2010	09/10/2010		12/21/2010	03/05/2010
Date Physical Analyzed	-	03/16/2010	03/16/2010	06/22/2010	09/18/2010		12/21/2010	03/16/2010
Barium (unfiltered)	mg/L					0.0536		
Chromium, Total (unfiltered)	mg/L							
Oxidation-Reduction Potential	mV	147.5	147.5	132.5	114.8	114.8	104.1	47.3
Total Petroleum Hydrocarbons (CT ETPH)	mg/L	0.363	0.265	0.579	0.774		0.750	0.147
1,1,1-Trichloroethane	ug/L							
1,1-Dichloroethane	ug/L							
cis-1,2-Dichloroethylene	ug/L							
Tetrachloroethylene	ug/L		1.1	4.8	2.2		2.0	36.6
Trichloroethylene	ug/L				1.0			
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Table 5-2
SUMMARY OF CONSTITUENTS DETECTED IN GROUNDWATER
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	FB-MW-02	FB-MW-02	FB-MW-02	HB-MW-04	HB-MW-04	HB-MW-05	HB-MW-05
	Sample ID	1145340	1152116	1159177	1152112	1159174	1139122	1145339
	Sample Date	06/09/2010	09/09/2010	12/09/2010	09/09/2010	12/09/2010	03/04/2010	06/09/2010
	Sample Time	13:55	14:40	14:50	10:30	15:30	14:15	13:10
	Sample Depth	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.80' - 14.80	4.80' - 14.80
	Laboratory	ACTM	ACTM	ACTM	ACTM	ACTM	ACTM	ACTM
	Lab. Number	M92105-9	M94153-1	M96492-11	M94152-1	M96492-5	M89656-12	M92105-8
Constituent	Units							
Depth of Well	Ft	13.50	13.31	13.45	13.31	13.34	14.59	14.58
Depth to Water	Ft	8.88	9.7	9.91	9.11	9.41	10.08	10.31
Oxygen, Dissolved (field)	mg/L	8.35	3.40	12.05	0.24	1.71	8.27	7.02
Specific Conductivity (field)	uS/cm	242	342.4	189	500.4	336	956	1854
Temperature	C	13.88	20.7	14.00	20.8	13.96	12.24	19.77
Turbidity (field)	NTU	4.79	1.88	4.89	1.7	2.16	3.11	3.58
pH (field measurement)	SU	6.82	6.57	5.81	7.18	7.27	6.20	6.12
Date Metals Analyzed	-						03/08/2010	06/14/2010
Date Organics Analyzed	-	06/19/2010	09/10/2010	12/21/2010				
Date Physical Analyzed	-		09/18/2010	12/21/2010	09/18/2010	12/21/2010		
Barium (unfiltered)	mg/L							0.251
Chromium, Total (unfiltered)	mg/L						0.0273	0.0347
Oxidation-Reduction Potential	mV	190.1	102.9	99.2	-79.7	89.3	151.4	80.4
Total Petroleum Hydrocarbons (CT ETPH)	mg/L		0.221	0.117	0.211	0.156		
1,1,1-Trichloroethane	ug/L		1.4					
1,1-Dichloroethane	ug/L							
cis-1,2-Dichloroethylene	ug/L	1.4	2.9					
Tetrachloroethylene	ug/L	80.5	109	45.2				
Trichloroethylene	ug/L	1.2	2.6					
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Table 5-2
SUMMARY OF CONSTITUENTS DETECTED IN GROUNDWATER
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	HB-MW-05	HB-MW-05	HB-MW-05	HB-MW-06	HB-MW-06	HB-MW-06	HB-MW-06
	Sample ID	1152114	1152114	1159173	1139118	1145338	1145342	1152113
	Sample Date	09/09/2010	09/09/2010	12/09/2010	03/04/2010	06/09/2010	06/09/2010	09/09/2010
	Sample Time	14:00	14:00	14:10	11:50	11:32	11:32	11:45
	Sample Depth	4.80' - 14.80	4.80' - 14.80	4.80' - 14.80	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00
	Laboratory	ACTM	ACTM	ACTM	ACTM	ACTM	ACTM	ACTM
	Lab. Number	M94152-5	M94152-6	M96492-4	M89656-3	M92105-5	M92105-13	M94152-3
Constituent	Units							
Depth of Well	Ft	14.56	14.56	14.61	13.61	13.62	13.62	13.61
Depth to Water	Ft	10.96	10.96	11.23	8.57	8.88	8.88	9.62
Oxygen, Dissolved (field)	mg/L	1.84	1.84	8.22	0.15	1.49	1.49	0.12
Specific Conductivity (field)	uS/cm	591	591	950	392	428	428	606
Temperature	C	22.4	22.4	17.28	11.70	15.38	15.38	21.9
Turbidity (field)	NTU	2.2	2.2	2.91	2.12	4.75	4.75	1.4
pH (field measurement)	SU	6.32	6.32	6.27	6.28	6.26	6.26	5.93
Date Metals Analyzed	-		09/14/2010	12/14/2010				
Date Organics Analyzed	-	09/11/2010			03/05/2010	06/19/2010	06/19/2010	09/11/2010
Date Physical Analyzed	-	09/18/2010			03/16/2010		06/22/2010	09/18/2010
Barium (unfiltered)	mg/L		0.211	0.195				
Chromium, Total (unfiltered)	mg/L		0.0833	0.0221				
Oxidation-Reduction Potential	mV	-53.8	-53.8	177.4	83.6	157.4	157.4	-42.2
Total Petroleum Hydrocarbons (CT ETPH)	mg/L	0.114			0.279		0.168	0.557
1,1,1-Trichloroethane	ug/L				3.3	2.0	2.1	5.9
1,1-Dichloroethane	ug/L							
cis-1,2-Dichloroethylene	ug/L							
Tetrachloroethylene	ug/L	1.0			16.1	16.8	17.5	10.6
Trichloroethylene	ug/L				1.3	1.0	1.1	2.0
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Table 5-2
SUMMARY OF CONSTITUENTS DETECTED IN GROUNDWATER
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	HB-MW-06	HB-MW-06	HB-MW-06	HB-MW-06	HB-MW-06	HB-MW-06	HB-MW-06
	Sample ID	1152113	1152121	1152121	1159176	1159176	1159179	1159179
	Sample Date	09/09/2010	09/09/2010	09/09/2010	12/09/2010	12/09/2010	12/09/2010	12/09/2010
	Sample Time	11:45	11:45	11:45	12:35	12:35	12:35	12:35
	Sample Depth	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00	4.00' - 14.00
	Laboratory	ACTM	ACTM	ACTM	ACTM	ACTM	ACTM	ACTM
	Lab. Number	M94152-4	M94152-7	M94152-8	M96492-10	M96492-9	M96492-18	M96492-19
Constituent	Units							
Depth of Well	Ft	13.61	13.61	13.61	13.68	13.68	13.68	13.68
Depth to Water	Ft	9.62	9.62	9.62	9.94	9.94	9.94	9.94
Oxygen, Dissolved (field)	mg/L	0.12	0.12	0.12	10.79	10.79	10.79	10.79
Specific Conductivity (field)	uS/cm	606	606	606	314	314	314	314
Temperature	C	21.9	21.9	21.9	14.14	14.14	14.14	14.14
Turbidity (field)	NTU	1.4	1.4	1.4	1.62	1.62	1.62	1.62
pH (field measurement)	SU	5.93	5.93	5.93	5.29	5.29	5.29	5.29
Date Metals Analyzed	-	09/14/2010		09/14/2010	12/14/2010			12/14/2010
Date Organics Analyzed	-		09/11/2010			12/21/2010	12/23/2010	
Date Physical Analyzed	-		09/18/2010			12/21/2010	12/22/2010	
Barium (unfiltered)	mg/L	0.111		0.105	0.0545			0.0534
Chromium, Total (unfiltered)	mg/L							
Oxidation-Reduction Potential	mV	-42.2	-42.2	-42.2	111.9	111.9	111.9	111.9
Total Petroleum Hydrocarbons (CT ETPH)	mg/L		0.484			0.341	0.325	
1,1,1-Trichloroethane	ug/L		6.1			2.4		
1,1-Dichloroethane	ug/L		1.2					
cis-1,2-Dichloroethylene	ug/L							
Tetrachloroethylene	ug/L		10.2			8.0	3.1	
Trichloroethylene	ug/L		1.8			1.0		
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Table 5-2
SUMMARY OF CONSTITUENTS DETECTED IN GROUNDWATER
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	HB-MW-07	HB-MW-07	HB-MW-07	HB-MW-07	HB-MW-07	HB-MW-07	
	Sample ID	1139121	1145336	1152115	1152115	1159172	1159172	
	Sample Date	03/04/2010	06/09/2010	09/09/2010	09/09/2010	12/09/2010	12/09/2010	
	Sample Time	12:20	10:25	15:15	15:15	12:00	12:00	
	Sample Depth	5.00' - 15.00	5.00' - 15.00	5.00' - 15.00	5.00' - 15.00	5.00' - 15.00	5.00' - 15.00	
	Laboratory	ACTM	ACTM	ACTM	ACTM	ACTM	ACTM	
	Lab. Number	M89656-9	M92105-1	M94152-10	M94152-9	M96492-1	M96492-2	
Constituent	Units							
Depth of Well	Ft	14.52	14.50	14.25	14.25	14.29	14.29	
Depth to Water	Ft	9.89	10.04	10.55	10.55	10.79	10.79	
Oxygen, Dissolved (field)	mg/L	2.08	1.41	0.92	0.92	5.41	5.41	
Specific Conductivity (field)	uS/cm	460	820	428.4	428.4	683	683	
Temperature	C	12.44	17.05	21.3	21.3	15.13	15.13	
Turbidity (field)	NTU	2.07	2.42	2.3	2.3	2.22	2.22	
pH (field measurement)	SU	6.65	6.42	6.47	6.47	6.76	6.76	
Date Metals Analyzed	-			09/14/2010			12/14/2010	
Date Organics Analyzed	-	03/05/2010	06/19/2010		09/11/2010	12/21/2010		
Date Physical Analyzed	-				09/18/2010	12/21/2010		
Barium (unfiltered)	mg/L			0.0824			0.161	
Chromium, Total (unfiltered)	mg/L							
Oxidation-Reduction Potential	mV	112.5	26.2	1.8	1.8	145.3	145.3	
Total Petroleum Hydrocarbons (CT ETPH)	mg/L				0.213	0.100		
1,1,1-Trichloroethane	ug/L	1.8	1.0		2.5	1.0		
1,1-Dichloroethane	ug/L							
cis-1,2-Dichloroethylene	ug/L							
Tetrachloroethylene	ug/L	2.4	5.9		1.9	1.7		
Trichloroethylene	ug/L							
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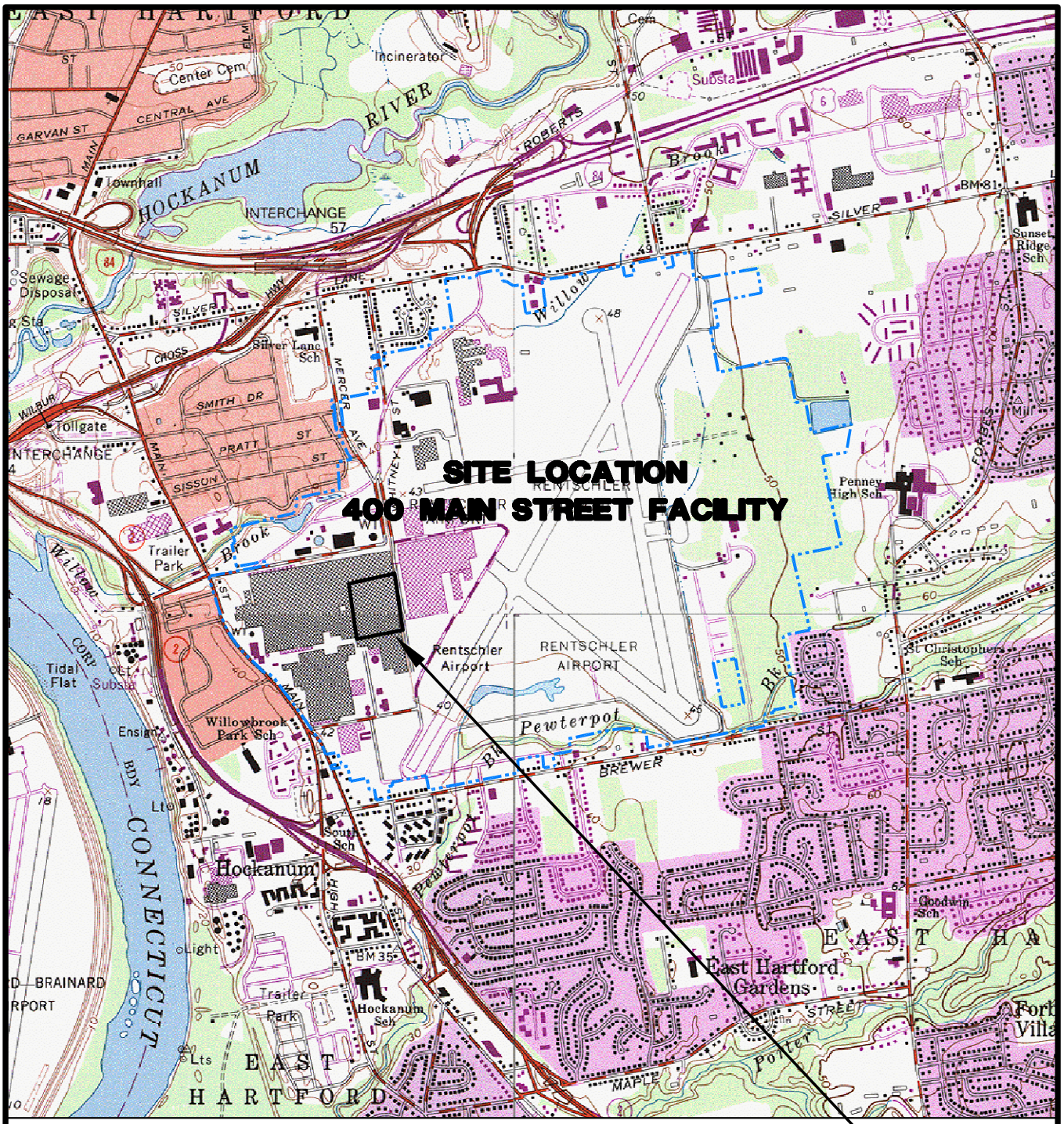
FIGURES



SITE BOUNDARY

F & H BUILDINGS
PROJECT AREA

MAP REFERENCE:
USGS 7.5 MINUTE SERIES QUADRANGLES
FOR HARTFORD NORTH, HARTFORD SOUTH,
GLASTONBURY,AND MANCHESTER CONN.,
DATED 1964 & 1963 AND REVISED 1992.

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SCALE IN FEET

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2010 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT
PRATT & WHITNEY DIVISION, F&H BUILDINGS, EAST HARTFORD, CONNECTICUT

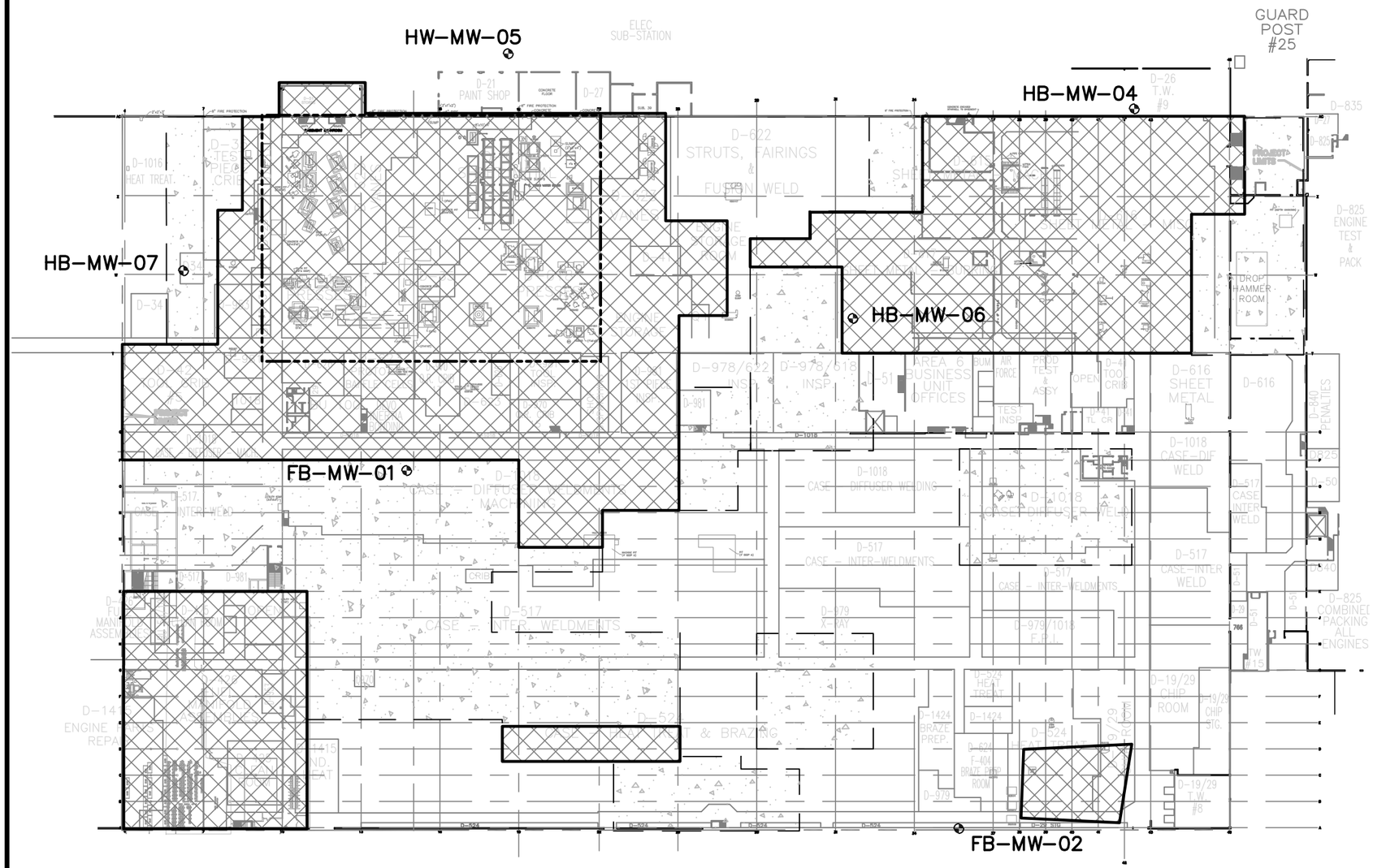
SITE LOCATION MAP

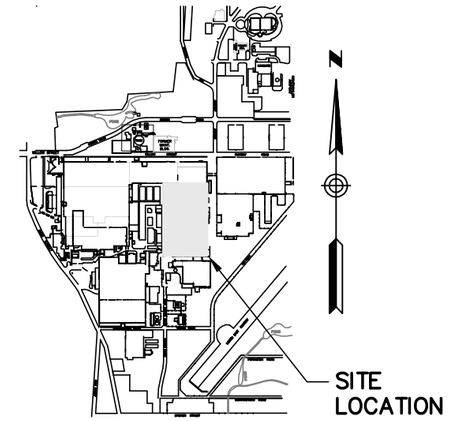
Comm.No.
88UT045

FIGURE 2-1

LEA

G:\AUTOCAD\PROJECTS\PWEH\88UT045\TASK001 GROUNDWATER MONITORING ACTIVITIES\88UT045-USGS.DWG Tab:USGS Saved: 1/10/2011 3:57 PM Plotted: 1/10/2011 3:57 PM





KEY MAP

NOT TO SCALE

LEGEND

- APPROXIMATE LIMITS OF BITUMINOUS ASPHALT
- APPROXIMATE LIMITS OF PREVIOUS CONCRETE REMOVAL & REPLACED WITH PROCESSED AGGREGATE BASE
- APPROXIMATE LIMITS OF ENGINEERED CONTROL
- MONITORING WELL LOCATION

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SCALE IN FEET

2010 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT
PRATT & WHITNEY DIVISION, F&H BUILDINGS, EAST HARTFORD, CONNECTICUT

SITE PLAN

Comm.No.	FIGURE 4-1	LEA
88UT045		

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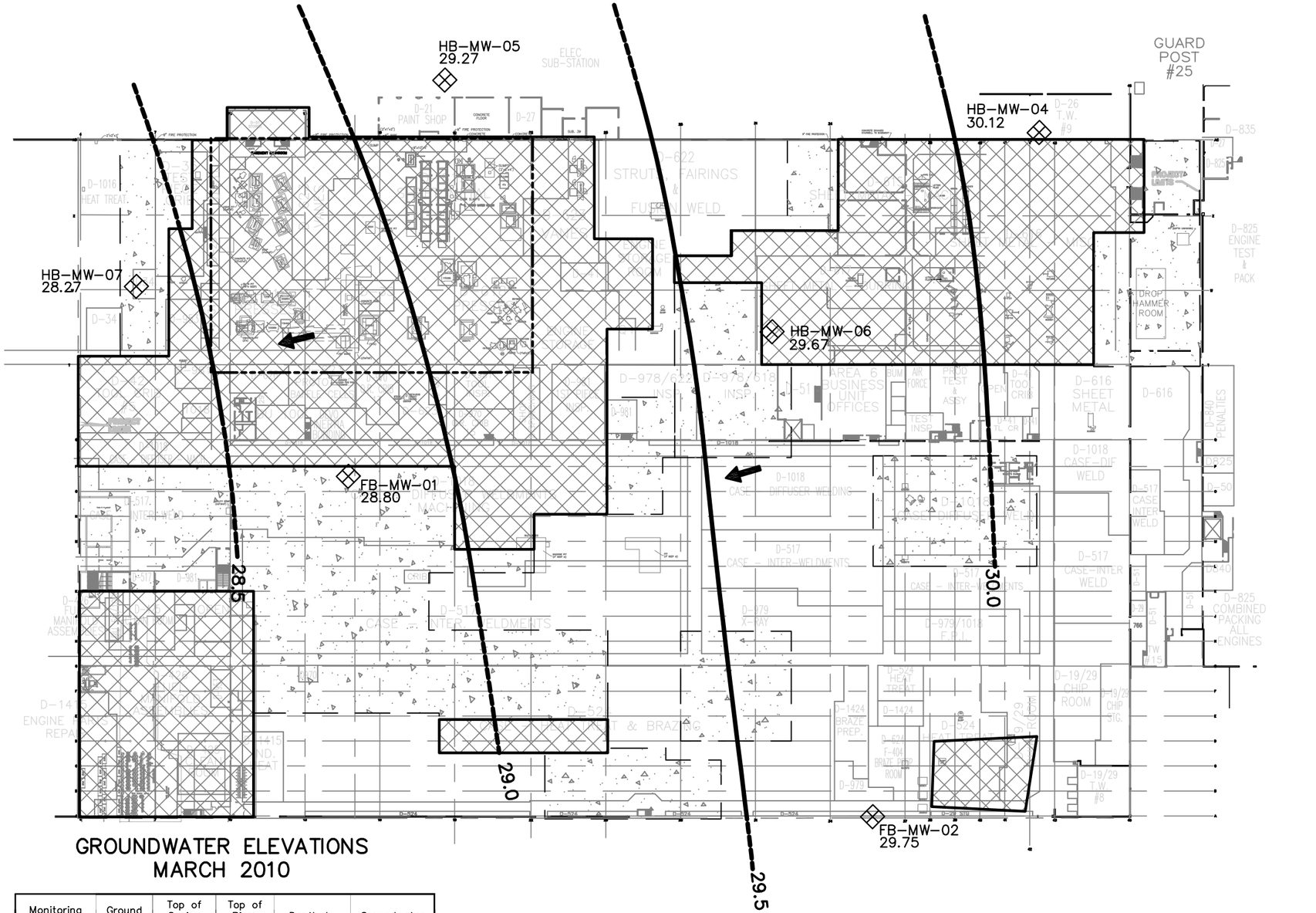


GROUNDWATER ELEVATIONS MARCH 2010

Monitoring Well Identification	Ground Elevation (ft)	Top of Casing Elevation (ft)	Top of Riser Elevation (ft)	Depth to Water1 (ft)	Groundwater Elevation (ft)
FB-MW-01	38.41	38.39	38.21	9.41	28.80
FB-MW-02	38.47	38.48	38.32	8.57	29.75
HB-MW-04	38.35	38.45	38.08	7.96	30.12
HB-MW-05	39.64	39.67	39.35	10.08	29.27
HB-MW-06	38.48	38.58	38.24	8.57	29.67
HB-MW-07	38.15	38.31	38.16	9.89	28.27

NOTES:

(1) DEPTH TO WATER WAS MEASURED FROM TOP OF RISER.

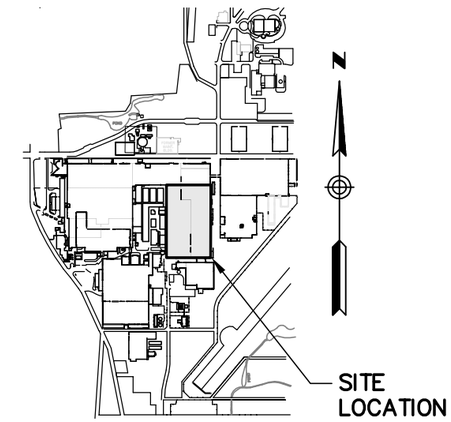
(2) DEPTH TO WATER MEASUREMENTS COLLECTED ON MARCH 4, 2010.

ft INDICATES FEET.

N

50 0 50 100 150

SCALE IN FEET



KEY MAP

NOT TO SCALE

LEGEND

APPROXIMATE LIMITS OF BITUMINOUS ASPHALT

APPROXIMATE LIMITS OF PREVIOUS CONCRETE REMOVAL & REPLACED WITH PROCESSED AGGREGATE BASE

APPROXIMATE LIMITS OF ENGINEERED CONTROL

MONITORING WELL LOCATION

GROUNDWATER CONTOUR DASHED WHERE INFERRED

GROUNDWATER FLOW DIRECTION

GROUNDWATER EXCEEDANCES

SAMPLE WITH DETECT BUT NO EXCEEDANCES

2010 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT
PRATT & WHITNEY DIVISION, F&H BUILDINGS, EAST HARTFORD, CONNECTICUT

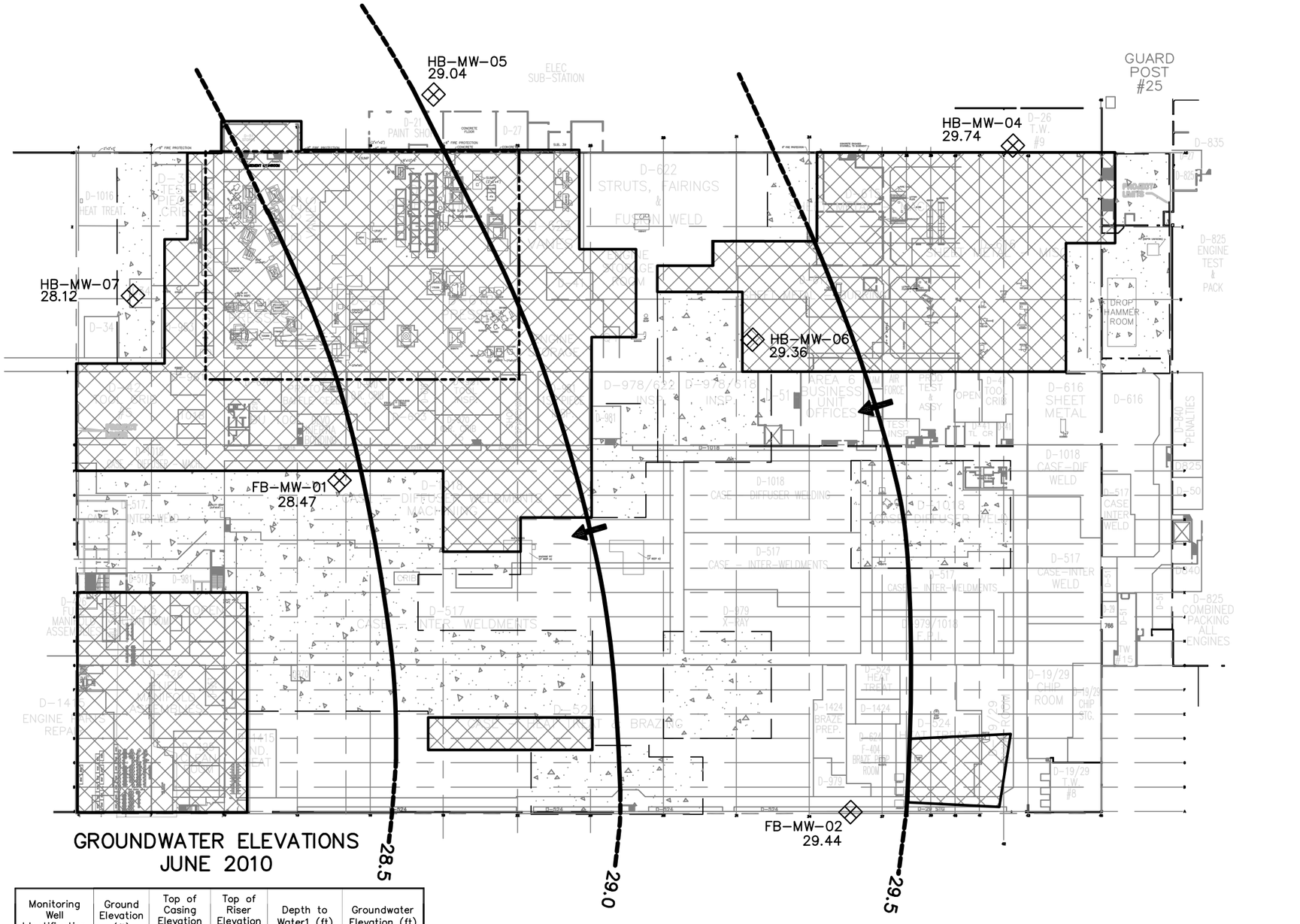
MARCH 2010 GROUNDWATER SAMPLING RESULTS AND GENERALIZED GROUNDWATER CONTOUR MAP

Comm.No. 88UT045

FIGURE 4-2

LEA

G:\AUTOCAD\PROJECTS\PWEH\88UT045\TASK001 GROUNDWATER MONITORING ACTIVITIES\88UT045-G2010-03.DWGTab: 4-2 Saved: 1/10/2011 2:20 PM Plotted: 1/10/2011 2:28 PM



GROUNDWATER ELEVATIONS JUNE 2010

Monitoring Well Identification	Ground Elevation (ft)	Top of Casing Elevation (ft)	Top of Riser Elevation (ft)	Depth to Water1 (ft)	Groundwater Elevation (ft)
FB-MW-01	38.41	38.39	38.21	9.74	28.47
FB-MW-02	38.47	38.48	38.32	8.88	29.44
HB-MW-04	38.35	38.45	38.08	8.34	29.74
HB-MW-05	39.64	39.67	39.35	10.31	29.04
HB-MW-06	38.48	38.58	38.24	8.88	29.36
HB-MW-07	38.15	38.31	38.16	10.04	28.12

NOTES:

(1) DEPTH TO WATER WAS MEASURED FROM TOP OF RISER.

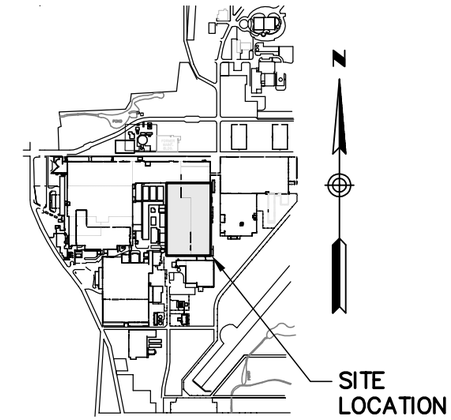
(2) DEPTH TO WATER MEASUREMENTS COLLECTED ON JUNE 9, 2010.

ft INDICATES FEET.

N

50 0 50 100 150

SCALE IN FEET



KEY MAP

NOT TO SCALE

LEGEND

APPROXIMATE LIMITS OF BITUMINOUS ASPHALT

APPROXIMATE LIMITS OF PREVIOUS CONCRETE REMOVAL & REPLACED WITH PROCESSED AGGREGATE BASE

APPROXIMATE LIMITS OF ENGINEERED CONTROL

MONITORING WELL LOCATION

GROUNDWATER CONTOUR DASHED WHERE INFERRED

GROUNDWATER FLOW DIRECTION

GROUNDWATER EXCEEDANCES

SAMPLE WITH DETECT BUT NO EXCEEDANCES

2010 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT
PRATT & WHITNEY DIVISION, F&H BUILDINGS, EAST HARTFORD, CONNECTICUT

JUNE 2010 GROUNDWATER SAMPLING RESULTS AND GENERALIZED GROUNDWATER CONTOUR MAP

Comm.No. 88UT045

FIGURE 4-3

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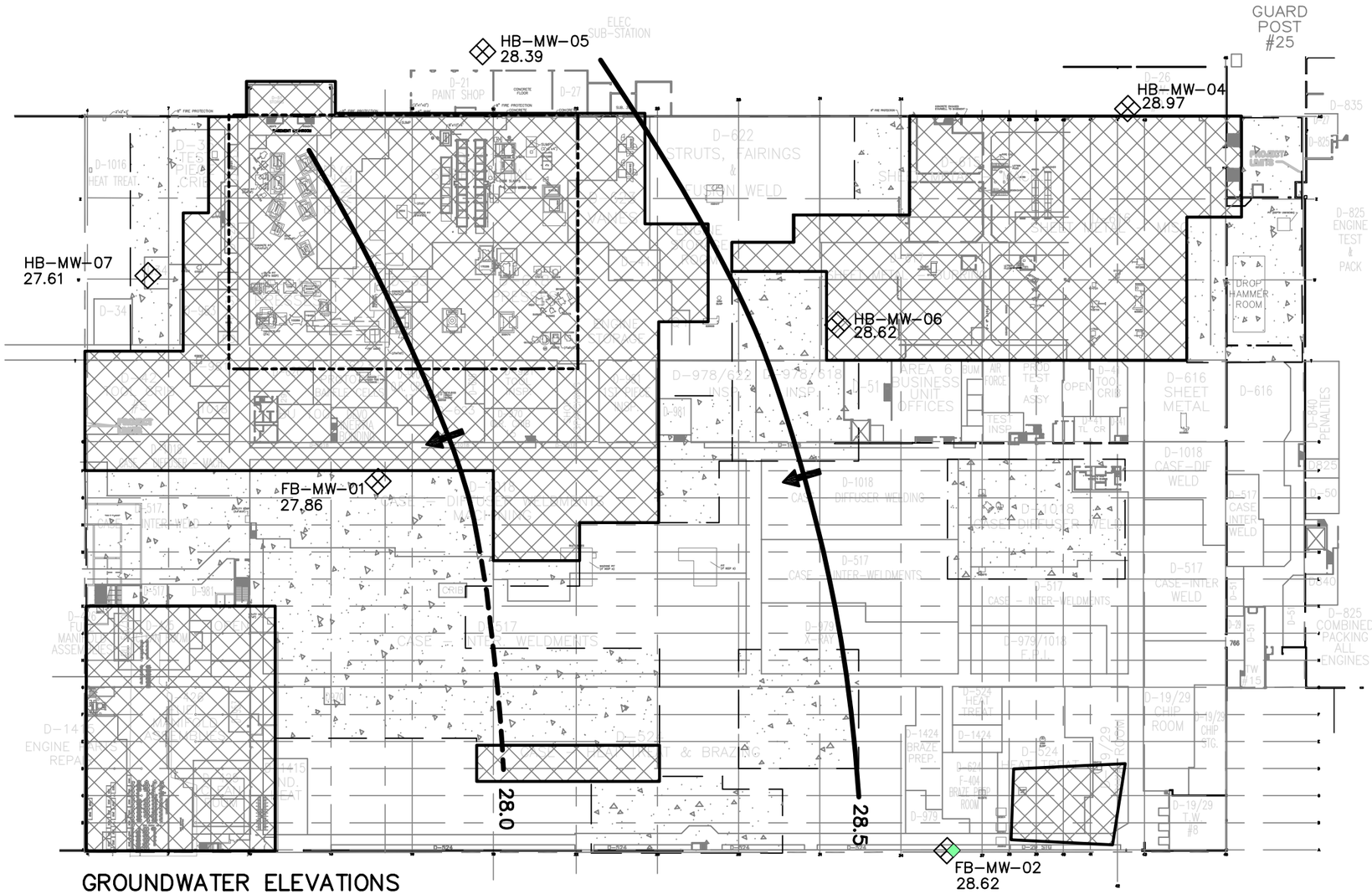


GROUNDWATER ELEVATIONS SEPTEMBER 2010

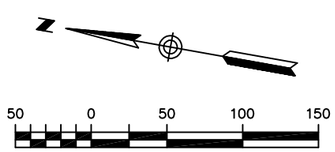
Monitoring Well Identification	Ground Elevation (ft)	Top of Casing Elevation (ft)	Top of Riser Elevation (ft)	Depth to Water[1] (ft)	Groundwater Elevation (ft)
FB-MW-01	38.41	38.39	38.21	10.35	27.86
FB-MW-02	38.47	38.48	38.32	9.70	28.62
HB-MW-04	38.35	38.45	38.08	9.11	28.97
HB-MW-05	39.64	39.67	39.35	10.96	28.39
HB-MW-06	38.48	38.58	38.24	9.62	28.62
HB-MW-07	38.15	38.31	38.16	10.55	27.61

NOTES:

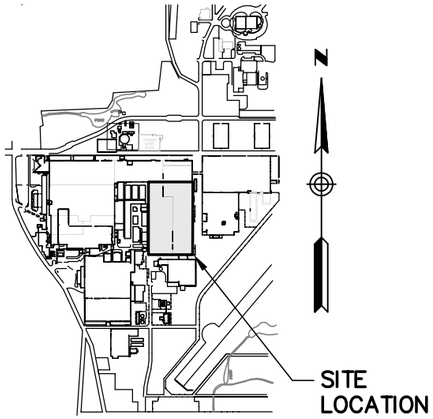
(1) DEPTH TO WATER WAS MEASURED FROM TOP OF RISER.

(2) DEPTH TO WATER MEASUREMENTS COLLECTED ON SEPTEMBER 9, 2010.

ft INDICATES FEET.



SCALE IN FEET



KEY MAP

NOT TO SCALE

LEGEND

- APPROXIMATE LIMITS OF BITUMINOUS ASPHALT
- APPROXIMATE LIMITS OF PREVIOUS CONCRETE REMOVAL & REPLACED WITH PROCESSED AGGREGATE BASE
- APPROXIMATE LIMITS OF ENGINEERED CONTROL
- MONITORING WELL LOCATION
- GROUNDWATER CONTOUR DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION

GROUNDWATER EXCEEDANCES

- SAMPLE WITH DETECT BUT NO EXCEEDANCES

2010 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT
PRATT & WHITNEY DIVISION, F&H BUILDINGS, EAST HARTFORD, CONNECTICUT

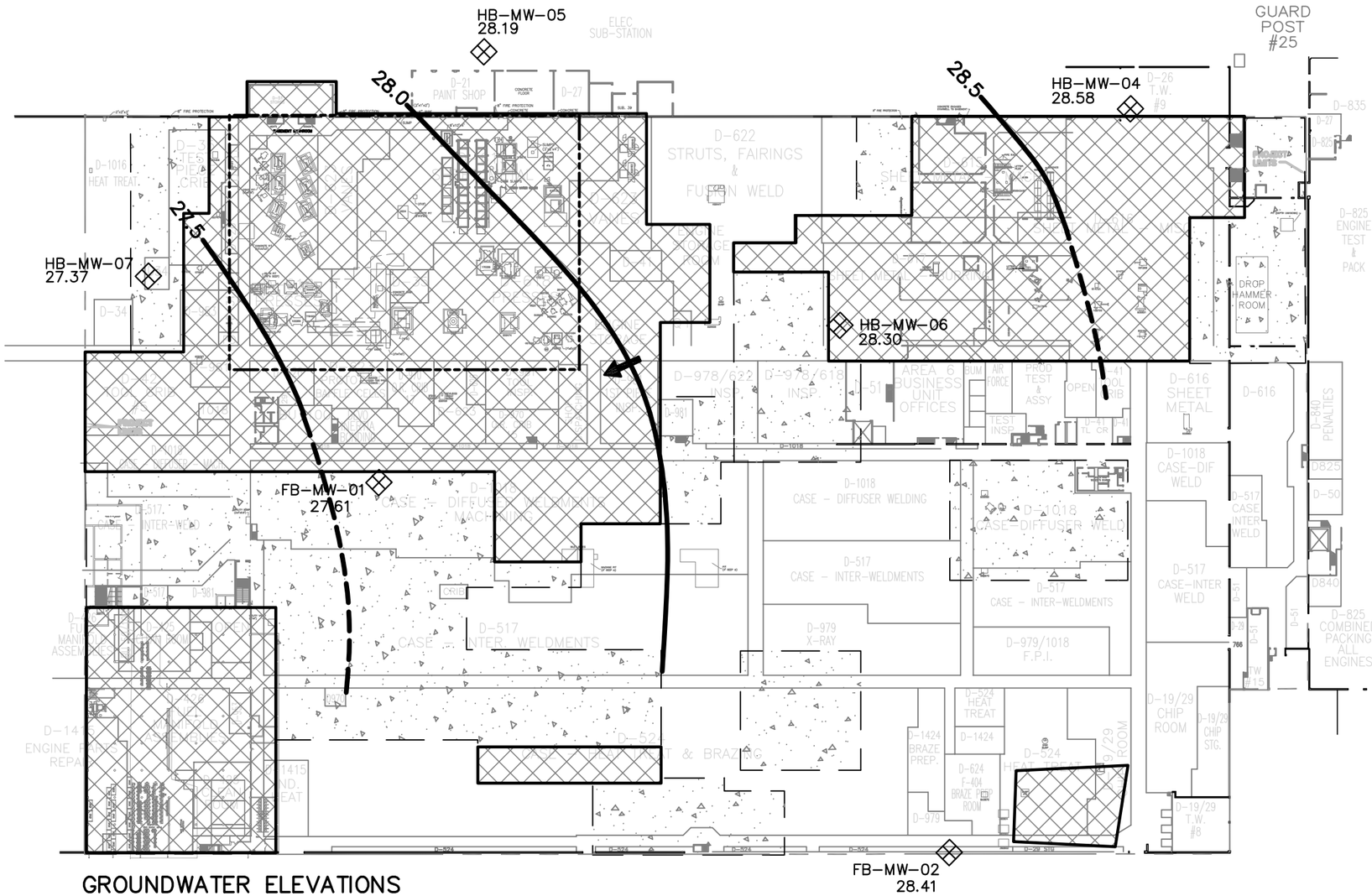
SEPTEMBER 2010 GROUNDWATER SAMPLING RESULTS AND GENERALIZED GROUNDWATER CONTOUR MAP

Comm.No. 88UT045

FIGURE 4-4

LEA

G:\AUTOCAD\PROJECTS\PWEH\88UT045\TASK001 GROUNDWATER MONITORING ACTIVITIES\88UT045-G2010-09.DWGTab: 4-4 Saved: 1/10/2011 2:22 PM Plotted: 1/10/2011 2:27 PM



GROUNDWATER ELEVATIONS DECEMBER 2010

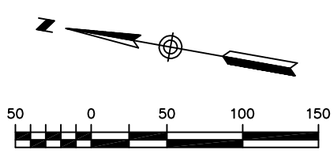
Monitoring Well Identification	Ground Elevation (ft)	Top of Casing Elevation (ft)	Top of Riser Elevation (ft)	Depth to Water[1] (ft)	Groundwater Elevation (ft)
FB-MW-01	38.41	38.39	38.21	10.60	27.61
FB-MW-02	38.47	38.48	38.32	9.91	28.41
HB-MW-04	38.35	38.45	38.08	9.50	28.58
HB-MW-05	39.64	39.67	39.35	11.16	28.19
HB-MW-06	38.48	38.58	38.24	9.94	28.30
HB-MW-07	38.15	38.31	38.16	10.79	27.37

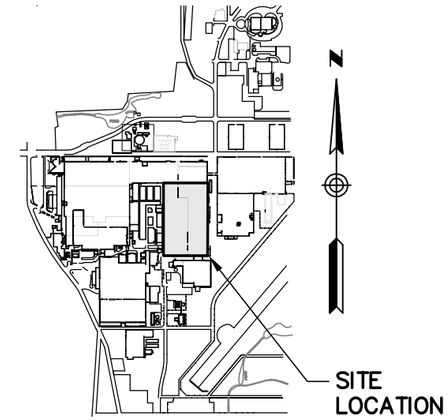
NOTES:

(1) DEPTH TO WATER MEASUREMNETS WERE RECORDED FROM TOP OF RISER.

(2) DEPTH TO WATER MEASUREMENTS COLLECTED ON DECEMBER 9, 2010.

ft INDICATES FEET.





KEY MAP

NOT TO SCALE

LEGEND

- APPROXIMATE LIMITS OF BITUMINOUS ASPHALT
- APPROXIMATE LIMITS OF PREVIOUS CONCRETE REMOVAL & REPLACED WITH PROCESSED AGGREGATE BASE
- APPROXIMATE LIMITS OF ENGINEERED CONTROL
- MONITORING WELL LOCATION
- GROUNDWATER CONTOUR DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION

GROUNDWATER EXCEEDANCES

- SAMPLE WITH DETECT BUT NO EXCEEDANCES

2010 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT
PRATT & WHITNEY DIVISION, F&H BUILDINGS, EAST HARTFORD, CONNECTICUT

DECEMBER 2010 GROUNDWATER SAMPLING RESULTS AND GENERALIZED GROUNDWATER CONTOUR MAP

Comm.No. 88UT045

FIGURE 4-5

LEA

G:\AUTOCAD\PROJECTS\PWEH\88UT045\TASK001 GROUNDWATER MONITORING ACTIVITIES\88UT045-G2010-12.DWGTab: 4-5 Saved: 1/10/2011 2:23 PM Plotted: 1/10/2011 2:26 PM

Appendix A

Copies of Field Paperwork

DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No.	**88UT908.001**	Page 1 of 10
Project	UTC P&W F&H GW Monitoring 2009	Date 3/4/10
Location	P&W East Hartford, East Hartford, CT	
Client	Pratt & Whitney Division - JTot	

Arrived at Site 0815 Departed from Site 1545 Vehicle ST-14 personal

Odometer (Start)Return 60 miles

Site Activities

- [ ] Soil Sampling
- [x] Groundwater Sampling
- [ ] Surface Water Sampling
- [ ] Vapor/Air Sampling
- [ ] Concrete Sampling
- [ ] Other Sampling
- [ ] Other Sampling
- [ ] Well Development
- [ ] Geoprobe Work
- [ ] Concrete Coring
- [ ] Construction
- [ ] Waste Management
- [ ] Inspection
- [ ] Site Walk Over
- [ ] Surveying
- [ ] Other (Describe)

Current Project Information

Last Sample Number Used

Last Location ID Used

Current Location (if not complete)

Sampling for VOCs, Metals, PCBs, TPH

Laboratories used Accutest

Paperwork & Equipment left at/in Nate Emmons

Site Contact Mark Hoff

Contractors on Site LEA

Time and place to meet contractors

Non-productive Time

- [x] None
- [ ] Equipment Breakdown
- [ ] Late
- [ ] Weather
- [ ] Missing Equipment
- [ ] Other (Describe)

Quality Assurance Checks

Yes	N/A	No	
✓			Sample labels complete
✓			Sample/cooler seals OK
✓			All samples obtained
✓			Chains of custody
✓			All forms/logs complete
✓			Site condition OK
✓			Site H&S Plan on site
✓			Instruments calibrated

Checked By

Residuals Disposition

Item	Approx. Amount	Container ID
Soil/Solid		
Groundwater	≈13 gals	741906
Decon Fluid		
PPE		
Other		

Weather Conditions

Temperature 38° Precipitation — Wind strong

Comments

Expendable Items Used

Qty	Item	LEA Number
	Bailer, Disposable (specify size)	090
	Drum, Closed Top 55 Gallon	086
	Filter, In Line	024
1	Miscellaneous Health & Safety Items	060
80'	Tubing, ~~1/2"~~, NOS 1/4" poly	007
7'	Tubing, ~~3/8"~~, NOS silicone	008
	Water, Distilled	025

Equipment Used

Qty	Item	LEA Number
	Generator 3500 Watt	153
	Meter, Conductivity	022
	Meter, pH/Temp	021
1	Miscellaneous Small Tools & Equipment	152
	Pump, Grundfos	073
2	Pump, Peristaltic (spec. Master or Isco)	040
	Pump, Submersible	201
	Pump, Watera	038
2	Turbidimeter	023
1	VOC Analyzer, Photovac 2020 (PID)	012
2	Water Level Indicator	028
2	Water Quality Meter w/Flow Cell	070

Field Personnel ~~Nate Emmons~~ Rob Zuhowski

Signature

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No.	**88UT908.001**	Page 2 of 10
Project	UTC P&W F&H GW Monitoring 2009	Date 3/4/10
Location	P&W East Hartford, East Hartford, CT	
Client	Pratt & Whitney Division - JTot	

Description of Site Activities

0815 · onsite
- meet with Mark Hoff for pre jobs meeting @ Waste Treatment
0855 - begin equipment setups & calibrations
0920 · begin groundwater sampling
1420 · R. Zuhowski takes care of waste groundwater
A. Clarke finishes HB-MW-05 sample
1525 · R. Zuhowski offsite with van to yard
A. Clarke continues to exit for Sentest
1540 · Benny onsite for sample pickup
1545 A. Clarke offsite

Field Personnel ~~Nate Emmons~~ Rob Zuhowski *Signature*

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT
CALIBRATION RECORD

LEA Comm. No.	**88UT908.001**	Page 3 of 10
Project	UTC P&W F&H GW Monitoring 2009	Date 3/4/10
Location	P&W East Hartford, East Hartford, CT	
Client	Pratt & Whitney Division - JTot	

pH Meter/Serial #

		Time	pH 4.01	pH 7.00	pH 10.01	Spec. Cond.	ORP	DO
Initial Calibration	02C0323AA	0915	✓	✓	✓	1000	100	99.9
Calibration Check	R205091	0915	✓	✓	✓	1000	100	101.1
Calibration Check								

Turbidity Meter/Serial #

		Time	0 NTU	20 NTU	100 NTU	800 NTU
Initial Calibration	3519	0905	✓	✓	✓	
Calibration Check	3520	0905	✓	✓	✓	
Calibration Check						

PID Meter/Serial #

	Time	Standard	Meter Reading	Zero with
Initial Calibration	0900	100	100	ambient air
Calibration Check				
Calibration Check				

Balance/Serial #

	Time	Standard	Balance
Initial Calibration			
Calibration Check			
Calibration Check			

Comments

Field Personnel ~~Nate Emmons~~ Pete Zuhowski

Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MISCELLANEOUS SAMPLES

LEA Comm. No. **88UT908.001**
Project UTC P&W F&H GW Monitoring 2009
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

Date 3/4/10

Sample ID	Location ID	Time	Sample Type	Depth (ft)	PID/FID Reading	Comments	Waste Cont. ID
1139123	FB-MW-01	1030	DUP		0.0		
1139124		1000	BKT			Trip Blank	
1139125		1415	BKE			Equipment Blank	

Field Personnel ~~Nate Emmons~~ Rob Zaborowski *Signature*

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT908.001**	Page 5 of 10
Project	UTC P&W F&H GW Monitoring 2009	Date 3/4/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 10:10
Client	Pratt & Whitney Division - JTot	

Monitoring Well Number FB-MW-02 Sample Number(s) 1139117 1139117cf

Initial Field Data and Measurements

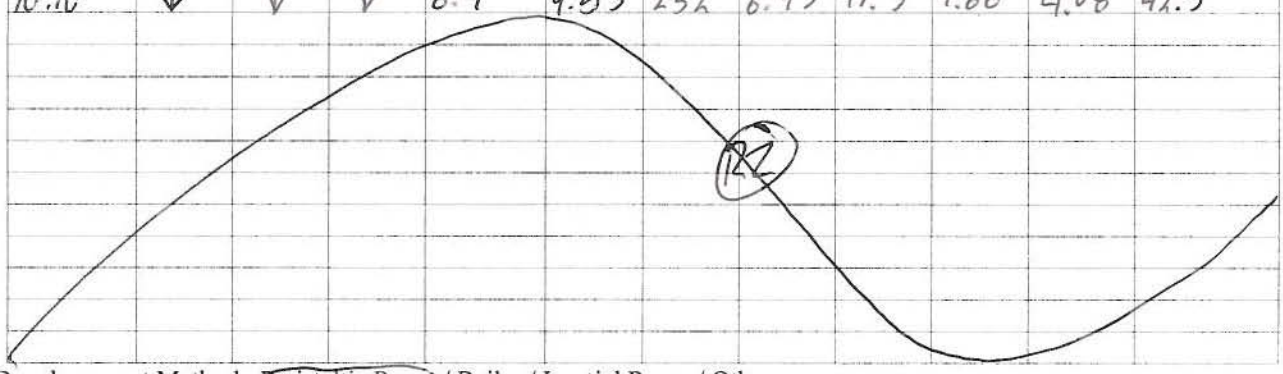
Depth of Well 13.62 Reference Used TOR
Depth to Water 8.57 PID/FID Reading —
Height of Column 5.05 Interface Yes / (No) If yes, Depth — Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector (Road Box) / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure	X	
Collar Intact	X	
Cover Locked	X	
Other (describe)		

Development Information

Time \ Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	DOC ~~Comment~~
9:00	8.57	300	120	START	PURGING						
9:10	8.64			1.2	9.58	269	7.00	35.9	5.03	24.3	44.3
9:20	8.64			2.4	9.56	265	6.96	40.7	4.86	16.4	42.3
9:30				3.6	9.52	255	6.93	43.9	4.46	10.1	39.0
9:40				4.8	9.49	253	6.93	46.7	4.74	6.12	41.0
9:50				6	9.58	251	6.93	48.5	4.65	4.92	42.6
10:00				7.2	9.51	254	6.93	47.1	4.68	4.41	42.1
10:10				8.4	9.53	252	6.93	47.3	4.66	4.08	42.3



Developement Method (Peristaltic Pump) / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? (Yes) / No If Yes, with what? liquinox, DI, Methanol on WLI
Waste Container ID 741906

Additional Comments

Field Personnel ~~Nate Emmons~~ Alex C. Rob Zuckowski Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT908.001**	Page 6 of 10
Project	UTC P&W F&H GW Monitoring 2009	Date 3/4/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 11:50
Client	Pratt & Whitney Division - JTot	

Monitoring Well Number HB-MW-06 Sample Number(s) 1139118 1139118cf

Initial Field Data and Measurements

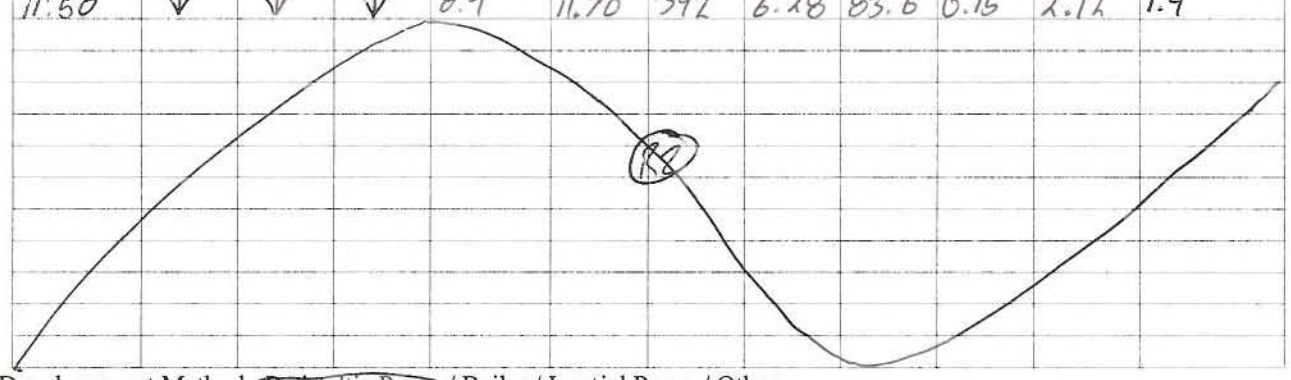
Depth of Well 13.61 Reference Used TOR
Depth to Water 8.57 PID/FID Reading —
Height of Column 5.04 Interface Yes / (No) If yes, Depth — Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector (Road Box) / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure	X	
Collar Intact	X	
Cover Locked	X	
Other (describe)		

Development Information

Time \ Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	DOS ~~Comment~~
10:40	8.57	300	120	START	PURGING						
10:50	8.64			1.2	11.33	418	6.37	73.6	0.37	8.61	3.3
11:00	8.64			2.4	11.44	405	6.25	82.4	0.14	5.42	1.3
11:10				3.6	11.51	396	6.28	81.5	0.24	4.15	2.2
11:20				4.8	11.66	394	6.29	82.7	0.12	3.21	1.1
11:30				6	11.71	392	6.28	84.0	0.15	2.42	1.4
11:40				7.2	11.68	393	6.28	83.2	0.14	2.48	1.3
11:50				8.4	11.70	392	6.28	83.6	0.15	2.12	1.4



Developement Method (Peristaltic Pump) / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? (Yes) / No If Yes, with what? liquinox, DI, Methanol on WLI
Waste Container ID 741906

Additional Comments

Field Personnel ~~Nate Emmons~~ Alex C. Rob Zurkowski Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT908.001**	Page 7 of 10
Project	UTC P&W F&H GW Monitoring 2009	Date 3/4/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 13:30
Client	Pratt & Whitney Division - JTot	

Monitoring Well Number HB-MW-04 Sample Number(s) 1139119 1139119 of

Initial Field Data and Measurements

Depth of Well 13.37 Reference Used TOR
Depth to Water 7.96 PID/FID Reading —
Height of Column 5.41 Interface Yes / No If yes, Depth — Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector Road Box / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure	X	
Collar Intact	X	
Cover Locked	X	
Other (describe)		

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	DO% ~~Comment~~
12:20	7.46	300	120	START PURGING							
12:30	8.04			1.2	9.83	317	7.52	6.4	1.81	14.5	14.6
12:40	8.04			2.4	9.80	318	7.50	6.2	1.36	6.72	11.9
12:50				3.6	9.76	318	7.48	9.3	1.10	4.41	9.7
13:00				4.8	9.85	317	7.48	9.7	1.40	3.62	12.5
13:10				6	9.89	317	7.47	9.5	1.42	3.21	12.1
13:20				7.2	9.86	318	7.48	9.2	1.38	2.89	11.8
13:30				8.4	9.88	318	7.48	9.4	1.40	2.65	12.0

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what? Liquinox, DI, Methanol on WLI
Waste Container ID 741906

Additional Comments

Field Personnel ~~Nate Emmons~~ Alex C. Rob Zurkowski Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT908.001**	Page 8 of 10
Project	UTC P&W F&H GW Monitoring 2009	Date 3/4/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 10:30
Client	Pratt & Whitney Division - JTot	

Monitoring Well Number FB-MW-01 Sample Number(s) 1139120 1139123 1139123uf 1139120uf

Initial Field Data and Measurements

Depth of Well 13.80 Reference Used top of pvc riser
Depth to Water 9.41 PID/FID Reading 0.0
Height of Column 4.39 Interface Yes / No If yes, Depth Lighter / Heavier

Well Casing Diameter 1.5" Material pvc
Protector Road Box / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	✓	
Other (describe)		

Development Information

Time \ Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment DO%
0920	9.41	300	120	0	←		Start purging				→
0930	9.42				10.33	325	6.59	127.1	5.75	20.4	51.3
0940					10.34	319	6.54	138.9	5.12	16.3	45.7
0950					10.30	316	6.52	144.5	4.57	12.4	40.8
1000					10.31	316	6.54	144.7	4.54	8.23	40.6
1010					10.47	314	6.54	146.8	4.34	6.41	38.8
1020				7.2	10.59	315	6.54	147.3	4.18	4.53	37.4
1025				7.8	10.61	315	6.54	147.5	4.17	3.21	37.4
1030				8.4	10.59	315	6.54	147.5	4.17	3.66	37.3

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?
Waste Container ID 741906

Additional Comments

Field Personnel ~~Nate Emmons~~ Rob Zurkowski *Signature*

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT908.001**	Page 9 of 10
Project	UTC P&W F&H GW Monitoring 2009	Date 3/4/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 12:20
Client	Pratt & Whitney Division - JTot	

Monitoring Well Number HB-MW-07 Sample Number(s) 1139121 1139121uf

Initial Field Data and Measurements

Depth of Well 14.52 Reference Used top of pvc riser
Depth to Water 9.89 PID/FID Reading 0.0
Height of Column 4.63 Interface Yes / No If yes, Depth Lighter / Heavier

Well Casing Diameter 1.5" Material pvc
Protector Road Box / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	✓	
Other (describe)		

Development Information

Time \ Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment DO%
1130	9.89	300	120	0	←		start purging				→
1140	9.91				11.90	408	6.83	84.3	1.74	6.83	16.2
1150					12.32	424	6.69	98.2	1.82	5.22	17.0
1200					12.11	442	6.67	104.8	1.93	4.81	18.0
1210				4.8	12.40	460	6.66	112.1	2.07	3.26	19.4
1215				5.4	12.38	459	6.66	112.4	2.07	1.98	19.4
1220				6	12.44	460	6.65	112.5	2.08	2.07	19.5

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?
Waste Container ID 741906

Additional Comments

Field Personnel ~~Nate Emmons~~ Rob Zuchowski *Signature*

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT908.001**	Page 10 of 10
Project	UTC P&W F&H GW Monitoring 2009	Date 3/4/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 14:15
Client	Pratt & Whitney Division - JTot	

Monitoring Well Number HB-MW-05 Sample Number(s) 1139122 1139122cf

Initial Field Data and Measurements

Depth of Well 14.59 Reference Used top of pvc riser
Depth to Water 10.08 PID/FID Reading 0.0
Height of Column 4.51 Interface Yes / No If yes, Depth _____ Lighter / Heavier

Well Casing Diameter 1.5" Material pvc
Protector Road Box / Stickup
Ground to Reference _____
Comments _____

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	✓	
Other (describe)		

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment DO%
1310	10.08	300	120	0	←		start purging				→
1320	10.11				12.60	875	6.34	155.6	9.87	14.6	87.1
1330					12.56	913	6.29	157.4	8.81	10.2	83.1
1340					12.45	945	6.24	154.9	8.54	8.56	80.3
1350					12.42	954	6.21	151.8	8.36	6.66	78.8
1400					12.18	956	6.19	151.6	8.29	5.73	77.5
1405				6.6	12.22	955	6.19	151.4	8.28	4.91	77.6
1410				7.2	12.19	955	6.20	151.4	8.28	3.56	77.5
1415				7.8	12.24	956	6.20	151.4	8.27	3.11	77.5

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other _____

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what? _____
Waste Container ID 741906

Additional Comments

Field Personnel ~~Nate Emmons~~ Peter Zurkowski *Signature*

ACCUTEST Laboratories

1 of 2

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Loureiro Engineering Assoc.
ADDRESS: 100 Northwest Drive
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Nate Emmons
PHONE #: 860-747-6181

FACILITY INFORMATION

PROJECT NAME: UTC PtW FtH GW Monitoring 2010
LOCATION: PtW East Hartford CT
PROJECT NO.: 88UT908
FAX #:

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	RCP VOCs 8260B	RCP PCBs 8082	CT EPTH	RCRA 8 Metals + Cu, Li, Zn								LAB USE ONLY
	1139117	3/4/10	10:10	RJZ	GW	6	X					X	X	X	X									
	1139117 of		10:10			1			X			X				X								
	1139118		11:50			6	X					X	X	X	X									
	1139118 of		11:50			1			X			X				X								
	1139119		13:30			6	X					X	X	X	X									
	1139119 of	3/4/10	13:30	RJZ		1			X			X				X								

DATA TURNAROUND INFORMATION

- [x] 14 DAYS STANDARD
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	3/4/10 1540	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

ACCUTEST Laboratories

2 of 2

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Cavero Engineering Associates
ADDRESS: 100 Northwest Drive
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Nate Emmons
PHONE #: 860-747-6181

FACILITY INFORMATION

PROJECT NAME: P&W F&H GW Monitoring
LOCATION: P&W East Hartford
PROJECT NO.: 88UT9108.001
FAX #:

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	TKE	VOCs by 8260B	PCBs by 8082	CT ETPH	RCRA metals by 6010	LAB USE ONLY
	1139120	3-4-10	1030	A	GW	6	2					4	X	X	X		
	1139120uf		1030			1			1							X	
	1139121		1220			6	2					4	X	X	X		
	1139121uf		1220			1			1							X	
	1139122		1415			6	2					4	X	X	X		
	1139122uf		1415			1			1							X	
	1139123		1030			6	2					4	X	X	X		
	1139123uf		1030			1			1							X	
	1139124		1000			1	1						X				
	1139125		1415			6	2					4	X	X	X		
	1139125uf	3-4-10	1415	A	GW	1			1							X	

DATA TURNAROUND INFORMATION

- [x] 14 DAYS STANDARD
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	3/4/10 1540	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No.	**88UT045.001**	Page 1 of 11	
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 6/9/10	
Location	P&W East Hartford, East Hartford, CT		
Client	Pratt & Whitney East Hartford-JT		

Arrived at Site 740 Departed from Site 1520 Vehicle Ranger

Odometer (Start)Re 160 miles RT turns

Site Activities

- [ ] Soil Sampling
- [x] Groundwater Sampling
- [ ] Surface Water Sampling
- [ ] Vapor/Air Sampling
- [ ] Concrete Sampling
- [ ] Other Sampling
- [ ] Other Sampling
- [ ] Well Development
- [ ] Geoprobe Work
- [ ] Concrete Coring
- [ ] Construction
- [ ] Waste Management
- [ ] Inspection
- [ ] Site Walk Over
- [ ] Surveying
- [ ] Other (Describe)

Current Project Information

Last Sample Number Used	1145344
Last Location ID Used	—
Current Location (if not complete)	—
Sampling for	VOCs/TPH/PCBs/metals
Laboratories used	Accutest
Paperwork & Equipment left at/in	Office
Site Contact	Jeff Thompson
Contractors on Site	LEA
Time and place to meet contractors	3 DRUM

Non-productive Time

- [x] None
- [ ] Equipment Breakdown
- [ ] Late
- [ ] Weather
- [ ] Missing Equipment
- [ ] Other (Describe)

Quality Assurance Checks

Yes	N/A	No	
✓			Sample labels complete
✓			Sample/cooler seals OK
✓			All samples obtained
✓			Chains of custody
✓			All forms/logs complete
✓			Site condition OK
✓			Site H&S Plan on site
✓			Instruments calibrated

Checked By

Residuals Disposition

Item	Approx. Amount	Container ID
Soil/Solid		
Groundwater	~12 gallons	741906
Decon Fluid		
PPE		
Other		

Weather Conditions

Temperature 60s Precipitation ~~60s~~ Wind slight

Comments

Expendable Items Used

Qty	Item	LEA Number
	Bailer, Disposable (specify size)	090
	Decontamination Supplies	081
	Drum, Closed Top 55 Gallon	086
	Filter, In Line	024
1	Miscellaneous Health & Safety Items	060
	Tubing, 1/2", NOS	007
	Tubing, ~~3/8", NOS~~ POLY	008
1 gal.	Water, Distilled	025

Equipment Used

Qty	Item	LEA Number
	Generator 3500 Watt	153
	Meter, Conductivity	022
	Meter, pH/Temp	021
1	Miscellaneous Small Tools & Equipment	152
	Pump, Grundfos	073
2	Pump, Peristaltic (spec. Master or Isco)	040
	Pump, Submersible	201
	Pump, Watera	038
	Thermo-Anemometer	248
2	Turbidimeter	023
	VOC Analyzer, Photovac 2020 (PID)	012
2	Water Level Indicator	028
2	Water Quality Meter w/Flow Cell	070

Field Personnel Bill G. Heather G.

Signature Heather Grim

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No.	**88UT045.001**	Page 2 of 11
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 6/9/10
Location	P&W East Hartford, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

Description of Site Activities

740 Arrived at Site
Vehicle Inspection
Met w/ Paul I. for Prejob at Waste Treatment
Entered F+H parking lot
Set up on wells, begin sampling
Christina V., Adam D., and LCI personnel adjacent to parking lot
Wickiwitz on-site - marked out monitoring wells with spray paint
1145 Benny waiting to get sampler
1510 Benny gets sampler - off site - 1520

#6

Field Personnel Bill G.
Heather G.

Signature Heather G.

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT
CALIBRATION RECORD

LEA Comm. No.	**88UT045.001**	Page 3 of 11
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 6/10/10
Location	P&W East Hartford, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

pH Meter/Serial # 03E0693 AD, 06E1427 AN

	Time	pH 4.01	pH 7.00	pH 10.01	Spec. Cond.	ORP	DO
Initial Calibration	900		✓		✓	✓	✓
Calibration Check							
Calibration Check							

Turbidity Meter/Serial # 35221, 3519

	Time	0 NTU	20 NTU	100 NTU	800 NTU
Initial Calibration	900		✓	✓	
Calibration Check					
Calibration Check					

PID Meter/Serial #

	Time	Standard	Meter Reading	Zero with
Initial Calibration				
Calibration Check				
Calibration Check				

Balance/Serial #

	Time	Standard	Balance
Initial Calibration			
Calibration Check			
Calibration Check			

Comments

Field Personnel Bill G. Heather G.

Signature Heather Grim

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MISCELLANEOUS SAMPLES

LEA Comm. No. **88UT045.001**
Project UTC F&H Bldgs 2010 Maintenance & GW
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney East Hartford-JT

Page 4 of 11
Date 6/9/10

Sample ID	Location ID	Time	Sample Type	Depth (ft)	PID/FID Reading	Comments	Waste Cont. ID
1145342	HB-MW-06	11:32	DUP	–	–	—	741906
1145343	Trip Blank	9:20	BKT	—	—	—	—
1145344	Equip Blank	12:05	BKE	—	—	—	—

HG

Field Personnel Bill G. Heather G.

Signature Heather Grim

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MONITORING WELL INVENTORY

LEA Comm. No.	**88UT045.001**		Page 5 of 10
Project	UTC F&H Bldgs 2010 Maintenance & GW		Date 6/9/10
Location	P&W East Hartford, East Hartford, CT		
Client	Pratt & Whitney East Hartford-JT		

Sample ID	Location ID	Time	Predicted Depth of Well	Predicted Depth to Water	Actual Depth of Well	Actual Depth to Water	PID/FID	Reference Elevation	Comments
2235009	FB-MW-01	935			13.80	9.74			
2235010	FB-MW-02	1355			13.50	8.88			
2235011	HB-MW-04	1450			13.38	8.34			
2235012	HB-MW-05	1310			14.58	10.31			
2235013	HB-MW-06	1050			13.62	8.88			
2235014	HB-MW-07	1025			14.50	10.04			
2235015									
2235016									
2235017									

HG

Field Personnel Heather G. Bill G.

Signature Heather Gunn

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 6 of 11
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 6/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 1017
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number FB-MW-01 Sample Number(s) 1145337 1145337ut

Initial Field Data and Measurements

Depth of Well 13.80 Reference Used TOC
Depth to Water 9.74 PID/FID Reading —
Height of Column 4.06 Interface Yes / (No) If yes, Depth _____ Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector Road Box / Stickup
Ground to Reference TOC
Comments —

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	✓	
Other (describe)	—	

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
935	9.74	350	150	0.0	START PURGING						
950	9.76	↓	↓	3.0	14.74	425	6.26	120.8	3.78	4.71	
1005	9.73			4.5	14.94	432	6.23	128.3	2.93	4.67	
1010	9.74			5.25	14.72	433	6.24	130.9	2.88	4.53	
1015	9.70			6.0	14.81	436	6.25	132.5	2.90	4.78	

HG

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / (No) If Yes, with what?
Waste Container ID 741906

Additional Comments

Field Personnel Bill G. Heather G. *Signature* [signature]

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 7 of 11
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 6/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 11:32
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-06 Sample Number(s) 1145338, 1145338uf, 1145342, 1145342uf

Initial Field Data and Measurements

Depth of Well 13.62 Reference Used TOC
Depth to Water 8.88 PID/FID Reading —
Height of Column 4.74 Interface Yes / No If yes, Depth _____ Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector Road Box / Stickup
Ground to Reference TOC
Comments —

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	✓	
Other (describe)	—	

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1050	8.88	350	120	0.0		START PURGING					
1110	8.96		120	2.4	14.74	433	6.29	127.5	1.71	4.62	
1120	8.93		120	3.6	15.14	428	6.26	145.3	1.49	4.28	
11:25	8.93		120	4.2	15.24	437	6.25	154.0	1.48	4.65	
11:30	8.93		120	4.8	15.38	428	6.26	157.4	1.49	4.75	
											SAMPLED

HG

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?
Waste Container ID 7H1906

Additional Comments P+W personnel spray-painted acting MW casing during sampling

Field Personnel Bill G. Heather G. *Signature* [signature]

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 8 of 11
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 6/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 13:55
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number FB-MW-02 Sample Number(s) 1145340 1145340ut

Initial Field Data and Measurements

Depth of Well 13.50 Reference Used TOC
Depth to Water 8.88 PID/FID Reading –
Height of Column 4.62 Interface Yes / (No) If yes, Depth Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector (Road Box) / Stickup
Ground to Reference TOC
Comments –

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	–	
Other (describe)	–	

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1255	8.88	350	150	0.0		START PURGING					
1310	9.00		150	2.25	13.79	218	6.91	110.1	9.50	10.5	
1320	9.00		150	3.75	13.81	219	6.85	140.1	8.74	7.28	
1330	9.00		150	5.25	13.96	229	6.83	156.3	8.88	5.58	
1335	9.00		150	6.0	13.97	246	6.82	164.4	8.83	5.48	
1340	9.00		150	6.75	13.90	248	6.83	172.9	8.50	4.68	
1345	9.00		150	7.50	13.87	245	6.82	180.2	8.40	4.25	
1350	9.00	350	150	8.25	13.88	242	6.82	190.1	8.35	4.79	
											SAMPLED

HG

Developement Method (Peristaltic Pump) / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / (No) If Yes, with what?
Waste Container ID 741906

Additional Comments

Field Personnel BILL G
HEATHER G.

Signature Heather Grim

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 9 of 11
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 6/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 10:25
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-07 Sample Number(s) 1145336, 1145336dup

Initial Field Data and Measurements

Depth of Well 14.50 Reference Used TOC
Depth to Water 10.04 PID/FID Reading
Height of Column 4.46 Interface Yes / No If yes, Depth Lighter / Heavier

Well Casing Diameter 2" Material
Protector (Road Box) / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked		
Other (describe)		

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
0910	10.04	350	120	—	START		PURGE				
0920	10.07	350	120	1.2	17.10	819	6.48	30.9	1.43	9.08	
0930	10.09	350	120	2.4	17.16	812	6.44	34.8	1.42	8.75	
0940	10.10	350	120	3.6	17.00	813	6.43	33.1	1.35	7.26	
0950	10.10	350	120	4.8	17.14	814	6.42	33.4	1.35	5.53	
1000	10.10	350	120	6.0	17.04	821	6.42	32.8	1.44	5.59	
1010	10.10	350	120	7.2	17.15	818	6.43	31.6	1.40	5.61	
1020	10.10	350	120	8.4	17.05	820	6.42	26.2	1.41	2.42	
1025	SAMPLE TAKEN										

Developement Method (Peristaltic Pump) / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?
Waste Container ID

Additional Comments

Field Personnel William Greer *Signature* William Greer

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 10 of 11
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 6/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 14:50
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-04 Sample Number(s) 1145341 1145341uf

Initial Field Data and Measurements

Depth of Well 13.29 Reference Used TOC
Depth to Water 8.34 PID/FID Reading
Height of Column 5'95 Interface Yes / No If yes, Depth Lighter / Heavier

Well Casing Diameter 2" Material General Condition OK Bad
Protector ~~Road Box~~ / Stickup Casing Secure ✓
Ground to Reference Collar Intact ✓
Comments Cover Locked —
Other (describe)

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1350	8.34	—		START							
1410	8.41	350	120	2.4	16.95	505	7.41	27.5	1.03	11.3	
1420	8.42	350	120	3.6	16.58	508	7.44	19.9	0.70	7.95	
1430	8.42	350	120	4.8	16.42	502	7.45	13.4	0.62	5.71	
1435	8.42	350	120	5.4	16.21	499	7.45	10.4	0.48	5.26	
1440	8.42	350	120	6.0	16.19	497	7.45	6.7	0.51	4.94	
1445	—	SAMPLE									

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?
Waste Container ID

Additional Comments

Field Personnel William Grier *Signature* [signature]

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 11 of 11
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 6 / 9 / 10
Location	P&W East Hartford, East Hartford, CT	Sample Time 13 :10
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-05 Sample Number(s) 1145339, 1145339ut

Initial Field Data and Measurements

Depth of Well 14.58 Reference Used

Depth to Water 10.31 PID/FID Reading

Height of Column 4.27 Interface Yes / No If yes, Depth Lighter / Heavier

Well Casing Diameter Material

Protector Road Box / Stickup

Ground to Reference

Comments

General Condition	OK	Bad
Casing Secure		
Collar Intact		
Cover Locked		
Other (describe)		

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1125	10.31	350	120		START						
1145	10.32	350	120	2.4	19.80	1936	6.22	69.9	7.83	14.0	
1155	10.34	350	120	3.6	19.80	1937	6.21	75.1	7.50	9.88	
1205	10.33	350	120	4.8	20.10	1928	6.20	77.9	7.32	8.91	
1215	10.33	350	120	6.0	20.07	1907	6.19	79.0	7.28	7.17	
1225	10.33	350	120	7.2	20.47	1894	6.18	76.2	7.16	7.47	
1235	10.33	350	120	8.4	20.20	1884	6.17	75.4	7.12	6.20	
1245	10.33	350	120	9.6	19.55	1866	6.15	78	7.15	5.62	
1255	10.33	350	120	10.8	19.65	1859	6.13	81.5	7.05	3.52	
1305	10.33	350	120	12.0	19.77	1854	6.12	80.4	7.02	3.58	
1310		SAMPLE									

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?

Waste Container ID

Additional Comments

Field Personnel ***Signature***

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #: KB6/2010-371

CLIENT INFORMATION

NAME: Loureiro Engineering Associates
ADDRESS: 100 Northwest Dr.
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Nate Emmons
PHONE #: 860-410-2987

FACILITY INFORMATION

PROJECT NAME: F+H Building
LOCATION: Pratt + Whitney, East Hartford, CT
PROJECT NO.: 88UT908
FAX #:

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	VOCs 8260B	PCBs 8082	CT ETPH	RCRA 8+Cu, Ni, Zn	LAB USE ONLY
	1145344	6/9/10	12:05	HG	GW	2	X					X	X				
	1145344	6/9/10	12:05	HG	GW	4						X		X	X		
	1145344UP	6/9/10	12:05	HG	GW	1			X			X				X	

DATA TURNAROUND INFORMATION

- ☒ 14 DAYS STANDARD
- ☐ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☒ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. [signature]	6/21/10 15K	1. [signature]	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: RBG12010-377
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Loureiro Engineering Associates
ADDRESS: 100 Northwest Dr.
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Nate Emmons
PHONE #: 860-410-2987

FACILITY INFORMATION

PROJECT NAME: F&H Buildings
LOCATION: Pratt & Whitney East Hartford, CT
PROJECT NO.: 88 01908
FAX #:

ANALYTICAL INFORMATION

VOCs 8260B; PCBs 8082; CT ETPH; RCRA 8+Cu, Ni, Zn

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	HCl	NaOH	HNO3	H2SO4	NONE	ICE	VOCs 8260B	PCBs 8082	CT ETPH	RCRA 8+Cu, Ni, Zn	LAB USE ONLY
	1145336	6/9/10	1025	BG	GW	2	X					X	X				
	1145336		1025	BG		4						X		X	X		
	1145336uf		1025	BG		1			X			X				X	
	1145337		1017	HG		2	X					X	X				
	1145337		1017	HG		4						X		X	X		
	1145337uf		1017	HG		1			X			X				X	
	1145338		1132	HG		2	X					X	X				
	1145338		1132	HG		4						X		X	X		
	1145338uf		1132	HG		1						X				X	
	1145339		1310	BG		2	X					X	X				
	1145339	6/9/10	1310	BG	GW	4						X		X	X		

DATA TURNAROUND INFORMATION

- [x] 14 DAYS STANDARD
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

In accordance w/CT RCPs/RSRs

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Heather Shum	6/9/10 1515	1. [signature]	2.		2.
3.		3.	4.		4.
5.		5.			

SEAL # | PRESERVE WHERE APPLICABLE ☐ | ON ICE ☐ | TEMPERATURE ____ C

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #: KBU2010/377

CLIENT INFORMATION

NAME: Loureiro Engineering Associates
ADDRESS: 100 Northwest Dr
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Nate Emmons
PHONE #: 860-410-2987

FACILITY INFORMATION

PROJECT NAME: F & H Buildings
LOCATION: Pratt + Whitney East Hartford, CT
PROJECT NO.: 88UT908
FAX #:

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	VOCs 8260B	PCBs 8082	CT ETPH	RCRA 8 Cd Ni Zn	LAB USE ONLY
	1145339uf	6/9/10	1310	BG	GW	1			X			X				X	
	1145340		1355	HG		2	X					X	X				
	1145340		1355	HG		4						X		X	X		
	1145340uf		1355	HG		1			X			X				X	
	1145341		1450	BG		2	X					X	X				
	1145341		1450	BG		4		X				X		X	X		
	1145341uf		1450	BG		1			X			X				X	
	1145342		1132	HG		2	X					X	X				
	1145342		1132	HG		4						X		X	X		
	1145342uf		1132	HG		1			X			X				X	
	1145343	6/9/10	920	HG	GW	1	X					X	X				

DATA TURNAROUND INFORMATION

- [x] 14 DAYS STANDARD
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

In accordance w/CT RCPs/RSRs

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Nathan Grim	6/9/10 1515	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No.	**88UT045.001**		Page 1 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW		Date 9/9/10
Location	P&W East Hartford, East Hartford, CT		
Client	Pratt & Whitney East Hartford-JT		

Arrived at Site 0730 Departed from Site 1615 Vehicle ST-14

Odometer (Start)Re 0 turn 60

Site Activities

- [ ] Soil Sampling
- [x] Groundwater Sampling
- [ ] Surface Water Sampling
- [ ] Vapor/Air Sampling
- [ ] Concrete Sampling
- [ ] Other Sampling
- [ ] Other Sampling
- [ ] Well Development
- [ ] Geoprobe Work
- [ ] Concrete Coring
- [ ] Construction
- [ ] Waste Management
- [ ]
- [ ] Inspection
- [ ] Site Walk Over
- [ ] Surveying
- [ ] Other (Describe)

Current Project Information

Last Sample Number Used	115 2117
Last Location ID Used	FB-MW-01
Current Location (if not complete)	(NA)
Sampling for	VOC, ETPH, PCBs, Metals
Laboratories used	Phoenix
Paperwork & Equipment left at/in	LEA
Site Contact	
Contractors on Site	(NA)
Time and place to meet contractors	

Non-productive Time

- [x] None
- [ ] Equipment Breakdown
- [ ] Late
- [ ] Weather
- [ ] Missing Equipment
- [ ] Other (Describe)

Quality Assurance Checks

Yes	N/A	No	
✓			Sample labels complete
✓			Sample/cooler seals OK
✓			All samples obtained
✓			Chains of custody
✓			All forms/logs complete
✓			Site condition OK
✓			Site H&S Plan on site
✓			Instruments calibrated

Residuals Disposition

Item	Approx. Amount	Container ID
Soil/Solid	(NA)	
Groundwater	1.8 gallons	759269 ≈ 1/2 full
Decon Fluid		
PPE	(NA)	
Other		

Weather Conditions

Temperature 65° Precipitation No Wind No

Comments (NA)

Checked By

Robin McKinney

Expendable Items Used

Qty	Item	LEA Number
	Bailer, Disposable (specify size)	090
	Drum, Closed Top 55 Gallon	086
	Filter, In Line	024
13	Miscellaneous Health & Safety Items	060
	Tubing, 1/2", NOS	007
	Tubing, 3/8", NOS	008
	Water, Distilled	025

Equipment Used

Qty	Item	LEA Number
	Generator 3500 Watt	153
	Meter, Conductivity	022
	Meter, pH/Temp	021
1	Miscellaneous Small Tools & Equipment	152
	Pump, Grundfos	073
3	Pump, Peristaltic (spec. Master or Isco)	040
	Pump, Submersible	201
	Pump, Watera	038
3	Turbidimeter	023
1	VOC Analyzer, Photovac 2020 (PID)	012
3	Water Level Indicator	028
3	Water Quality Meter w/Flow Cell	070

Field Personnel ~~Nate Emmons~~ Heather C. Beth V.

Signature

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No.	**88UT045.001**	Page 2 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 7/9/10
Location	P&W East Hartford, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

Description of Site Activities

0730 Onsite
0800 Meet w/ Jeff Jordan about F&H wells
0845 Heather Grimm Onsite, Calibrate equipment
0900 Get water levels at F&H
0930 Start [redacted] low flow on HB-MW-04
1030 Sample HB-MW-04
1145 Sample HB-MW-06 Replicate done about an hr of sampling
1300 Start pumping HB-MW-05
1340 Kieth V. onsite to sample wells + check cap
1355 Heath G. onsite to sample wells
1530 Heather Onsite
1615 Offsite

AD

Field Personnel ~~Nate Emmons~~ Rick D. Kieth V. Heather G.

Signature

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT
CALIBRATION RECORD

LEA Comm. No.	**88UT045.001**	Page 3 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 7/9/10
Location	P&W East Hartford, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

pH Meter/Serial #

	Time	pH 4.01	pH 7.00	pH 10.01	Spec. Cond.	ORP	DO
Initial Calibration	0845	✓	✓	✓	✓	✓	✓
Calibration Check							
Calibration Check							

Turbidity Meter/Serial #

	Time	0 NTU	20 NTU	100 NTU	800 NTU
Initial Calibration	0855	✓	✓	✓	✓
Calibration Check					
Calibration Check					

PID Meter/Serial #

	Time	Standard	Meter Reading	Zero with
Initial Calibration	0900	100	100	Ambient Air
Calibration Check				
Calibration Check				

Balance/Serial #

	Time	Standard	Balance
Initial Calibration			
Calibration Check			
Calibration Check			

Comments

Field Personnel ~~Nate Emmons~~ Rob D. Keith V. Heather G.

Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MONITORING WELL INVENTORY

LEA Comm. No. **88UT045.001**
Project UTC F&H Bldgs 2010 Maintenance & GW
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney East Hartford-JT

Date 9/9/10

Sample ID	Location ID	Time	Predicted Depth of Well	Predicted Depth to Water	Actual Depth of Well	Actual Depth to Water	PID/FID	Reference Elevation	Comments
2235542	FB-MW-01	0905	13.73	10.35			0.0	TOC	
2235543	FB-MW-02	0910	13.31	9.70			0.0		
2235544	HB-MW-04	0915	13.31	9.11			0.0		
2235545	HB-MW-05	0920	14.56	10.96			0.0		
2235546	HB-MW-06	0925	13.61	9.62			0.0		
2235547	HB-MW-07	0930	14.75	10.55			0.0		
2235548									

Field Personnel ~~Nate Emmons~~ Rick D. Kelly U. Arthur G. **Signature**

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MISCELLANEOUS SAMPLES

LEA Comm. No.	**88UT045.001**	Page 5 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 9/9/10
Location	P&W East Hartford, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

Sample ID	Location ID	Time	Sample Type	Depth (ft)	PID/FID Reading	Comments	Waste Cont. ID
1152495	N/A	0900	TBK			Trip Blank	
1152496		1330	EBK	N/A		Equipment Blank	N/A
1152121	HB-MW-06	1145	DUP			Replicate	

N/A

Field Personnel ~~Nate Emmons~~ Heather G. Keith V.

Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 6 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 9/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 10:30
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-04 Sample Number(s) 1152112 1152112oF

Initial Field Data and Measurements

Depth of Well 13.31' Reference Used TOC
Depth to Water 9.11' PID/FID Reading 0.0
Height of Column 4.20' Interface NA ~~Yes / No~~ ~~If yes, Depth~~ Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector Road Box / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure		✓
Collar Intact	✓	
Cover Locked	✓	
Other (describe)		

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
0940	9.11'	350	100	0							Initial
0945	9.14				20.8	489.4	7.14	-87.8	1.07	14.2	
0955	9.21				20.7	490.1	7.16	-81.2	0.09	8.1	
1005					20.6	499.1	7.17	-82.1	0.19	4.2	
1015					20.8	499.2	7.18	-79.8	0.25	2.8	
1025					20.8	500.2	7.18	-79.6	0.25	2.1	
1030				5	20.8	500.4	7.18	-79.7	0.24	1.7	Sample

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes No If Yes, with what? DI Methanol
Waste Container ID 759269

Additional Comments

Field Personnel ~~Nate Emmons~~ Liat D. Liat V. Heather G. **Signature**

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 7 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 9/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 11:45
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HS-MW-06 Sample Number(s) 1152113 1152113F
1152121 1152121F

Initial Field Data and Measurements

Depth of Well 13.61' Reference Used TOC
Depth to Water 9.62' PID/FID Reading 0.0
Height of Column 3.99' Interface N/A ~~Yes / No~~ If yes, Depth ~~Lighter / Heavier~~

Well Casing Diameter 1.5" Material PVC
Protector Road Box / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	✓	
Other (describe)		

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1100	9.62'	350	100	0							Initial
1105	9.64				21.5	631	6.45	-29.9	0.26	12.6	
1115					21.7	615	6.15	-38.7	0.18	5.7	
1125					21.8	607	6.01	-40.1	0.14	3.9	
1135					21.9	606	5.94	-41.8	0.13	2.1	
1140					21.9	606	5.94	-42.1	0.12	1.5	
1145				9.52	21.9	606	5.93	-42.2	0.12	1.4	Sample

NO

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what? DI, Methanol
Waste Container ID 759267

Additional Comments

Duplicate DONE

Field Personnel ~~Nate Emmons~~ Rick S. Keith V. Heather G. *Signature*

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 8 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 9/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 14:00
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-05 Sample Number(s) 1152114 1152114-F

Initial Field Data and Measurements

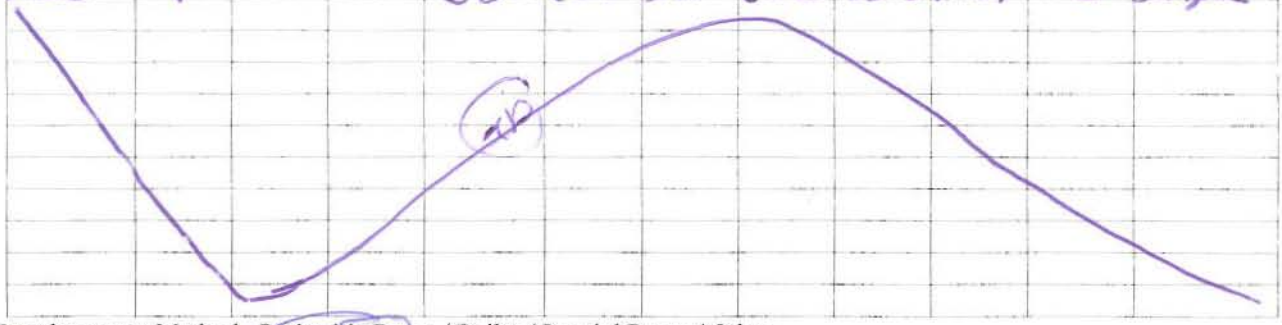
Depth of Well 14.56' Reference Used TOC
Depth to Water 10.96' PID/FID Reading 0.0
Height of Column 3.60' Interface N/A ~~Yes / No~~ If yes, Depth ~~Lighter / Heavier~~

Well Casing Diameter 1.5" Material PVC
Protector Road Box / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	✓	
Other (describe)		

Development Information

Time \ Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1255	10.96	350	100	0							Initial
1300	10.97				22.0	583	6.36	-11.7	1.01	14.6	
1310	10.98				22.2	586	6.34	-30.8	1.46	9.8	
1320					22.3	588	6.33	-39.9	1.65	10.2	
1330					22.3	589	6.32	-50.1	1.80	4.6	
1340					22.4	590	6.32	-52.9	1.84	3.8	
1350					22.4	590	6.32	-53.7	1.89	2.1	
1355					22.4	591	6.32	-54.1	1.82	1.8	
1400				6.52	22.4	591	6.32	-53.8	1.84	2.2	Sample



Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what? DI, Alkonox
Waste Container ID 759269

Additional Comments

Field Personnel ~~Nate Emmons~~ [illegible] [illegible] [illegible] *Signature* [illegible]

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 9 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 9/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 14:40
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number FB-MW-02 Sample Number(s) 1152116 1152116DF

Initial Field Data and Measurements

Depth of Well 13.31 Reference Used TOR
Depth to Water 9.7 PID/FID Reading
Height of Column 3.61 Interface Yes / No If yes, Depth NA Lighter / Heavier

Well Casing Diameter 1.5 Material PVC
Protector Road Box / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure	—	
Collar Intact	—	
Cover Locked	—	
Other (describe)		

Development Information

Time \ Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP ~~(Eh)~~ mV	DO (mg/L)	Turbidity (NTU)	Comment
1350	9.7	350	100		START PUMPING						
1400	~~9.73~~ 9.73		100	1	20.6	324.4	6.58	97.7	3.72	9.24	
1410	9.73		100	2	20.7	324.8	6.57	100.6	3.58	7.50	
1420	9.73		100	3	20.8	341.8	6.58	101.0	3.40	4.01	
1425	9.73		100	3.5	20.7	342.6	6.57	102.1	3.43	3.71	
1430	9.73		100	4	20.8	342.5	6.57	102.4	3.38	3.26	
1435	9.73		100	4.5	20.8	342.6	6.57	1030	3.40	2.19	
1440	9.73	350	100	5	20.7	342.4	6.57	102.9	3.40	1.88	SAMPLE

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?
Waste Container ID 759269

Additional Comments YSI # 10E100237

Field Personnel ~~Nate Emmons~~ Rich D'Amico Keith Volkers Heather Gwinn Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 10 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 9/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 15:06
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number _____ Sample Number(s) 1152117 1152117ut

Initial Field Data and Measurements

Depth of Well 13.73' Reference Used TOC
Depth to Water 10.35' PID/FID Reading —
Height of Column 3.38' Interface Yes / No If yes, Depth _____ Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector Road Box / Stickup
Ground to Reference TOC
Comments —

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	—	
Other (describe)	—	

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1420	10.35	350	120	0.0	— START PURGING —						
1440	10.40		120	2.4	22.1	439.5	6.46	106.4	0.59	1.79	
1450	10.34		120	3.6	22.1	428.3	6.45	109.8	0.47	1.16	
1500	10.35		120	4.8	22.2	434.3	6.45	113.0	0.52	1.11	
1505	10.35	350	120	5.4	22.0	434.4	6.46	114.8	0.50	1.28	
									SAMPLED		

H/G

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?
Waste Container ID 759269

Additional Comments

Field Personnel ~~Nate Emmons~~ R. DAMICO H. GRIMM K. VOLKERT

Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 10 of 17
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 9/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 15:15
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-07 Sample Number(s) 1152115 1152115-F

Initial Field Data and Measurements

Depth of Well 14.25' Reference Used TOC
Depth to Water 10.55' PID/FID Reading 0.0
Height of Column 3.70' Interface N/A ~~Yes / No~~ ~~If yes, Depth~~ Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector Road Box / Stickup
Ground to Reference 0
Comments

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	✓	
Other (describe)		

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1430	10.55	350	100	0							Initial
1435	10.57	↓	↓	↓	21.6	671	6.48	-47.8	1.52	11.6	↓
1445	10.59	↓	↓	↓	21.4	538	6.46	-15.8	1.21	5.1	↓
1455	↓	↓	↓	↓	21.4	461	6.47	-08.2	1.02	3.8	↓
1505	↓	↓	↓	↓	21.3	431.8	6.47	-1.2	0.91	2.1	↓
1510	↓	↓	↓	↓	21.3	429.4	6.47	1.6	0.92	1.8	↓
1515	↓	↓	↓	4.5L	21.3	428.4	6.47	1.8	0.92	2.3	Sample

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes; with what? DI, Methanol
Waste Container ID 759269

Additional Comments

Field Personnel ~~Nate Emmons~~ Rich D. Heather G. Keith V. *Signature*

United Technologies/Pratt & Whitney
2010 Post-Remediation Maintenance and Monitoring Program
F&H Buildings

Weather Conditions: Cloudy
Inspection Date: 9/9/10
Inspection Time: 1430

Inspector: Keith Volkert
Reviewed By: Robin McKinney

INSPECTION POINT	DESCRIPTION	GOOD	FAIR	POOR
1) Signs of erosion over engineered control	Check for gullies.	✓		
2) Signs of settling over engineered control	Look for ponding and for settling of pavement of more than 0.5 inches over a 5 square foot area.	✓		
3) Signs of ponding over engineered control	Look for areas of more than 5 square feet of standing water.	✓		
4) Signs of pavement damage over engineered control and pavement used to render soil inaccessible	Look for areas of spider cracking, spalling and loss of binder.	~~✓~~	✓	
5) Permanent Survey Markers	Look for damaged or missing markers.	✓		
6) Monitoring well network	Check concrete collar protective casing, locks, legible well identification.	✓		
	1.Condition of lock	✓		
	2.Visible ID of wells			✓
	3.Ponding or infiltration of surface water	✓		
	4.Condition of concrete collar	✓		
	5.Condition of steel casing	✓		

Report all deficiencies to the designated representative of United Technologies Corporation/Pratt & Whitney
List all deficiencies, the corrective measures taken, and the date corrective measures were completed:

1) Multiple Cracks running North to South with little growth No soil exposure - in paved

Corrective Action: area west of engineered control.

2) Continue to check pavement, and consider repair if cracks worsen and expose underlying soil.

Corrective Action:

3)

Corrective Action:

4)

Corrective Action:

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Robin Pelkey (UFA)
ADDRESS: 100 Northwest Drive
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO:
PHONE #:

FACILITY INFORMATION

PROJECT NAME: UTC FRH Bldg 2010 Redevelopment
LOCATION: Rt 5 Farmington CT
PROJECT NO.: 88UT045.001
FAX #:

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	NaS2O3	VOC's 8260B	CT ETPH	PCB's 8082	LCP 8 + CT							LAB USE ONLY
	115ZU2	9/9/10	1030	CSO	GW	6	X				X	X	X	X	X								
	115ZU2F		↓			1			X							X							
	115ZU3		1145			6	X				X	X	X	X	X								
	115ZU3F		↓			1			X							X							
	115ZU4		1400			6	X				X	X	X	X	X								
	115ZU4F		↓			1			X							X							
	115ZU1		1145			6	X				X	X	X	X	X								
	115ZU1F		↓			1			X							X							
	115ZU5		1515			6	X				X	X	X	X	X								
	115ZU5F		↓			1			X							X							

DATA TURNAROUND INFORMATION

- ☐ 14 DAYS STANDARD
- ☐ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

Provide CT LCP modified VOCs for VOCs + PCBs + provide CT LCP report w/ ref. # KBL 17010-377

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	9/9/10 1530	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Laurino Engineering Assoc.
ADDRESS: 100 Northwest Dr
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Robin McKinney
PHONE #: 860.747.6181

FACILITY INFORMATION

PROJECT NAME: UTC GH Bldg 2010 GW
LOCATION: East Hartford CT
PROJECT NO.: 88UT.045
FAX #: 860.747.8822

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	VOC 8260	CT ETPH	PCB	RCRA8 CULI Zn	LAB USE ONLY
	1152116	9/9/10	1440	IW	GW	6					4	x	x	x		
	1152116vf		1440	IW	GW	1			1						x	
	1152117		1506	HG	↓	6	X				X	X	X	X		
	1152117vf		1506	↓	↓	1			X						X	

DATA TURNAROUND INFORMATION

- ☐ 14 DAYS STANDARD
- ☐ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER _____

APPROVED BY: _____

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY) _____

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	9/9/10	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE _____ C

DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No.	**88UT045.001**	Page 1 of 12	
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 12/9/10	
Location	P&W East Hartford, East Hartford, CT		
Client	Pratt & Whitney East Hartford-JT		

Arrived at Site 0710 Departed from Site 1700 Vehicle GMC Van (ST-14) / Personal

Odometer (Start)Return ~160 Miles RT

Site Activities

- [ ] Soil Sampling
- [x] Groundwater Sampling
- [ ] Surface Water Sampling
- [ ] Vapor/Air Sampling
- [ ] Concrete Sampling
- [ ] Other Sampling
- [ ] Other Sampling
- [ ] Well Development
- [ ] Geoprobe Work
- [ ] Concrete Coring
- [ ] Construction
- [ ] Waste Management
- [ ]
- [x] Inspection
- [ ] Site Walk Over
- [ ] Surveying
- [ ] Other (Describe)

Current Project Information

Last Sample Number Used	H59181
Last Location ID Used	—
Current Location (if not complete)	—
Sampling for	VOCs, PCB, ETPH, metals
Laboratories used	Accutest
Paperwork & Equipment left at/in	Office
Site Contact	Paul Iwasaki
Contractors on Site	LEA
Time and place to meet contractors	—

Non-productive Time

- [ ] None
- [x] Equipment Breakdown — pump not working correctly
- [ ] Late
- [ ] Weather
- [ ] Missing Equipment
- [ ] Other (Describe)

Quality Assurance Checks

Yes	N/A	No	
X			Sample labels complete
X			Sample/cooler seals OK
X			All samples obtained
X			Chains of custody
X			All forms/logs complete
X			Site condition OK
X			Site H&S Plan on site
X			Instruments calibrated

Residuals Disposition

Item	Approx. Amount	Container ID
Soil/Solid		
Groundwater	~15 gallons	759269
Decon Fluid		
PPE		
Other		

Weather Conditions

Temperature 20s Precipitation None Wind Yes - 20mph?

Comments

Checked By Robin McKinney

Expendable Items Used

Qty	Item	LEA Number
	Bailer, Disposable (specify size)	090
	Drum, Closed Top 55 Gallon	086
	Filter, In Line	024
1	Miscellaneous Health & Safety Items	060
~120'	Tubing, 1/4", NOS	007
27'	Tubing, 3/8", NOS poly (soft)	008
1	Water, Distilled	025

Equipment Used

Qty	Item	LEA Number
	Generator 3500 Watt	153
	Meter, Conductivity	022
	Meter, pH/Temp	021
	Miscellaneous Small Tools & Equipment	152
	Pump, Grundfos	073
3	Pump, Peristaltic (spec. Master or Isco)	040
	Pump, Submersible	201
	Pump, Watera	038
2	Turbidimeter	023
	VOC Analyzer, Photovac 2020 (PID)	012
2	Water Level Indicator	028
2	Water Quality Meter w/Flow Cell	070

Field Personnel Heather Grimm, Dennis Ryder

Signature [signature]

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No.	**88UT045.001**	Page 2 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 12/9/10
Location	P&W East Hartford, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

Description of Site Activities

900 Arrive at Site
Pre-job w/ Paul - sign in at trailer at F+H Building site
Set up at wells / calibration / water levels
Pump breaks - Denny to US Environmental for another one
Finish sampling
Locked in at gate - call P+W Security to let us out
1630 Meet Benny
Waste
1700 OFFSITE

Field Personnel: Heather Grimm, Dennis Ryder

Signature: Heather Grimm

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MISCELLANEOUS SAMPLES

LEA Comm. No. **88UT045.001**
Project UTC F&H Bldgs 2010 Maintenance & GW
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney East Hartford-JT

Page 3 of 12
Date 12/9/10

Sample ID	Location ID	Time	Sample Type	Depth (ft)	PID/FID Reading	Comments	Waste Cont. ID
1159181	Trip Blank	900	BKT	—	—	—	—
1159180	Equipment Blank	1200	BKE	—	—	—	—
1159179	AB-MW-06	1235	DUP	—	—	—	759269

HG

Field Personnel Heather Grimm
Dennis Ryder

Signature Heather Grimm

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT
CALIBRATION RECORD

LEA Comm. No.	**88UT045.001**	Page 8 of 12	
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 12/9/10	
Location	P&W East Hartford, East Hartford, CT		
Client	Pratt & Whitney East Hartford-JT		

pH Meter/Serial # 010036AB

	Time	pH 4.01	pH 7.00	pH 10.01	Spec. Cond.	ORP	DO
Initial Calibration			7.00/7.00		1000/1000	100/100.1	99.9/99.8
Calibration Check							
Calibration Check							

Turbidity Meter/Serial # 2522

	Time	<20 NTU	20 NTU	100 NTU	800 NTU
Initial Calibration		.20/.16	20/20		
Calibration Check					
Calibration Check					

PID Meter/Serial #

	Time	Standard	Meter Reading	Zero with
Initial Calibration				
Calibration Check				
Calibration Check				

Balance/Serial #

	Time	Standard	Balance
Initial Calibration			
Calibration Check			
Calibration Check			

Comments

Field Personnel: Heather Grimm, Dennis Ryder

Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
PERFORMANCE SAMPLE

LEA Comm. No.	**88UT045.001**	Page 5 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 12/9/10
Location	P&W East Hartford, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

LEA Sample ID: VOCs 1305 1159178

ERA A Waters Company — USA 800-372-0122 EUROPE 44 (0) 161 946 2777
Loureiro Engineering
Volatiles
Preserved w/ HCl
Sample ID # 1130-10-04.3

LEA Sample ID: PCBs 1305 1159178

ERA A Waters Company — USA 800-372-0122 EUROPE 44 (0) 161 946 2777
Loureiro Engineering
PCB's
Unpreserved
Sample ID # 1130-10-04.1

LEA Sample ID: Metals (vf) 1305 1159178

ERA A Waters Company — USA 800-372-0122 EUROPE 44 (0) 161 946 2777
Loureiro Engineering
Metals
Preserved w/ HNO3
Sample ID # 1130-10-04.4

LEA Sample ID: TPH 1410 1159792

ERA A Waters Company — USA 800-372-0122 EUROPE 44 (0) 161 946 2777
Loureiro Engineering
DRO
Unpreserved
Sample ID # 1130-10-04.2

LEA Sample ID:

LEA Sample ID:

HG

Field Personnel	Heather Grimm Dennis Ryder	*Signature* Heather Grimm

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MONITORING WELL INVENTORY

LEA Comm. No. **88UT045.001**
Project UTC F&H Bldgs 2010 Maintenance & GW
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney East Hartford-JT

Page 6 of 12
Date 12/9/10

Sample ID	Location ID	Time	~~Predicted~~ Actual Depth of Well	~~Predicted~~ Actual Depth to Water	Actual Depth of Well	Actual Depth to Water	PID/FID	Reference Elevation	Comments
2236162	FB-MW-01	1015	13.90	10.60			0.0		
2236163	FB-MW-02	1140	13.45	9.91			0.1		
2236164	HB-MW-04	1135	13.38	9.50			0.0		
2236165	HB-MW-05	1130	14.60	~~14.07~~ 11.16			0.0		
2236166	HB-MW-06	1150	13.68	9.94			0.0		
2236167	HB-MW-07	1100	14.29	10.79			0.0		
2236168									

Field Personnel Heather Grimm
Dennis Ryder

Signature Heather Grimm

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 7 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 12/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 12:00
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-07 Sample Number(s) 1159172 1159172vf

Initial Field Data and Measurements

Depth of Well 14.29 Reference Used Top of PVC Riser
Depth to Water 10.79 PID/FID Reading NM
Height of Column 3.50 Interface Yes / No If yes, Depth — Lighter / Heavier

Well Casing Diameter 2" Material PVC
Protector Road Box / Stickup
Ground to Reference
Comments

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	✓	
Other (describe)		

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
11:00	10.79	300	100	0	INITIAL						
11:10	10.79	300	100		15.45	549	7.75	140.1	11.93	5.46	
11:20	10.80	300	100		15.15	591	6.91	141.3	6.91	5.11	
11:30	10.83	300	100		15.14	670	6.80	144.3	6.45	4.25	
11:40	10.83	300	100		15.13	679	6.75	144.8	5.38	3.13	
11:50	10.87	300	100		15.13	680	6.75	145.1	5.57	2.06	
12:00	10.83	300	100	6.0	15.13	683	6.76	145.3	5.41	2.22	SAMPLE

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?
Waste Container ID 759269

Additional Comments

Field Personnel Heather Grimm
Dennis Ryder

Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 8 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 12/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 14:10
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-05 Sample Number(s) 1159173 1159173-F

Initial Field Data and Measurements

Depth of Well 14.61 Reference Used Top of Riser
Depth to Water 11.23 PID/FID Reading NM
Height of Column 3.38 Interface Yes / No If yes, Depth _____ Lighter / Heavier

Well Casing Diameter 2" Material PVC
Protector (Road Box) / Stickup
Ground to Reference _____
Comments (2)

General Condition	OK	Bad
Casing Secure	X	
Collar Intact	X	
Cover Locked	X	
Other (describe)	—	(2)

Development Information

Time \ Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
12:30	11.23	300	100	0	Initial						
12:40	11.30	300	100		17.25	1116	6.19	169.5	8.81	36.5	
12:50	11.33	300	100		17.28	1087	6.25	183.1	8.36	18.3	
13:00	11.35	300	100		17.29	984	6.27	180.3	8.29	9.65	
13:10	11.35	300	100		17.28	971	6.27	189.1	8.29	9.45	
13:20	11.35	300	100	(2)	17.28	976	6.28	191.4	8.30	11.5	(2)
13:30	11.35	300	100		17.28	964	6.27	185.3	8.26	8.32	
13:40	11.35	300	100		17.27	960	6.27	180.2	8.23	5.17	
13:50	11.35	300	100		17.28	953	6.27	170.9	8.23	4.38	
(2) ~~13:00~~ 14:00	11.35	300	100		17.28	950	6.27	173.6	8.22	3.26	
14:10	11.35	300	100	10.0	17.28	950	6.27	177.4	8.22	2.91	SAMPLE

(2)

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other _____

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / ~~No~~ If Yes, with what? (2)
Waste Container ID 759269

Additional Comments

Field Personnel Heather Grimm
Dennis Ryder

Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 9 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 12/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 15:30
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-04 Sample Number(s) 1159174 1159174cf

Initial Field Data and Measurements

Depth of Well 13.34 Reference Used Top of Riser
Depth to Water 9.41 PID/FID Reading 2m
Height of Column 3.93 Interface Yes / (No) If yes, Depth — Lighter / Heavier

Well Casing Diameter 2" Material — General Condition

Protector (Road Box) / Stickup
Ground to Reference —
Comments —

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	✓	
Other (describe)	—	

Development Information

Time \ Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
14:30	9.41	300	100	0	Initial						
14:40	9.42	300	100		13.53	327	7.18	103.5	2.25	3.36	
14:50	9.48	300	100		13.89	330	7.26	99.6	2.08	6.21	
15:00	9.48	300	100		13.96	331	7.27	97.5	1.99	4.91	
15:10	9.48	300	100		13.96	331	7.27	95.4	1.82	5.31	
15:20	9.48	300	100		13.96	333	7.27	92.4	1.78	3.08	
15:30	9.48	300	100	6.0	13.96	336	7.27	89.3	1.71	2.16	SAMPLE

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other —

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / (No) If Yes, with what? —
Waste Container ID 759269

Additional Comments

Field Personnel Heather Grimm
Dennis Ryder

Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 10 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 12/9/2010
Location	P&W East Hartford, East Hartford, CT	Sample Time 11:12
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number FB-MW-01 Sample Number(s) 1159175 1159175uf

Initial Field Data and Measurements

Depth of Well 13.90' Reference Used TOC
Depth to Water 10.60' PID/FID Reading
Height of Column 3.30' Interface Yes / No If yes, Depth Lighter / Heavier

Well Casing Diameter 1.8" Material PVC
Protector Road Box / Stickup
Ground to Reference TOC
Comments —

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	—	
Other (describe)	—	

Development Information

Time \ Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1015	10.60	350	100	0.0	START PURGING						
1035	10.66			2.0	13.98	311	6.06	140.6	10.03	4.45	
1045	10.66			3.0	13.35	322	5.78	127.0	11.23	3.23	
1055	10.66			4.6	12.83	317	5.64	117.0	10.70	1.91	
~~1105~~ 1100	10.66			4.5	12.96	315	5.64	111.4	10.37	2.07	
1105	10.66			5.0	13.00	319	5.59	107.1	10.26	2.31	
1110	10.66		100	5.5	13.14	320	5.58	104.1	10.10	3.55	
									SAMPLED		

HG

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what? DI/MeOH wipe
Waste Container ID 759269

Additional Comments

Field Personnel Heather Grimm
Dennis Ryder

Signature Heather Grimm

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 11 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 12/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 12:35
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number HB-MW-06 Sample Number(s) 1159176 1159176uf 1159179 1159179uf

Initial Field Data and Measurements

Depth of Well 13.68' Reference Used TOC
Depth to Water 9.94' PID/FID Reading 0.0
Height of Column 3.74' Interface Yes / No If yes, Depth _____ Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector Road Box / Stickup
Ground to Reference TOC
Comments —

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	—	
Other (describe)		

Development Information

Parameter / Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1200	9.94	350	150	0.0			START PURGING				
1215	9.94		100	1.5	14.28	312	5.31	110.1	14.54	3.28	
1225	9.94		100	2.5	14.36	317	5.28	112.3	11.67	2.57	
1230	9.94		100	3.0	14.26	317	5.29	112.0	11.70	2.23	
1235	9.94	350	100	3.3	14.14	314	5.29	111.9	10.79	1.62	
										SAMPLED	

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what? DI/MeOH Wipe
Waste Container ID 759269

Additional Comments

Field Personnel Heather Grimm
Dennis Ryder

Signature Heather Grimm

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	**88UT045.001**	Page 12 of 12
Project	UTC F&H Bldgs 2010 Maintenance & GW	Date 12/9/10
Location	P&W East Hartford, East Hartford, CT	Sample Time 14:50
Client	Pratt & Whitney East Hartford-JT	

Monitoring Well Number FB-MW-02 Sample Number(s) 1159177 1159177ut

Initial Field Data and Measurements

Depth of Well 13.45' Reference Used TOC
Depth to Water 9.91' PID/FID Reading 0.1
Height of Column 3.64' Interface Yes / (No) If yes, Depth _____ Lighter / Heavier

Well Casing Diameter 1.5" Material PVC
Protector Road Box / Stickup
Ground to Reference TOC
Comments

General Condition	OK	Bad
Casing Secure	✓	
Collar Intact	✓	
Cover Locked	—	
Other (describe)	—	

Development Information

Time \ Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1410 ~~1340~~	9.91	350	200	0.0		START	PURGING				
1420	9.94	↓	↓	2.0	13.82	193	5.78	98.8	11.57	4.20	
1430	9.90			4.0	13.98	191	5.79	96.9	12.64	5.21	
1440	9.92			6.0	13.97	189	5.80	98.6	12.27	5.72	
1445	9.92			7.0	13.89	195	5.80	99.4	12.17	6.08	
1448	9.92		200	7.6	14.0	189	5.81	95.2	12.05	4.89	
										SAMPLED	

HG

Developement Method Peristaltic Pump / Bailer / Inertial Pump / Other _____

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what? DI/Meth wipe
Waste Container ID DI/Meth wipe 759269
HG

Additional Comments

Field Personnel Heather Grimm
Dennis Ryder

Signature

ACCUTEST Laboratories

1 of 3

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #: KB6/2010-377

CLIENT INFORMATION

NAME: Louteiro Engineering Associates
ADDRESS: 100 Northwest Dr.
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Robin McKinney
PHONE #: 860-410-3000

FACILITY INFORMATION

PROJECT NAME: F+H Bldgs. 2010 Maintenance + GW
LOCATION: P+W East Hartford
PROJECT NO.: 8 8UT045
FAX #:

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	VOCs 8260B	CT ETPH	PCBs 8082	Total RCRA Metals (Cu, Ni, Zn)	LAB USE ONLY
	1159172	12/9/10	1200	DR	GW	3	X					X	X				
	1159172		1200	DR		4						X		X	X		
	1159172ul		1200	DR		1			X			X				X	
	1159173		1410	DR		3	X					X	X				
	1159173		1410	DR		4						X		X	X		
	1159173ul		1410	DR		1			X			X				X	
	1159174		1530	DR		3	X					X	X				
	1159174		1530	DR		4						X		X	X		
	1159174ul		1530	DR		1			X			X				X	
	1159175		11:12	HG		3	X					X	X				
	1159175	12/9/10	11:12	HG	GW	4						X		X	X		

DATA TURNAROUND INFORMATION

- [x] 14 DAYS STANDARD — APPROVED BY:
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

Provide CT RCP analytical lists for VOCs + PCBs + provide CT RCP report

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12/9/10 1630	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

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2 of 3

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #: KB6/2010-377

CLIENT INFORMATION

NAME: Lourenio Engineering Associates
ADDRESS: 100 Northwest Dr. Plainville, CT
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Robin McKinney
PHONE #: 860-410-3200

FACILITY INFORMATION

PROJECT NAME: F+H Bldgs.
LOCATION: P+W, East Hartford 8 Ruth St
PROJECT NO.:
FAX #:

ANALYTICAL INFORMATION

VOC, PCB, CT ETPH, Total RCRA 8 metals, Cu, Al, Zn

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	Ice	VOC	PCB	CT ETPH	Total RCRA 8 metals, Cu, Al, Zn								LAB USE ONLY
	1159175ut	12/9/10	11:12	HG	GW	1			X			X				X								
	1159176		12:35	HG		3	X					X	X											
	1159176		12:35	HG		4						X		X	X									
	1159176ut		12:35	HG		1			X			X				X								
	1159177		1450	HG		3	X					X	X											
	1159177		1450	HG		4						X		X	X									
	1159177ut		1450	HG		1			X			X				X								
	1159178		1305	HG		3	X					X	X											
	1159178		1305	HG		4						X	HG	X	X									
	1159178ut		1305	HG		1			X			X				X								
	1159181	12/9/10	900	HG	GW	2	X					X	X											

DATA TURNAROUND INFORMATION

- ☐ 14 DAYS STANDARD
- ☐ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☑ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

Provide CT RCP analytical lists for VOCs + PCBs + Provide CT RCP report

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12/9/10 1630	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

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3 of 3

CHAIN OF CUSTODY

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NAME: Louteiro Engineering Associates
ADDRESS: 100 Northwest Dr.
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Robin McKinney
PHONE #: 800-410-3000

FACILITY INFORMATION

PROJECT NAME: F+H Bldgs
LOCATION: P+W CH
PROJECT NO.: 88U.045
FAX #:

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	Ice	VOCs 8260B	CT ETPH	PCBs 8082	Tot. RCRA 8 + Cu, Ni, Zn							LAB USE ONLY
	1159180	12/9/10	1200	HG	GW	3	X	X				X	X										
	1159180		1200			4	4	(X)				X		X	X								
	1159180uf		1200			1	1					X				X							
	1159179		1235			3	X					X	X										
	1159179		1235			4						X		X	X								
	1159179uf	12/9/10	1235	HG	GW	1			X			X				X							
	1159792	12/9/10	1410	HG	GW	2						X		X									

DATA TURNAROUND INFORMATION

- ☑ 14 DAYS STANDARD — APPROVED BY:
- ☐ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☑ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

Provide CT RCP analytical for VOCs + PCBs + provide RCP report

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. 1650	10/9/10	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

Appendix B

Copies of Laboratory Reports
(provided on CD ROM)

New England ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

03/18/10

Technical Report for

Loureiro Eng. Associates

UTC:F&H Post Remediation GW Monitoring

88UT908

Accutest Job Number: M89656

Sampling Date: 03/04/10

Report to:

LEA

nsemmons@loureiro.com

ATTN: Nate Emmons

Total number of pages in report: **103**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Tand
Lab Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (002) ND (R-188) CO MN (11546AA) NC (653) IL (002337) DoD/ISO/IEC 17025:2005 (L2235)

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Accutest Laboratories

Sample Summary

Loureiro Eng. Associates

Job No: M89656

UTC:F&H Post Remediation GW Monitoring
Project No: 88UT908

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M89656-1	03/04/10	10:10	RJZ	03/04/10	AQ	Ground Water	1139117
M89656-2	03/04/10	10:10	RJZ	03/04/10	AQ	Ground Water	1139117UF
M89656-3	03/04/10	11:50	RJZ	03/04/10	AQ	Ground Water	1139118
M89656-4	03/04/10	11:50	RJZ	03/04/10	AQ	Ground Water	1139118UF
M89656-5	03/04/10	13:30	RJZ	03/04/10	AQ	Ground Water	1139119
M89656-6	03/04/10	13:30	RJZ	03/04/10	AQ	Ground Water	1139119UF
M89656-7	03/04/10	10:30	RJZ	03/04/10	AQ	Ground Water	1139120
M89656-8	03/04/10	10:30	RJZ	03/04/10	AQ	Ground Water	1139120UF
M89656-9	03/04/10	12:20	RJZ	03/04/10	AQ	Ground Water	1139121
M89656-10	03/04/10	12:20	RJZ	03/04/10	AQ	Ground Water	1139121UF
M89656-11	03/04/10	14:15	RJZ	03/04/10	AQ	Ground Water	1139122
M89656-12	03/04/10	14:15	RJZ	03/04/10	AQ	Ground Water	1139122UF
M89656-13	03/04/10	10:30	RJZ	03/04/10	AQ	Ground Water	1139123

Accutest Laboratories

Sample Summary
(continued)

Loureiro Eng. Associates

Job No: M89656

UTC:F&H Post Remediation GW Monitoring
Project No: 88UT908

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M89656-14	03/04/10	10:30	RJZ	03/04/10	AQ	Ground Water	1139123UF
M89656-15	03/04/10	10:00	RJZ	03/04/10	AQ	Ground Water	1139124
M89656-16	03/04/10	14:15	RJZ	03/04/10	AQ	Ground Water	1139125
M89656-17	03/04/10	14:15	RJZ	03/04/10	AQ	Ground Water	1139125UF

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Loureiro Eng. Associates	**Job No**	M89656
Site:	UTC:F&H Post Remediation GW Monitoring	**Report Date**	3/18/2010 1:16:21 PM

17 Sample(s) were collected on 03/04/2010 and were received at Accutest on 03/04/2010 properly preserved, at 0.9 Deg. C and intact. These Samples received an Accutest job number of M89656. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** MSE1856

- All samples were analyzed within the recommended method holding time.
- Sample(s) M89656-1MS, M89656-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 2-Butanone (MEK), 2-Hexanone, Acetone, Isopropylbenzene are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for Trans-1,4-Dichloro-2-Butene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 2,2-Dichloropropane are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- M89656-1MS/MSD for Isopropylbenzene: Outside control limits. Blank Spike meets program technical requirements.
- Initial calibration verification standard MSE1853-ICC1853 for acetone, 2-butanone, 1,2,3-trichlorobenzene, naphthalene is employed quadratic regression.
- BSD Recovery(s) for 2-Hexanone, Acetone, Isopropylbenzene are outside control limits. Blank Spike meets program technical requirements.
- Continuing calibration check standard for acetone, 2-butanone, toluene-d8, 2-hexanone, bromofluorobenzene exceed 30% Difference. This check standard met RCP criteria.

Extractables by GC By Method CT-ETPH 7/06

Matrix AQ **Batch ID:** OP20802

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M89685-9MS, M89685-9MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8082

Matrix AQ **Batch ID:** OP20826

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M89749-5MS, M89749-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010B

Matrix AQ	**Batch ID:** MP14889

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M89610-16DUP, M89610-16MS, M89610-16SDL, M89610-16DUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Chromium, Silver are outside control limits for sample MP14889-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Chromium, Copper, Zinc are outside control limits for sample MP14889-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ	**Batch ID:** MP14894

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M89593-2DUP, M89593-2MS were used as the QC samples for metals.

Matrix AQ	**Batch ID:** MP14908

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M89656-10DUP, M89656-10MS were used as the QC samples for metals.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M89656).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1139117		
Lab Sample ID:	M89656-1	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E43133.D	1	03/05/10	SC	n/a	n/a	MSE1856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139117		
Lab Sample ID:	M89656-1	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	36.6	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139117		
Lab Sample ID:	M89656-1	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	109%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139117		
Lab Sample ID:	M89656-1	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PO62840.D	1	03/16/10	WZ	03/06/10	OP20802	GPO3585
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.147	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	81%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139117		
Lab Sample ID:	M89656-1	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF74091.D	1	03/13/10	SL	03/10/10	OP20826	GEF3380
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		30-150%
877-09-8	Tetrachloro-m-xylene	99%		30-150%
2051-24-3	Decachlorobiphenyl	88%		30-150%
2051-24-3	Decachlorobiphenyl	87%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139117UF		
Lab Sample ID:	M89656-2	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
		Percent Solids:	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Barium	< 200	200	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	03/09/10	03/09/10	MA	SW846 7470A [2]	SW846 7471A [4]
Nickel	< 40	40	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA11524
(2) Instrument QC Batch: MA11527
(3) Prep QC Batch: MP14889
(4) Prep QC Batch: MP14894

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1139118		
Lab Sample ID:	M89656-3	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E43137.D	1	03/05/10	SC	n/a	n/a	MSE1856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139118		
Lab Sample ID:	M89656-3	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	16.1	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	3.3	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.3	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139118		
Lab Sample ID:	M89656-3	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139118		
Lab Sample ID:	M89656-3	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PO62844.D	1	03/16/10	WZ	03/06/10	OP20802	GPO3585
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.279	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	89%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139118		
Lab Sample ID:	M89656-3	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF74092.D	1	03/13/10	SL	03/10/10	OP20826	GEF3380
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		30-150%
877-09-8	Tetrachloro-m-xylene	94%		30-150%
2051-24-3	Decachlorobiphenyl	75%		30-150%
2051-24-3	Decachlorobiphenyl	77%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139118UF		
Lab Sample ID:	M89656-4	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
		Percent Solids:	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Barium	< 200	200	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	03/09/10	03/09/10	MA	SW846 7470A [2]	SW846 7471A [4]
Nickel	< 40	40	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA11524
(2) Instrument QC Batch: MA11527
(3) Prep QC Batch: MP14889
(4) Prep QC Batch: MP14894

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1139119		
Lab Sample ID:	M89656-5	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E43138.D	1	03/05/10	SC	n/a	n/a	MSE1856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139119		
Lab Sample ID:	M89656-5	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139119		
Lab Sample ID:	M89656-5	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139119		
Lab Sample ID:	M89656-5	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PO62846.D	1	03/16/10	WZ	03/06/10	OP20802	GPO3585
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	78%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139119		
Lab Sample ID:	M89656-5	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF74094.D	1	03/14/10	SL	03/10/10	OP20826	GEF3380
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		30-150%
877-09-8	Tetrachloro-m-xylene	96%		30-150%
2051-24-3	Decachlorobiphenyl	71%		30-150%
2051-24-3	Decachlorobiphenyl	69%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139119UF		
Lab Sample ID:	M89656-6	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
		Percent Solids:	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Barium	< 200	200	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	03/09/10	03/09/10	MA	SW846 7470A [2]	SW846 7471A [4]
Nickel	< 40	40	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA11524
(2) Instrument QC Batch: MA11527
(3) Prep QC Batch: MP14889
(4) Prep QC Batch: MP14894

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1139120		
Lab Sample ID:	M89656-7	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E43139.D	1	03/05/10	SC	n/a	n/a	MSE1856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139120		
Lab Sample ID:	M89656-7	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139120		
Lab Sample ID:	M89656-7	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	96%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139120		
Lab Sample ID:	M89656-7	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PO62848.D	1	03/16/10	WZ	03/06/10	OP20802	GPO3585
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.363	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	83%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139120		
Lab Sample ID:	M89656-7	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF74095.D	1	03/14/10	SL	03/10/10	OP20826	GEF3380
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-150%
877-09-8	Tetrachloro-m-xylene	96%		30-150%
2051-24-3	Decachlorobiphenyl	75%		30-150%
2051-24-3	Decachlorobiphenyl	80%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139120UF		
Lab Sample ID:	M89656-8	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
		Percent Solids:	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Barium	< 200	200	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	03/09/10	03/09/10	MA	SW846 7470A [2]	SW846 7471A [4]
Nickel	< 40	40	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA11524
(2) Instrument QC Batch: MA11527
(3) Prep QC Batch: MP14889
(4) Prep QC Batch: MP14894

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1139121		
Lab Sample ID:	M89656-9	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E43140.D	1	03/05/10	SC	n/a	n/a	MSE1856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139121		
Lab Sample ID:	M89656-9	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	2.4	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	1.8	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139121		
Lab Sample ID:	M89656-9	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	96%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139121		
Lab Sample ID:	M89656-9	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PO62850.D	1	03/16/10	WZ	03/06/10	OP20802	GPO3585
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	86%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139121		
Lab Sample ID:	M89656-9	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF74096.D	1	03/14/10	SL	03/10/10	OP20826	GEF3380
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	97%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139121UF		
Lab Sample ID:	M89656-10	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
		Percent Solids:	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Barium	< 200	200	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	03/11/10	03/11/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA11524
(2) Instrument QC Batch: MA11534
(3) Prep QC Batch: MP14889
(4) Prep QC Batch: MP14908

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1139122		
Lab Sample ID:	M89656-11	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E43141.D	1	03/05/10	SC	n/a	n/a	MSE1856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139122		
Lab Sample ID:	M89656-11	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139122		
Lab Sample ID:	M89656-11	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139122		
Lab Sample ID:	M89656-11	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PO62851.D	1	03/16/10	WZ	03/06/10	OP20802	GPO3585
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	98%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139122		
Lab Sample ID:	M89656-11	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF74097.D	1	03/14/10	SL	03/10/10	OP20826	GEF3380
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	95%		30-150%
2051-24-3	Decachlorobiphenyl	86%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139122UF		
Lab Sample ID:	M89656-12	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
		Percent Solids:	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Barium	< 200	200	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Chromium	27.3	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	03/11/10	03/11/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA11524
(2) Instrument QC Batch: MA11534
(3) Prep QC Batch: MP14889
(4) Prep QC Batch: MP14908

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1139123		
Lab Sample ID:	M89656-13	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E43142.D	1	03/05/10	SC	n/a	n/a	MSE1856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139123		
Lab Sample ID:	M89656-13	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	1.1	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139123		
Lab Sample ID:	M89656-13	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139123		
Lab Sample ID:	M89656-13	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PO62852.D	1	03/16/10	WZ	03/06/10	OP20802	GPO3585
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.265	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	88%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139123		
Lab Sample ID:	M89656-13	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF74098.D	1	03/14/10	SL	03/10/10	OP20826	GEF3380
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		30-150%
877-09-8	Tetrachloro-m-xylene	86%		30-150%
2051-24-3	Decachlorobiphenyl	68%		30-150%
2051-24-3	Decachlorobiphenyl	74%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139123UF		
Lab Sample ID:	M89656-14	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
		Percent Solids:	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Barium	< 200	200	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	03/11/10	03/11/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA11524
(2) Instrument QC Batch: MA11534
(3) Prep QC Batch: MP14889
(4) Prep QC Batch: MP14908

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1139124		
Lab Sample ID:	M89656-15	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E43132.D	1	03/05/10	SC	n/a	n/a	MSE1856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139124		
Lab Sample ID:	M89656-15	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139124		
Lab Sample ID:	M89656-15	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	110%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139125		
Lab Sample ID:	M89656-16	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E43143.D	1	03/05/10	SC	n/a	n/a	MSE1856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139125		
Lab Sample ID:	M89656-16	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139125		
Lab Sample ID:	M89656-16	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	95%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139125		
Lab Sample ID:	M89656-16	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PO62853.D	1	03/17/10	WZ	03/06/10	OP20802	GPO3585
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	100%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139125		
Lab Sample ID:	M89656-16	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF74099.D	1	03/14/10	SL	03/10/10	OP20826	GEF3380
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		30-150%
877-09-8	Tetrachloro-m-xylene	99%		30-150%
2051-24-3	Decachlorobiphenyl	58%		30-150%
2051-24-3	Decachlorobiphenyl	55%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1139125UF		
Lab Sample ID:	M89656-17	**Date Sampled:**	03/04/10
Matrix:	AQ - Ground Water	**Date Received:**	03/04/10
		Percent Solids:	n/a
Project:	UTC:F&H Post Remediation GW Monitoring		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Barium	< 200	200	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	03/11/10	03/11/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	03/05/10	03/08/10	DA	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA11524
(2) Instrument QC Batch: MA11534
(3) Prep QC Batch: MP14889
(4) Prep QC Batch: MP14908

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	**SW846 8082**	AQ	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	**SW846 8082**	AQ	Certified by SOP MGC204/GC-ECD

ACCUTEST Laboratories

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CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M88656
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Loureiro Engineering Assoc.
ADDRESS: 100 Northwest Drive
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Nate Emmons
PHONE #: 860-747-6181

FACILITY INFORMATION

PROJECT NAME: UTC PtW FtH GW Monitoring 2010
LOCATION: PtW East Hartford CT
PROJECT NO.: 88UT908
FAX #:

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	RCP VOCs 8260B	RCP PCBs 8082	CT EPH	RCRA 8 Metals + Cu, Ni, Zn	LAB USE ONLY
-1	1139117	3/4/10	10:10	RJZ	GW	6	X					X	X	X	X		
-2	1139117 of		10:10			1			X			X				X	
-3	1139118		11:50			6	X					X	X	X	X		
-4	1139118 of		11:50			1			X			X				X	
-5	1139119		13:30			6	X					X	X	X	X		
-6	1139119 of	3/4/10	13:30	RJZ		1			X			X				X	

RJZ

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

DATA TURNAROUND INFORMATION

- [x] 14 DAYS STANDARD
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

10A, 6B, 2B2

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY: SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	3/4/10 1540	1.	2.	3-4-10 18:15	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE	ON ICE / TEMPERATURE
5.		5.		☐	☐ 0.9 C

4.2 4

M89656: Chain of Custody
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ACCUTEST Laboratories

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CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M89656
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Cavero Engineering Associates
ADDRESS: 100 Northwest Drive
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Nate Emmons
PHONE #: 860-747-6181

FACILITY INFORMATION

PROJECT NAME: P&W F&H GW Monitoring
LOCATION: P&W East Hartford CT
PROJECT NO.: 88UT9108.001
FAX #:

ANALYTICAL INFORMATION

VOCs by 8260B; PCBs by 8082; CT ETPH; RCRA 8 metals + Cu, Ni, Zn

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	VOCs by 8260B	PCBs by 8082	CT ETPH	RCRA 8 metals + Cu, Ni, Zn	LAB USE ONLY
-7	1139120	3-4-10	1030	A	GW	6	2					4	X	X	X		
-8	1139120 uf		1030			1			1							X	
-9	1139121		1220			6	2					4	X	X	X		
-10	1139121 uf		1220			1			1							X	
-11	1139122		1415			6	2					4	X	X	X		
-12	1139122 uf		1415			1			1							X	
-13	1139123		1030			6	2					4	X	X	X		
-14	1139123 uf		1030			1			1							X	
-15	1139124		1000			1	1						X				
-16	1139125		1415			6	2					4	X	X	X		
-17	1139125 uf	3-4-10	1415	A	GW	1			1							X	

DATA TURNAROUND INFORMATION

- ☑ 14 DAYS STANDARD
- ☐ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	3/4/10 1540	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

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M89656: Chain of Custody
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Accutest Laboratories Sample Receipt Summary

Accutest Job Number: M89656 **Client:** LEA **Immediate Client Services Action Required:** No

Date / Time Received: 3/4/2010 6:15:00 PM **No. Coolers:** 1 **Client Service Action Required at Login:** No

Project: UTC PW EH **Airbill #'s:** N/A

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	Infared gun	
3. Cooler media:	Ice (bag)	

Quality Control Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☑	☐	
2. Trip Blank listed on COC:	☑	☐	
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume rec'd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

M89656: Chain of Custody
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Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **Accutest New England** **Client:** **Loureiro Eng. Associates**

Project Location: **UTC:F&H Post Remediation GW Monitoring** **Project Number:** **88UT908**

Sampling Date(s): **3/4/2010**

Laboratory Sample ID(s): M89656-1, M89656-2, M89656-3, M89656-4, M89656-5, M89656-6, M89656-7, M89656-8, M89656-9, M89656-10, M89656-11, M89656-12, M89656-13, M89656-14, M89656-15, M89656-16, M89656-17

Methods: CT-ETPH 7/06, SW846 6010B, SW846 7470A, SW846 8082, SW846 8260B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☐ No ☑
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☑ No ☐
	b) Were these reporting limits met?	Yes ☐ No ☑
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes ☐ No ☑
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Position: Lab Director

Printed Name: Reza Tand Date: 3/18/2010
Accutest New England

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M89656

UTC:F&H Post Remediation GW Monitoring
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M89656-1 1139117	Collected: 04-MAR-10 10:10 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-1	SW846 8260B	05-MAR-10 17:56	SC			V8260RCP
M89656-1	SW846 8082	13-MAR-10 23:13	SL	10-MAR-10	AJ	P8082RCP
M89656-1	CT-ETPH 7/06	16-MAR-10 19:11	WZ	06-MAR-10	AJ	BCTTPH
M89656-2 1139117UF	Collected: 04-MAR-10 10:10 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-2	SW846 6010B	08-MAR-10 13:12	DA	05-MAR-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M89656-2	SW846 7470A	09-MAR-10 15:34	MA	09-MAR-10	MA	HG
M89656-3 1139118	Collected: 04-MAR-10 11:50 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-3	SW846 8260B	05-MAR-10 19:50	SC			V8260RCP
M89656-3	SW846 8082	13-MAR-10 23:57	SL	10-MAR-10	AJ	P8082RCP
M89656-3	CT-ETPH 7/06	16-MAR-10 20:30	WZ	06-MAR-10	AJ	BCTTPH
M89656-4 1139118UF	Collected: 04-MAR-10 11:50 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-4	SW846 6010B	08-MAR-10 13:16	DA	05-MAR-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M89656-4	SW846 7470A	09-MAR-10 15:37	MA	09-MAR-10	MA	HG
M89656-5 1139119	Collected: 04-MAR-10 13:30 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-5	SW846 8260B	05-MAR-10 20:19	SC			V8260RCP
M89656-5	SW846 8082	14-MAR-10 01:11	SL	10-MAR-10	AJ	P8082RCP
M89656-5	CT-ETPH 7/06	16-MAR-10 21:06	WZ	06-MAR-10	AJ	BCTTPH
M89656-6 1139119UF	Collected: 04-MAR-10 13:30 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-6	SW846 6010B	08-MAR-10 13:20	DA	05-MAR-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M89656

UTC:F&H Post Remediation GW Monitoring
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M89656-6	SW846 7470A	09-MAR-10 15:39	MA	09-MAR-10	MA	HG
M89656-7 1139120	Collected: 04-MAR-10 10:30 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-7	SW846 8260B	05-MAR-10 20:48	SC			V8260RCP
M89656-7	SW846 8082	14-MAR-10 01:41	SL	10-MAR-10	AJ	P8082RCP
M89656-7	CT-ETPH 7/06	16-MAR-10 21:50	WZ	06-MAR-10	AJ	BCTTPH
M89656-8 1139120UF	Collected: 04-MAR-10 10:30 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-8	SW846 6010B	08-MAR-10 13:24	DA	05-MAR-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M89656-8	SW846 7470A	09-MAR-10 15:42	MA	09-MAR-10	MA	HG
M89656-9 1139121	Collected: 04-MAR-10 12:20 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-9	SW846 8260B	05-MAR-10 21:14	SC			V8260RCP
M89656-9	SW846 8082	14-MAR-10 02:25	SL	10-MAR-10	AJ	P8082RCP
M89656-9	CT-ETPH 7/06	16-MAR-10 22:26	WZ	06-MAR-10	AJ	BCTTPH
M89656-10 1139121UF	Collected: 04-MAR-10 12:20 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-10	SW846 6010B	08-MAR-10 13:28	DA	05-MAR-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M89656-10	SW846 7470A	11-MAR-10 18:03	MA	11-MAR-10	MA	HG
M89656-11 1139122	Collected: 04-MAR-10 14:15 By: RJZ		Received: 04-MAR-10 By: JB			
M89656-11	SW846 8260B	05-MAR-10 21:43	SC			V8260RCP
M89656-11	SW846 8082	14-MAR-10 02:55	SL	10-MAR-10	AJ	P8082RCP
M89656-11	CT-ETPH 7/06	16-MAR-10 23:02	WZ	06-MAR-10	AJ	BCTTPH
M89656-12 1139122UF	Collected: 04-MAR-10 14:15 By: RJZ		Received: 04-MAR-10 By: JB			

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M89656

UTC:F&H Post Remediation GW Monitoring
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M89656-12	SW846 6010B	08-MAR-10 13:45	DA	05-MAR-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M89656-12	SW846 7470A	11-MAR-10 18:06	MA	11-MAR-10	MA	HG
M89656-13	Collected: 04-MAR-10 10:30 By: RJZ		Received: 04-MAR-10 By: JB			
1139123						
M89656-13	SW846 8260B	05-MAR-10 22:12	SC			V8260RCP
M89656-13	SW846 8082	14-MAR-10 03:39	SL	10-MAR-10	AJ	P8082RCP
M89656-13	CT-ETPH 7/06	16-MAR-10 23:45	WZ	06-MAR-10	AJ	BCTTPH
M89656-14	Collected: 04-MAR-10 10:30 By: RJZ		Received: 04-MAR-10 By: JB			
1139123UF						
M89656-14	SW846 6010B	08-MAR-10 13:49	DA	05-MAR-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M89656-14	SW846 7470A	11-MAR-10 18:08	MA	11-MAR-10	MA	HG
M89656-15	Collected: 04-MAR-10 10:00 By: RJZ		Received: 04-MAR-10 By: JB			
1139124						
M89656-15	SW846 8260B	05-MAR-10 17:27	SC			V8260RCP
M89656-16	Collected: 04-MAR-10 14:15 By: RJZ		Received: 04-MAR-10 By: JB			
1139125						
M89656-16	SW846 8260B	05-MAR-10 22:34	SC			V8260RCP
M89656-16	SW846 8082	14-MAR-10 04:09	SL	10-MAR-10	AJ	P8082RCP
M89656-16	CT-ETPH 7/06	17-MAR-10 00:21	WZ	06-MAR-10	AJ	BCTTPH
M89656-17	Collected: 04-MAR-10 14:15 By: RJZ		Received: 04-MAR-10 By: JB			
1139125UF						
M89656-17	SW846 6010B	08-MAR-10 13:52	DA	05-MAR-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M89656-17	SW846 7470A	11-MAR-10 18:15	MA	11-MAR-10	MA	HG

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1856-MB	E43131.D	1	03/05/10	SC	n/a	n/a	MSE1856

The QC reported here applies to the following samples: **Method:** SW846 8260B

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-15, M89656-16

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1856-MB	E43131.D	1	03/05/10	SC	n/a	n/a	MSE1856

The QC reported here applies to the following samples: **Method:** SW846 8260B

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-15, M89656-16

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1856-MB	E43131.D	1	03/05/10	SC	n/a	n/a	MSE1856

The QC reported here applies to the following samples: **Method:** SW846 8260B

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-15, M89656-16

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	70-130%
2037-26-5	Toluene-D8	107%	70-130%
460-00-4	4-Bromofluorobenzene	102%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1856-BS	E43129.D	1	03/05/10	SC	n/a	n/a	MSE1856
MSE1856-BSD	E43130.D	1	03/05/10	SC	n/a	n/a	MSE1856

The QC reported here applies to the following samples: **Method:** SW846 8260B

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-15, M89656-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	67.7	135* [a]	65.6	131* [a]	3	70-130/25
107-13-1	Acrylonitrile	250	245	98	250	100	2	70-130/25
71-43-2	Benzene	50	49.3	99	50.4	101	2	70-130/25
108-86-1	Bromobenzene	50	51.3	103	50.9	102	1	70-130/25
75-27-4	Bromodichloromethane	50	47.2	94	47.0	94	0	70-130/25
75-25-2	Bromoform	50	49.3	99	47.9	96	3	70-130/25
74-83-9	Bromomethane	50	45.8	92	45.8	92	0	70-130/25
78-93-3	2-Butanone (MEK)	50	65.3	131* [a]	60.7	121	7	70-130/25
104-51-8	n-Butylbenzene	50	53.2	106	54.7	109	3	70-130/25
135-98-8	sec-Butylbenzene	50	54.8	110	56.0	112	2	70-130/25
98-06-6	tert-Butylbenzene	50	55.5	111	55.4	111	0	70-130/25
75-15-0	Carbon disulfide	50	48.0	96	49.8	100	4	70-130/25
56-23-5	Carbon tetrachloride	50	54.2	108	57.4	115	6	70-130/25
108-90-7	Chlorobenzene	50	49.7	99	50.7	101	2	70-130/25
75-00-3	Chloroethane	50	45.9	92	47.2	94	3	70-130/25
67-66-3	Chloroform	50	48.7	97	50.3	101	3	70-130/25
74-87-3	Chloromethane	50	52.6	105	54.4	109	3	70-130/25
95-49-8	o-Chlorotoluene	50	54.0	108	54.3	109	1	70-130/25
106-43-4	p-Chlorotoluene	50	53.1	106	54.4	109	2	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	50	43.0	86	45.9	92	7	70-130/25
124-48-1	Dibromochloromethane	50	49.3	99	50.8	102	3	70-130/25
106-93-4	1,2-Dibromoethane	50	50.5	101	49.8	100	1	70-130/25
95-50-1	1,2-Dichlorobenzene	50	45.8	92	47.0	94	3	70-130/25
541-73-1	1,3-Dichlorobenzene	50	49.3	99	49.8	100	1	70-130/25
106-46-7	1,4-Dichlorobenzene	50	50.2	100	50.0	100	0	70-130/25
75-71-8	Dichlorodifluoromethane	50	51.4	103	52.5	105	2	70-130/25
75-34-3	1,1-Dichloroethane	50	47.7	95	50.0	100	5	70-130/25
107-06-2	1,2-Dichloroethane	50	54.8	110	54.3	109	1	70-130/25
75-35-4	1,1-Dichloroethene	50	45.3	91	46.6	93	3	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	46.6	93	48.1	96	3	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	43.8	88	44.8	90	2	70-130/25
78-87-5	1,2-Dichloropropane	50	49.0	98	49.7	99	1	70-130/25
142-28-9	1,3-Dichloropropane	50	53.1	106	53.0	106	0	70-130/25
594-20-7	2,2-Dichloropropane	50	58.9	118	60.5	121	3	70-130/25
563-58-6	1,1-Dichloropropene	50	50.9	102	53.1	106	4	70-130/25
10061-01-5	cis-1,3-Dichloropropene	50	53.7	107	54.6	109	2	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1856-BS	E43129.D	1	03/05/10	SC	n/a	n/a	MSE1856
MSE1856-BSD	E43130.D	1	03/05/10	SC	n/a	n/a	MSE1856

The QC reported here applies to the following samples: **Method:** SW846 8260B

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-15, M89656-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	58.2	116	59.9	120	3	70-130/25
100-41-4	Ethylbenzene	50	50.7	101	51.9	104	2	70-130/25
76-13-1	Freon 113	50	52.3	105	55.6	111	6	70-130/25
87-68-3	Hexachlorobutadiene	50	42.6	85	45.0	90	5	70-130/25
591-78-6	2-Hexanone	50	70.5	141* [a]	66.1	132* [a]	6	70-130/25
98-82-8	Isopropylbenzene	50	67.5	135* [a]	67.2	134* [a]	0	70-130/25
99-87-6	p-Isopropyltoluene	50	53.3	107	54.9	110	3	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	48.1	96	50.2	100	4	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	50.1	100	52.0	104	4	70-130/25
74-95-3	Methylene bromide	50	48.6	97	48.3	97	1	70-130/25
75-09-2	Methylene chloride	50	43.8	88	46.2	92	5	70-130/25
91-20-3	Naphthalene	50	51.8	104	51.2	102	1	70-130/25
103-65-1	n-Propylbenzene	50	55.9	112	56.8	114	2	70-130/25
100-42-5	Styrene	50	52.6	105	52.4	105	0	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	50.2	100	51.1	102	2	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	52.4	105	53.7	107	2	70-130/25
127-18-4	Tetrachloroethene	50	52.3	105	52.7	105	1	70-130/25
109-99-9	Tetrahydrofuran	50	55.1	110	55.0	110	0	70-130/25
108-88-3	Toluene	50	53.2	106	53.9	108	1	70-130/25
110-57-6	Trans-1,4-Dichloro-2-Butene	50	45.1	90	44.4	89	2	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	52.4	105	52.3	105	0	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	51.0	102	53.5	107	5	70-130/25
71-55-6	1,1,1-Trichloroethane	50	48.7	97	50.1	100	3	70-130/25
79-00-5	1,1,2-Trichloroethane	50	49.2	98	51.6	103	5	70-130/25
79-01-6	Trichloroethene	50	49.2	98	49.8	100	1	70-130/25
75-69-4	Trichlorofluoromethane	50	53.3	107	55.1	110	3	70-130/25
96-18-4	1,2,3-Trichloropropane	50	48.3	97	49.7	99	3	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	54.0	108	54.0	108	0	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	54.9	110	55.9	112	2	70-130/25
75-01-4	Vinyl chloride	50	49.7	99	51.2	102	3	70-130/25
	m,p-Xylene	100	103	103	105	105	2	70-130/25
95-47-6	o-Xylene	50	51.5	103	52.4	105	2	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1856-BS	E43129.D	1	03/05/10	SC	n/a	n/a	MSE1856
MSE1856-BSD	E43130.D	1	03/05/10	SC	n/a	n/a	MSE1856

The QC reported here applies to the following samples: **Method:** SW846 8260B

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-15, M89656-16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	99%	100%	70-130%
2037-26-5	Toluene-D8	107%	108%	70-130%
460-00-4	4-Bromofluorobenzene	104%	107%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M89656-1MS	E43134.D	5	03/05/10	SC	n/a	n/a	MSE1856
M89656-1MSD	E43135.D	5	03/05/10	SC	n/a	n/a	MSE1856
M89656-1	E43133.D	1	03/05/10	SC	n/a	n/a	MSE1856

The QC reported here applies to the following samples: **Method:** SW846 8260B

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-15, M89656-16

CAS No.	Compound	M89656-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	213	85	231	92	8	70-130/30
107-13-1	Acrylonitrile	ND		1250	1250	100	1320	106	5	70-130/30
71-43-2	Benzene	ND		250	268	107	262	105	2	70-130/30
108-86-1	Bromobenzene	ND		250	273	109	279	112	2	70-130/30
75-27-4	Bromodichloromethane	ND		250	256	102	248	99	3	70-130/30
75-25-2	Bromoform	ND		250	231	92	240	96	4	70-130/30
74-83-9	Bromomethane	ND		250	252	101	257	103	2	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	236	94	223	89	6	70-130/30
104-51-8	n-Butylbenzene	ND		250	284	114	292	117	3	70-130/30
135-98-8	sec-Butylbenzene	ND		250	289	116	295	118	2	70-130/30
98-06-6	tert-Butylbenzene	ND		250	285	114	291	116	2	70-130/30
75-15-0	Carbon disulfide	ND		250	194	78	206	82	6	70-130/30
56-23-5	Carbon tetrachloride	ND		250	289	116	291	116	1	70-130/30
108-90-7	Chlorobenzene	ND		250	267	107	273	109	2	70-130/30
75-00-3	Chloroethane	ND		250	246	98	259	104	5	70-130/30
67-66-3	Chloroform	ND		250	271	108	279	112	3	70-130/30
74-87-3	Chloromethane	ND		250	284	114	295	118	4	70-130/30
95-49-8	o-Chlorotoluene	ND		250	288	115	294	118	2	70-130/30
106-43-4	p-Chlorotoluene	ND		250	282	113	289	116	2	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	217	87	243	97	11	70-130/30
124-48-1	Dibromochloromethane	ND		250	242	97	259	104	7	70-130/30
106-93-4	1,2-Dibromoethane	ND		250	254	102	269	108	6	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	256	102	262	105	2	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	270	108	273	109	1	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	271	108	283	113	4	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	274	110	280	112	2	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	264	106	268	107	2	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	295	118	290	116	2	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	239	96	249	100	4	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	254	102	258	103	2	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	232	93	236	94	2	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	266	106	259	104	3	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	270	108	271	108	0	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	322	129	330	132* [a]	2	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	280	112	267	107	5	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND		250	253	101	258	103	2	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M89656-1MS	E43134.D	5	03/05/10	SC	n/a	n/a	MSE1856
M89656-1MSD	E43135.D	5	03/05/10	SC	n/a	n/a	MSE1856
M89656-1	E43133.D	1	03/05/10	SC	n/a	n/a	MSE1856

The QC reported here applies to the following samples: **Method:** SW846 8260B

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-15, M89656-16

CAS No.	Compound	M89656-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		250	269	108	278	111	3	70-130/30
100-41-4	Ethylbenzene	ND		250	272	109	276	110	1	70-130/30
76-13-1	Freon 113	ND		250	287	115	283	113	1	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	243	97	248	99	2	70-130/30
591-78-6	2-Hexanone	ND		250	238	95	255	102	7	70-130/30
98-82-8	Isopropylbenzene	ND		250	351	140* [b]	353	141* [b]	1	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	287	115	291	116	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	251	100	264	106	5	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	258	103	265	106	3	70-130/30
74-95-3	Methylene bromide	ND		250	260	104	265	106	2	70-130/30
75-09-2	Methylene chloride	ND		250	236	94	251	100	6	70-130/30
91-20-3	Naphthalene	ND		250	264	106	297	119	12	70-130/30
103-65-1	n-Propylbenzene	ND		250	295	118	297	119	1	70-130/30
100-42-5	Styrene	ND		250	279	112	286	114	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	261	104	269	108	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	267	107	275	110	3	70-130/30
127-18-4	Tetrachloroethene	36.6		250	309	109	301	106	3	70-130/30
109-99-9	Tetrahydrofuran	ND		250	253	101	283	113	11	70-130/30
108-88-3	Toluene	ND		250	287	115	280	112	2	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND		250	168	67* [a]	197	79	16	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	276	110	311	124	12	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	290	116	300	120	3	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	271	108	271	108	0	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	275	110	268	107	3	70-130/30
79-01-6	Trichloroethene	ND		250	267	107	270	108	1	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	291	116	294	118	1	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	228	91	233	93	2	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	288	115	294	118	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	293	117	298	119	2	70-130/30
75-01-4	Vinyl chloride	ND		250	262	105	276	110	5	70-130/30
	m,p-Xylene	ND		500	558	112	559	112	0	70-130/30
95-47-6	o-Xylene	ND		250	281	112	286	114	2	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M89656-1MS	E43134.D	5	03/05/10	SC	n/a	n/a	MSE1856
M89656-1MSD	E43135.D	5	03/05/10	SC	n/a	n/a	MSE1856
M89656-1	E43133.D	1	03/05/10	SC	n/a	n/a	MSE1856

The QC reported here applies to the following samples: **Method:** SW846 8260B

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-15, M89656-16

CAS No.	Surrogate Recoveries	MS	MSD	M89656-1	Limits
1868-53-7	Dibromofluoromethane	99%	104%	100%	70-130%
2037-26-5	Toluene-D8	104%	106%	109%	70-130%
460-00-4	4-Bromofluorobenzene	98%	104%	104%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) Outside control limits. Blank Spike meets program technical requirements.

Volatile Internal Standard Area Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Check Std:	MSE1856-CC1853	**Injection Date:**	03/05/10
Lab File ID:	E43128.D	**Injection Time:**	15:40
Instrument ID:	GCMSE	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	77560	9.19	136415	10.07	54966	13.33	56959	15.88	27375	6.71
Upper Limit [a]	155120	9.69	272830	10.57	109932	13.83	113918	16.38	54750	7.21
Lower Limit [b]	38780	8.69	68208	9.57	27483	12.83	28480	15.38	13688	6.21

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSE1856-BS	77486	9.19	133403	10.07	55023	13.32	56367	15.88	27677	6.69
MSE1856-BSD	75503	9.19	132436	10.06	54710	13.33	55744	15.87	27694	6.69
MSE1856-MB	72132	9.19	126993	10.06	52224	13.33	56836	15.88	27087	6.70
M89656-15	69363	9.19	121312	10.07	48234	13.32	53188	15.88	20744	6.69
M89656-1	71802	9.19	120903	10.07	49504	13.32	53479	15.88	20572	6.70
M89656-1MS	73937	9.19	125697	10.06	52833	13.33	55332	15.87	24282	6.70
M89656-1MSD	69308	9.18	122209	10.06	49377	13.32	52499	15.88	23647	6.70
M89656-3	70399	9.19	121211	10.07	48981	13.32	55074	15.88	22329	6.70
M89656-5	72459	9.19	120682	10.06	49125	13.33	55589	15.88	22989	6.69
M89656-7	70888	9.18	122541	10.06	50575	13.33	55241	15.88	23197	6.70
M89656-9	72894	9.19	127204	10.06	49919	13.32	55777	15.88	21331	6.70
M89656-11	71445	9.19	121333	10.06	48958	13.32	54873	15.87	22525	6.69
M89656-13	73126	9.18	120829	10.06	49553	13.32	55432	15.88	21917	6.69
M89656-16	70859	9.19	119718	10.07	48871	13.32	55722	15.88	18992	6.69
ZZZZZZ	72201	9.19	122766	10.06	49828	13.32	54773	15.87	20607	6.69
ZZZZZZ	70415	9.19	121591	10.06	49069	13.33	53843	15.88	19769	6.69
ZZZZZZ	70851	9.18	120471	10.06	48912	13.32	53724	15.88	20522	6.70
ZZZZZZ	69273	9.18	117427	10.06	46626	13.33	52149	15.88	19339	6.70
ZZZZZZ	72251	9.19	121032	10.06	49923	13.33	54699	15.88	20696	6.70
ZZZZZZ	68315	9.19	116127	10.06	47385	13.32	52289	15.87	20088	6.70
ZZZZZZ	67238	9.18	115016	10.06	47396	13.32	51894	15.88	20982	6.69
ZZZZZZ	68455	9.18	114888	10.06	45862	13.32	51735	15.88	19687	6.69
ZZZZZZ	64601	9.19	106805	10.06	45193	13.32	51957	15.87	19467	6.69
ZZZZZZ	64884	9.19	111093	10.06	45900	13.32	52591	15.87	21054	6.69

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M89656-1	E43133.D	100.0	109.0	104.0
M89656-3	E43137.D	102.0	106.0	98.0
M89656-5	E43138.D	99.0	104.0	97.0
M89656-7	E43139.D	102.0	105.0	96.0
M89656-9	E43140.D	99.0	102.0	96.0
M89656-11	E43141.D	99.0	103.0	97.0
M89656-13	E43142.D	97.0	105.0	98.0
M89656-15	E43132.D	106.0	110.0	105.0
M89656-16	E43143.D	99.0	106.0	95.0
M89656-1MS	E43134.D	99.0	104.0	98.0
M89656-1MSD	E43135.D	104.0	106.0	104.0
MSE1856-BS	E43129.D	99.0	107.0	104.0
MSE1856-BSD	E43130.D	100.0	108.0	107.0
MSE1856-MB	E43131.D	105.0	107.0	102.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20802-MB	PO62748.D	1	03/12/10	WZ	03/06/10	OP20802	GPO3581

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-16

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries		Limits
3386-33-2	1-Chlorooctadecane	58%	50-149%

Method Blank Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20826-MB	EF74086.D	1	03/13/10	SL	03/10/10	OP20826	GEF3380

The QC reported here applies to the following samples: **Method:** SW846 8082

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-16

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	93%	30-150%
877-09-8	Tetrachloro-m-xylene	95%	30-150%
2051-24-3	Decachlorobiphenyl	60%	30-150%
2051-24-3	Decachlorobiphenyl	58%	30-150%

Blank Spike Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20802-BS	PO62750.D	1	03/12/10	WZ	03/06/10	OP20802	GPO3581

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-16

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-DRO (C9-C36)	0.7	0.529	76	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
3386-33-2	1-Chlorooctadecane	68%	50-149%

Blank Spike Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20826-BS	EF74145A.D	1	03/16/10	SL	03/10/10	OP20826	GEF3381

The QC reported here applies to the following samples: **Method:** SW846 8082

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	1.7	85	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	1.9	95	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	88%	30-150%
877-09-8	Tetrachloro-m-xylene	88%	30-150%
2051-24-3	Decachlorobiphenyl	51%	30-150%
2051-24-3	Decachlorobiphenyl	54%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20802-MS	PO62827.D	1	03/16/10	WZ	03/06/10	OP20802	GPO3585
OP20802-MSD	PO62828.D	1	03/16/10	WZ	03/06/10	OP20802	GPO3585
M89685-9	PO62829.D	1	03/16/10	WZ	03/06/10	OP20802	GPO3585

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-16

CAS No.	Compound	M89685-9 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	CT-DRO (C9-C36)	ND		0.7	0.691	99	0.664	95	4	50-129/26

CAS No.	Surrogate Recoveries	MS	MSD	M89685-9	Limits
3386-33-2	1-Chlorooctadecane	77%	79%	63%	50-149%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20826-MS	EF74088.D	1	03/13/10	SL	03/10/10	OP20826	GEF3380
OP20826-MSD	EF74089.D	1	03/13/10	SL	03/10/10	OP20826	GEF3380
M89749-5	EF74090.D	1	03/13/10	SL	03/10/10	OP20826	GEF3380

The QC reported here applies to the following samples: **Method:** SW846 8082

M89656-1, M89656-3, M89656-5, M89656-7, M89656-9, M89656-11, M89656-13, M89656-16

CAS No.	Compound	M89749-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		2	1.9	95	1.8	90	5	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		2	2.1	105	2.0	100	5	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M89749-5	Limits
877-09-8	Tetrachloro-m-xylene	92%	93%	96%	30-150%
877-09-8	Tetrachloro-m-xylene	95%	94%	101%	30-150%
2051-24-3	Decachlorobiphenyl	58%	57%	60%	30-150%
2051-24-3	Decachlorobiphenyl	54%	53%	57%	30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Method: CT-ETPH 7/06 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
M89656-1	PO62840.D	81.0
M89656-3	PO62844.D	89.0
M89656-5	PO62846.D	78.0
M89656-7	PO62848.D	83.0
M89656-9	PO62850.D	86.0
M89656-11	PO62851.D	98.0
M89656-13	PO62852.D	88.0
M89656-16	PO62853.D	100.0
OP20802-BS	PO62750.D	68.0
OP20802-MB	PO62748.D	58.0
OP20802-MS	PO62827.D	77.0
OP20802-MSD	PO62828.D	79.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chlorooctadecane	50-149%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: M89656
Account: LEA Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

Method: SW846 8082 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
M89656-1	EF74091.D	97.0	99.0	88.0	87.0
M89656-3	EF74092.D	90.0	94.0	75.0	77.0
M89656-5	EF74094.D	92.0	96.0	71.0	69.0
M89656-7	EF74095.D	91.0	96.0	75.0	80.0
M89656-9	EF74096.D	93.0	97.0	83.0	83.0
M89656-11	EF74097.D	93.0	95.0	86.0	83.0
M89656-13	EF74098.D	81.0	86.0	68.0	74.0
M89656-16	EF74099.D	97.0	99.0	58.0	55.0
OP20826-BS	EF74145A.D	88.0	88.0	51.0	54.0
OP20826-MB	EF74086.D	93.0	95.0	60.0	58.0
OP20826-MS	EF74088.D	92.0	95.0	58.0	54.0
OP20826-MSD	EF74089.D	93.0	94.0	57.0	53.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	30-150%
S2 = Decachlorobiphenyl	30-150%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 03/05/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	7	14		
Antimony	6.0	.79	1.2		
Arsenic	10	.57	1.9	-0.10	<10
Barium	200	2	3.7	0.80	<200
Beryllium	4.0	.15	.2		
Boron	100	1.2	1.5		
Cadmium	4.0	.12	.12	0.20	<4.0
Calcium	5000	15	39		
Chromium	10	.42	.5	0.0	<10
Cobalt	50	.17	.3		
Copper	25	.81	.8	0.30	<25
Gold	50	.97	1.7		
Iron	100	2.8	4.1		
Lead	5.0	.57	1.5	0.20	<5.0
Magnesium	5000	25	32		
Manganese	15	.12	.9		
Molybdenum	100	.24	.6		
Nickel	40	.12	.3	-0.20	<40
Palladium	50	1.2	2.5		
Platinum	50	4.4	7		
Potassium	5000	29	30		
Selenium	10	1.3	1.7	0.60	<10
Silicon	100	2.1	7.2		
Silver	5.0	.49	.5	-0.10	<5.0
Sodium	5000	27	31		
Strontium	10	.06	.3		
Thallium	10	.56	.7		
Tin	100	.31	.4		
Titanium	50	.4	.5		
Tungsten	100	3.4	12		
Vanadium	30	.63	1.1		
Zinc	20	.72	2	0.90	<20

Associated samples MP14889: M89656-2, M89656-4, M89656-6, M89656-8, M89656-10, M89656-12, M89656-14, M89656-17

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Metal	M89610-16 Original	MS	Spikelot MPICP	% Rec	QC Limits	M89610-16 Original	DUP	RPD	QC Limits
Prep Date:				03/05/10				03/05/10	
Aluminum									
Antimony	anr								
Arsenic	0.0	532	500	106.4	75-125	0.0	0.0	NC	0-20
Barium	64.5	2160	2000	104.8	75-125	64.5	64.9	0.6	0-20
Beryllium	anr								
Boron									
Cadmium	0.0	531	500	106.2	75-125	0.0	0.0	NC	0-20
Calcium									
Chromium	0.80	506	500	101.0	75-125	0.80	1.1	31.6 (a)	0-20
Cobalt									
Copper	2.7	503	500	100.1	75-125	2.7	2.7	0.0	0-20
Gold									
Iron									
Lead	0.0	1010	1000	101.0	75-125	0.0	0.0	NC	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	0.0	505	500	101.0	75-125	0.0	0.0	NC	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.0	526	500	105.2	75-125	0.0	0.0	NC	0-20
Silicon									
Silver	0.0	202	200	101.0	75-125	0.0	0.70	200.0(a)	0-20
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	1.9	505	500	100.6	75-125	1.9	2.2	14.6	0-20

Associated samples MP14889: M89656-2, M89656-4, M89656-6, M89656-8, M89656-10, M89656-12, M89656-14, M89656-17

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:			03/05/10					03/05/10	
Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	anr								
Arsenic	529	500	105.8	80-120	522	500	104.4	1.3	20
Barium	2100	2000	105.0	80-120	2050	2000	102.5	2.4	20
Beryllium	anr								
Boron									
Cadmium	527	500	105.4	80-120	518	500	103.6	1.7	20
Calcium									
Chromium	508	500	101.6	80-120	503	500	100.6	1.0	20
Cobalt									
Copper	501	500	100.2	80-120	502	500	100.4	0.2	20
Gold									
Iron									
Lead	1010	1000	101.0	80-120	1000	1000	100.0	1.0	20
Magnesium									
Manganese									
Molybdenum									
Nickel	507	500	101.4	80-120	500	500	100.0	1.4	20
Palladium									
Platinum									
Potassium									
Selenium	525	500	105.0	80-120	519	500	103.8	1.1	20
Silicon									
Silver	202	200	101.0	80-120	203	200	101.5	0.5	20
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	510	500	102.0	80-120	501	500	100.2	1.8	20

Associated samples MP14889: M89656-2, M89656-4, M89656-6, M89656-8, M89656-10, M89656-12, M89656-14, M89656-17

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

7

SERIAL DILUTION RESULTS SUMMARY

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 03/05/10

Metal	M89610-16 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	64.5	69.9	8.4	0-10
Beryllium	anr			
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.800	0.00	100.0(a)	0-10
Cobalt				
Copper	2.70	0.00	100.0(a)	0-10
Gold				
Iron				
Lead	0.00	0.00	NC	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	0.00	0.00	NC	0-10
Palladium				
Platinum				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	1.90	7.00	268.4(a)	0-10

Associated samples MP14889: M89656-2, M89656-4, M89656-6, M89656-8, M89656-10, M89656-12, M89656-14, M89656-17

SERIAL DILUTION RESULTS SUMMARY

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.1.4

7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14894 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 03/09/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.035	.048	-0.0080	<0.20

Associated samples MP14894: M89656-2, M89656-4, M89656-6, M89656-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14894
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date:				03/09/10				03/09/10	
Metal	M89593-2 Original	MS	Spikelot HGRWS1	% Rec	QC Limits	M89593-2 Original	DUP	RPD	QC Limits
Mercury	0.0	3.0	3	100.0	75-125	0.0	0.0	NC	0-20

Associated samples MP14894: M89656-2, M89656-4, M89656-6, M89656-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14894
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 03/09/10 03/09/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	2.9	3	96.7	80-120	2.9	3	96.7	0.0	20

Associated samples MP14894: M89656-2, M89656-4, M89656-6, M89656-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.3

7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14908
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 03/11/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.035	.048	-0.068	<0.20

Associated samples MP14908: M89656-10, M89656-12, M89656-14, M89656-17

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.3.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14908
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 03/11/10 03/11/10

Metal	M89656-10 Original	MS	Spikelot HGRWS1	% Rec	QC Limits	M89656-10 Original	DUP	RPD	QC Limits
Mercury	0.0	3.1	3	103.3	75-125	0.0	0.0	NC	0-20

Associated samples MP14908: M89656-10, M89656-12, M89656-14, M89656-17

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M89656
Account: LEA - Loureiro Eng. Associates
Project: UTC:F&H Post Remediation GW Monitoring

QC Batch ID: MP14908
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 03/11/10 03/11/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	3.0	3	100.0	80-120	3.0	3	100.0	0.0	20

Associated samples MP14908: M89656-10, M89656-12, M89656-14, M89656-17

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.3.3

7

New England ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

07/09/10

Technical Report for

Loureiro Eng. Associates

UTC: 2010 Quarterly GW - F&H Building

88UT908

Accutest Job Number: M92105

Sampling Date: 06/09/10

Report to:

Loureiro Eng. Associates

nsemmons@loureiro.com

ATTN: Nate Emmons

Total number of pages in report: **101**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Tand
Lab Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

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Accutest Laboratories

Sample Summary

Loureiro Eng. Associates

Job No: M92105

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT908

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M92105-1	06/09/10	10:25	BG	06/09/10	AQ	Ground Water	1145336
M92105-2	06/09/10	10:25	BG	06/09/10	AQ	Ground Water	1145336UF
M92105-3	06/09/10	10:17	HG	06/09/10	AQ	Ground Water	1145337
M92105-4	06/09/10	10:17	HG	06/09/10	AQ	Ground Water	1145337UF
M92105-5	06/09/10	10:32	HG	06/09/10	AQ	Ground Water	1145338
M92105-6	06/09/10	10:32	HG	06/09/10	AQ	Ground Water	1145338UF
M92105-7	06/09/10	13:10	BG	06/09/10	AQ	Ground Water	1145339
M92105-8	06/09/10	13:10	BG	06/09/10	AQ	Ground Water	1145339UF
M92105-9	06/09/10	13:55	HG	06/09/10	AQ	Ground Water	1145340
M92105-10	06/09/10	13:55	HG	06/09/10	AQ	Ground Water	1145340UF
M92105-11	06/09/10	14:50	BG	06/09/10	AQ	Ground Water	1145341
M92105-12	06/09/10	14:50	BG	06/09/10	AQ	Ground Water	1145341UF
M92105-13	06/09/10	11:32	HG	06/09/10	AQ	Ground Water	1145342

Accutest Laboratories

Sample Summary
(continued)

Loureiro Eng. Associates

Job No: M92105

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT908

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M92105-14	06/09/10	11:32	HG	06/09/10	AQ	Ground Water	1145342UF
M92105-15	06/09/10	09:20	HG	06/09/10	AQ	Ground Water	1145343
M92105-16	06/09/10	12:05	HG	06/09/10	AQ	Ground Water	1145344
M92105-17	06/09/10	12:05	HG	06/09/10	AQ	Ground Water	1145344UF

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Loureiro Eng. Associates	**Job No**	M92105
Site:	UTC: 2010 Quarterly GW - F&H Building	**Report Date**	7/9/2010 3:05:08 PM

17 Sample(s) were collected on 06/09/2010 and were received at Accutest on 06/09/2010 properly preserved, at 1.9 Deg. C and intact. These Samples received an Accutest job number of M92105. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** MSE1953

- All samples were analyzed within the recommended method holding time.
- Sample(s) M92105-1MS, M92105-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Acrylonitrile, Trans-1,4-Dichloro-2-Butene are outside control limits. Blank Spike meets program technical requirements.
- MS/MSD Recovery(s) for Acetone are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 1,2,3-Trichlorobenzene, Acetone, Trans-1,4-Dichloro-2-Butene are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for Acetone, Trans-1,4-Dichloro-2-Butene are outside control limits. Blank Spike meets program technical requirements.
- Blank Spike Duplicate Recovery(s) for 1,2,3-Trichlorobenzene, Tetrahydrofuran, 2,2-Dichloropropane, Acrylonitrile, Trans-1,4-Dichloro-2-Butene are outside control limits. Blank Spike meets program technical requirements.
- Continuing calibration check standard MSE1953-CC1937 for Trans-1,4-Dichloro-2-Butene exceed 30% Difference. This check standard met RCP criteria.
- Initial calibration verification standard MSE1937-ICV1937 for acetone exceed 35% Difference
- Initial calibration standard MSE1937-ICC1937 for naphthalene, 1,2,3-trichlorobenzene is employed quadratic regression.

Extractables by GC By Method CT-ETPH 7/06

Matrix AQ **Batch ID:** OP21659

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M92049-21MS, M92049-21MSD were used as the QC samples indicated.
- M92105-16 for 1-Chlorooctadecane: Outside control limits due to possible matrix interference. Confirmed by re-extraction/reanalysis.
- OP21659-MS/MSD for 1-Chlorooctadecane: Outside control limits due to possible matrix interference. Analyte recovery satisfactory.
- OP21659-BS for CT-DRO (C9-C36), OP21659-MB/BS for 1-Chlorooctadecane: Confirmed by reanalysis. Samples re-extracted for confirmation.

Matrix AQ **Batch ID:** OP21802

- M92105-16: Confirmation run.

Extractables by GC By Method SW846 8082

Matrix AQ	**Batch ID:** OP21660

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M92049-26MS, M92049-26MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010B

Matrix AQ	**Batch ID:** MP15432

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M92105-2DUP, M92105-2MS, M92105-2SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Chromium, Nickel, Zinc are outside control limits for sample MP15432-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ	**Batch ID:** MP15441

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M92105-6DUP, M92105-6MS were used as the QC samples for metals.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M92105).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1145336		
Lab Sample ID:	M92105-1	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E45861.D	1	06/19/10	DFT	n/a	n/a	MSE1953
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145336		
Lab Sample ID:	M92105-1	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	5.9	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	1.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145336		
Lab Sample ID:	M92105-1	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	75%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145336		
Lab Sample ID:	M92105-1	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC41164.D	1	06/22/10	KD	06/16/10	OP21659	GBC2048
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	59%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145336		
Lab Sample ID:	M92105-1	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB30610.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	112%		30-150%
877-09-8	Tetrachloro-m-xylene	111%		30-150%
2051-24-3	Decachlorobiphenyl	105%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145336UF		
Lab Sample ID:	M92105-2	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	< 200	200	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	06/14/10	06/14/10	MA	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 40	40	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/11/10	06/15/10	DA	SW846 6010B [3]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA11899
(2) Instrument QC Batch: MA11902
(3) Instrument QC Batch: MA11905
(4) Prep QC Batch: MP15432
(5) Prep QC Batch: MP15441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1145337		
Lab Sample ID:	M92105-3	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E45865.D	1	06/19/10	DFT	n/a	n/a	MSE1953
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145337		
Lab Sample ID:	M92105-3	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	4.8	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145337		
Lab Sample ID:	M92105-3	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	76%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145337		
Lab Sample ID:	M92105-3	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC41166.D	1	06/22/10	KD	06/16/10	OP21659	GBC2048
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.579	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	64%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145337		
Lab Sample ID:	M92105-3	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB30611.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.28	ug/l	
11104-28-2	Aroclor 1221	ND	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.28	ug/l	
53469-21-9	Aroclor 1242	ND	0.28	ug/l	
12672-29-6	Aroclor 1248	ND	0.28	ug/l	
11097-69-1	Aroclor 1254	ND	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.28	ug/l	
37324-23-5	Aroclor 1262	ND	0.28	ug/l	
11100-14-4	Aroclor 1268	ND	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-150%
877-09-8	Tetrachloro-m-xylene	88%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%
2051-24-3	Decachlorobiphenyl	82%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145337UF		
Lab Sample ID:	M92105-4	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	< 200	200	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	06/14/10	06/14/10	MA	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 40	40	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/11/10	06/15/10	DA	SW846 6010B [3]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA11899
(2) Instrument QC Batch: MA11902
(3) Instrument QC Batch: MA11905
(4) Prep QC Batch: MP15432
(5) Prep QC Batch: MP15441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1145338		
Lab Sample ID:	M92105-5	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E45866.D	1	06/19/10	DFT	n/a	n/a	MSE1953
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145338		
Lab Sample ID:	M92105-5	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	16.8	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.0	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145338		
Lab Sample ID:	M92105-5	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	74%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145338		
Lab Sample ID:	M92105-5	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC41168.D	1	06/22/10	KD	06/16/10	OP21659	GBC2048
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.089	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	72%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145338		
Lab Sample ID:	M92105-5	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB30612.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.28	ug/l	
11104-28-2	Aroclor 1221	ND	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.28	ug/l	
53469-21-9	Aroclor 1242	ND	0.28	ug/l	
12672-29-6	Aroclor 1248	ND	0.28	ug/l	
11097-69-1	Aroclor 1254	ND	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.28	ug/l	
37324-23-5	Aroclor 1262	ND	0.28	ug/l	
11100-14-4	Aroclor 1268	ND	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		30-150%
877-09-8	Tetrachloro-m-xylene	80%		30-150%
2051-24-3	Decachlorobiphenyl	87%		30-150%
2051-24-3	Decachlorobiphenyl	85%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145338UF		
Lab Sample ID:	M92105-6	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	< 200	200	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	06/14/10	06/14/10	MA	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 40	40	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/11/10	06/15/10	DA	SW846 6010B [3]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA11899
(2) Instrument QC Batch: MA11902
(3) Instrument QC Batch: MA11905
(4) Prep QC Batch: MP15432
(5) Prep QC Batch: MP15441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1145339		
Lab Sample ID:	M92105-7	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E45867.D	1	06/19/10	DFT	n/a	n/a	MSE1953
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145339		
Lab Sample ID:	M92105-7	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145339		
Lab Sample ID:	M92105-7	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	73%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145339		
Lab Sample ID:	M92105-7	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC41170.D	1	06/22/10	KD	06/16/10	OP21659	GBC2048
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	65%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145339		
Lab Sample ID:	M92105-7	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB30613.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		30-150%
877-09-8	Tetrachloro-m-xylene	85%		30-150%
2051-24-3	Decachlorobiphenyl	81%		30-150%
2051-24-3	Decachlorobiphenyl	80%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145339UF		
Lab Sample ID:	M92105-8	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	251	200	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	34.7	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	06/14/10	06/14/10	MA	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 40	40	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/11/10	06/15/10	DA	SW846 6010B [3]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA11899
(2) Instrument QC Batch: MA11902
(3) Instrument QC Batch: MA11905
(4) Prep QC Batch: MP15432
(5) Prep QC Batch: MP15441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1145340		
Lab Sample ID:	M92105-9	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E45868.D	1	06/19/10	DFT	n/a	n/a	MSE1953
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.4	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145340		
Lab Sample ID:	M92105-9	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	80.5	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.2	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145340		
Lab Sample ID:	M92105-9	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	76%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145340		
Lab Sample ID:	M92105-9	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC41172.D	1	06/22/10	KD	06/16/10	OP21659	GBC2048
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.091	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	55%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145340		
Lab Sample ID:	M92105-9	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB30614.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.29	ug/l	
11104-28-2	Aroclor 1221	ND	0.29	ug/l	
11141-16-5	Aroclor 1232	ND	0.29	ug/l	
53469-21-9	Aroclor 1242	ND	0.29	ug/l	
12672-29-6	Aroclor 1248	ND	0.29	ug/l	
11097-69-1	Aroclor 1254	ND	0.29	ug/l	
11096-82-5	Aroclor 1260	ND	0.29	ug/l	
37324-23-5	Aroclor 1262	ND	0.29	ug/l	
11100-14-4	Aroclor 1268	ND	0.29	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	104%		30-150%
877-09-8	Tetrachloro-m-xylene	94%		30-150%
2051-24-3	Decachlorobiphenyl	96%		30-150%
2051-24-3	Decachlorobiphenyl	97%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145340UF		
Lab Sample ID:	M92105-10	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	< 200	200	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	06/14/10	06/14/10	MA	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 40	40	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/11/10	06/15/10	DA	SW846 6010B [3]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA11899
(2) Instrument QC Batch: MA11902
(3) Instrument QC Batch: MA11905
(4) Prep QC Batch: MP15432
(5) Prep QC Batch: MP15441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1145341		
Lab Sample ID:	M92105-11	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E45869.D	1	06/19/10	DFT	n/a	n/a	MSE1953
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145341		
Lab Sample ID:	M92105-11	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145341		
Lab Sample ID:	M92105-11	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	77%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145341		
Lab Sample ID:	M92105-11	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC41174.D	1	06/22/10	KD	06/16/10	OP21659	GBC2048
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	57%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145341		
Lab Sample ID:	M92105-11	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB30616.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.27	ug/l	
11104-28-2	Aroclor 1221	ND	0.27	ug/l	
11141-16-5	Aroclor 1232	ND	0.27	ug/l	
53469-21-9	Aroclor 1242	ND	0.27	ug/l	
12672-29-6	Aroclor 1248	ND	0.27	ug/l	
11097-69-1	Aroclor 1254	ND	0.27	ug/l	
11096-82-5	Aroclor 1260	ND	0.27	ug/l	
37324-23-5	Aroclor 1262	ND	0.27	ug/l	
11100-14-4	Aroclor 1268	ND	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		30-150%
877-09-8	Tetrachloro-m-xylene	91%		30-150%
2051-24-3	Decachlorobiphenyl	84%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145341UF		
Lab Sample ID:	M92105-12	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	< 200	200	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	06/14/10	06/14/10	MA	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 40	40	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/11/10	06/15/10	DA	SW846 6010B [3]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA11899
(2) Instrument QC Batch: MA11902
(3) Instrument QC Batch: MA11905
(4) Prep QC Batch: MP15432
(5) Prep QC Batch: MP15441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1145342		
Lab Sample ID:	M92105-13	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E45870.D	1	06/19/10	DFT	n/a	n/a	MSE1953
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145342		
Lab Sample ID:	M92105-13	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	17.5	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.1	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.1	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145342		
Lab Sample ID:	M92105-13	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	93%		70-130%
460-00-4	4-Bromofluorobenzene	75%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145342		
Lab Sample ID:	M92105-13	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC41176.D	1	06/22/10	KD	06/16/10	OP21659	GBC2048
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.168	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	68%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145342		
Lab Sample ID:	M92105-13	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB30617.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		30-150%
877-09-8	Tetrachloro-m-xylene	87%		30-150%
2051-24-3	Decachlorobiphenyl	91%		30-150%
2051-24-3	Decachlorobiphenyl	89%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145342UF		
Lab Sample ID:	M92105-14	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	< 200	200	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	06/14/10	06/14/10	MA	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 40	40	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/11/10	06/15/10	DA	SW846 6010B [3]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA11899
(2) Instrument QC Batch: MA11902
(3) Instrument QC Batch: MA11905
(4) Prep QC Batch: MP15432
(5) Prep QC Batch: MP15441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1145343		
Lab Sample ID:	M92105-15	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E45871.D	1	06/19/10	DFT	n/a	n/a	MSE1953
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145343		
Lab Sample ID:	M92105-15	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145343		
Lab Sample ID:	M92105-15	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	95%		70-130%
460-00-4	4-Bromofluorobenzene	75%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145344		
Lab Sample ID:	M92105-16	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E45872.D	1	06/19/10	DFT	n/a	n/a	MSE1953
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145344		
Lab Sample ID:	M92105-16	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145344		
Lab Sample ID:	M92105-16	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	93%		70-130%
460-00-4	4-Bromofluorobenzene	72%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145344		
Lab Sample ID:	M92105-16	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC41178.D	1	06/22/10	KD	06/16/10	OP21659	GBC2048
Run #2 [a]	BC41502.D	1	06/30/10	KD	06/29/10	OP21802	GBC2059

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	980 ml	1.0 ml

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	32% [b]	25% [b]	50-149%

(a) Confirmation run.
(b) Outside control limits due to possible matrix interference. Confirmed by re-extraction/reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145344		
Lab Sample ID:	M92105-16	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB30618.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064
Run #2							

	Initial Volume	Final Volume
Run #1	860 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.29	ug/l	
11104-28-2	Aroclor 1221	ND	0.29	ug/l	
11141-16-5	Aroclor 1232	ND	0.29	ug/l	
53469-21-9	Aroclor 1242	ND	0.29	ug/l	
12672-29-6	Aroclor 1248	ND	0.29	ug/l	
11097-69-1	Aroclor 1254	ND	0.29	ug/l	
11096-82-5	Aroclor 1260	ND	0.29	ug/l	
37324-23-5	Aroclor 1262	ND	0.29	ug/l	
11100-14-4	Aroclor 1268	ND	0.29	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	105%		30-150%
877-09-8	Tetrachloro-m-xylene	102%		30-150%
2051-24-3	Decachlorobiphenyl	71%		30-150%
2051-24-3	Decachlorobiphenyl	70%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1145344UF		
Lab Sample ID:	M92105-17	**Date Sampled:**	06/09/10
Matrix:	AQ - Ground Water	**Date Received:**	06/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	< 200	200	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	06/14/10	06/14/10	MA	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 40	40	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/11/10	06/15/10	DA	SW846 6010B [3]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	06/11/10	06/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA11899
(2) Instrument QC Batch: MA11902
(3) Instrument QC Batch: MA11905
(4) Prep QC Batch: MP15432
(5) Prep QC Batch: MP15441

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	**SW846 8082**	AQ	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	**SW846 8082**	AQ	Certified by SOP MGC204/GC-ECD

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: RBG12010-377 M92105
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Loureiro Engineering Associates
ADDRESS: 100 Northwest Dr.
CITY: Plainville STATE: CT ZIP: 06062
SEND REPORT TO: Nate Emmons
PHONE #: 860-410-2987

FACILITY INFORMATION

PROJECT NAME: F&H Buildings
LOCATION: Pratt & Whitney East Hartford, CT
PROJECT NO.: 88UT908
FAX #:

ANALYTICAL INFORMATION

VOCs 8260B; PCBs 8082; CT ETPH; RCRA 8 + Cu, Ni, Zn

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	VOCs 8260B	PCBs 8082	CT ETPH	RCRA 8 + Cu, Ni, Zn	LAB USE ONLY
-1	1145336	6/9/10	1025	BG	GW	2	X					X	X				
	1145336		1025	BG		4						X		X	X		
-2	1145336uf		1025	BG		1			X			X				X	
-3	1145337		1017	HG		2	X					X	X				
	1145337		1017	HG		4						X		X	X		
-4	1145337uf		1017	HG		1			X			X				X	
-5	1145338		1132	HG		2	X					X	X				
	1145338		1132	HG		4						X		X	X		
-6	1145338uf		1132	HG		1						X				X	
-7	1145339		1310	BG		2	X					X	X				19B, 5B, 1A3
	1145339	6/9/10	1310	BG	GW	4						X		X	X		

DATA TURNAROUND INFORMATION

☒ 14 DAYS STANDARD — APPROVED BY:
☐ 7 DAYS *RUSH*
☐ 48 HOUR EMERGENCY
☐ OTHER

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☒ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY)

COMMENTS/REMARKS

In accordance w/CT RCPs/RSRs

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Nathan Shum	6/9/10 1515	1. B.	2. B.	6-9-10 18:2	2. B.
RELINQUISHED BY: 3. B.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 1.9 C

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M92105: Chain of Custody
Page 1 of 4

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M92105
ACCUTEST QUOTE #: KBG12010/3777

CLIENT INFORMATION

NAME: Loureiro Engineering Associates
ADDRESS: 100 Northwest Dr.
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Nate Eaimon
PHONE #: 860-410-2987

FACILITY INFORMATION

PROJECT NAME: F&A Buildings
LOCATION: Pratt + Whitney. East Hartford, CT
PROJECT NO.: 88UT908
FAX #:

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	VOCs 8260B	PCBs 8082	CT ETPH	RCRA 8+(Cu,Ni,Zn)	LAB USE ONLY
-8	1145339uf	6/9/10	1310	BG	GW	1			X			X				X	
-9	1145340		1355	HG		2	X					X	X				
	1145340		1355	HG		4						X		X	X		
-10	1145340uf		1355	HG		1			X			X				X	
-11	1145341		1450	BG		2	X					X	X				
	1145341		1450	BG		4						X		X	X		
-12	1145341uf		1450	BG		1			X			X				X	
-13	1145342		1132	HG		2	X					X	X				
	1145342		1132	HG		4						X		X	X		
-14	1145342uf		1132	HG		1			X			X				X	
-15	1145343	6/9/10	920	HG	GW	1	X					X	X				

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

DATA TURNAROUND INFORMATION

- [x] 14 DAYS STANDARD — APPROVED BY:
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

In accordance w/CT RCPs/RSRs

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Aletha Grim	6/9/10 1515	1. [signature]	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

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M92105: Chain of Custody
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ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M92105
ACCUTEST QUOTE #: KRO/2010-377

CLIENT INFORMATION

NAME: Loureiro Engineering Associates
ADDRESS: 100 Northwest Dr.
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Nate Emmons
PHONE #: 860-410-2987

FACILITY INFORMATION

PROJECT NAME: Pratt & Whitney, East Hartford, CT
LOCATION:
PROJECT NO.: 88VT908
FAX #:

ANALYTICAL INFORMATION

VOCs 8260B; PCBs 8082; CT ETPH; RCRA 8 + Cu, Ni, Zn

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	VOCs 8260B	PCBs 8082	CT ETPH	RCRA 8 + Cu, Ni, Zn	LAB USE ONLY
-16	1145344	6/9/10	12:05	HG	GW	2	X					X	X				
	1145344	6/9/10	12:05	HG	GW	4						X		X	X		
-17	1145344uP	6/9/10	12:05	HG	GW	1			X			X				X	

DATA TURNAROUND INFORMATION

- [x] 14 DAYS STANDARD
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	6/9/10 15:15	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

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M92105: Chain of Custody
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Accutest Laboratories Sample Receipt Summary

Accutest Job Number: M92105 **Client:** LEA **Immediate Client Services Action Required:** No

Date / Time Received: 6/9/2010 6:30:00 PM **No. Coolers:** 1 **Client Service Action Required at Login:** No

Project: FH BUILDING PRATT WHITNEY **Airbill #'s:** N/A

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	
2. Trip Blank listed on COC:	☑		☐	
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume rec'd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

M92105: Chain of Custody
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Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **Accutest New England** **Client:** **Loureiro Eng. Associates**

Project Location: **UTC: 2010 Quarterly GW - F&H Building** **Project Number:** **88UT908**

Sampling Date(s): **6/9/2010**

Laboratory Sample ID(s): M92105-1, M92105-2, M92105-3, M92105-4, M92105-5, M92105-6, M92105-7, M92105-8, M92105-9, M92105-10, M92105-11, M92105-12, M92105-13, M92105-14, M92105-15, M92105-16, M92105-17

Methods: CT-ETPH 7/06, SW846 6010B, SW846 7470A, SW846 8082, SW846 8260B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☐ No ☑
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☑ No ☐
	b) Were these reporting limits met?	Yes ☐ No ☑
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes ☐ No ☑
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Position: Lab Director

Printed Name: Reza Tand Date: 7/9/2010
Accutest New England

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M92105

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M92105-1 1145336	Collected: 09-JUN-10 10:25 By: BG		Received: 09-JUN-10 By: JB			
M92105-1	SW846 8260B	19-JUN-10 06:21	DFT			V8260RCP
M92105-1	CT-ETPH 7/06	22-JUN-10 02:21	KD	16-JUN-10	AJ	BCTTPH
M92105-1	SW846 8082	26-JUN-10 20:44	SL	16-JUN-10	RJ	P8082RCP
M92105-2 1145336UF	Collected: 09-JUN-10 10:25 By: BG		Received: 09-JUN-10 By: JB			
M92105-2	SW846 7470A	14-JUN-10 15:19	MA	14-JUN-10	MA	HG
M92105-2	SW846 6010B	14-JUN-10 17:29	DA	11-JUN-10	EM	AS,BA,CD,CR,CU,NI,PB,SE,ZN
M92105-2	SW846 6010B	15-JUN-10 14:33	DA	11-JUN-10	EM	AG
M92105-3 1145337	Collected: 09-JUN-10 10:17 By: HG		Received: 09-JUN-10 By: JB			
M92105-3	SW846 8260B	19-JUN-10 08:10	DFT			V8260RCP
M92105-3	CT-ETPH 7/06	22-JUN-10 03:01	KD	16-JUN-10	AJ	BCTTPH
M92105-3	SW846 8082	26-JUN-10 21:05	SL	16-JUN-10	RJ	P8082RCP
M92105-4 1145337UF	Collected: 09-JUN-10 10:17 By: HG		Received: 09-JUN-10 By: JB			
M92105-4	SW846 7470A	14-JUN-10 15:22	MA	14-JUN-10	MA	HG
M92105-4	SW846 6010B	14-JUN-10 18:47	DA	11-JUN-10	EM	AS,BA,CD,CR,CU,NI,PB,SE,ZN
M92105-4	SW846 6010B	15-JUN-10 15:16	DA	11-JUN-10	EM	AG
M92105-5 1145338	Collected: 09-JUN-10 10:32 By: HG		Received: 09-JUN-10 By: JB			
M92105-5	SW846 8260B	19-JUN-10 08:38	DFT			V8260RCP
M92105-5	CT-ETPH 7/06	22-JUN-10 03:41	KD	16-JUN-10	AJ	BCTTPH
M92105-5	SW846 8082	26-JUN-10 21:25	SL	16-JUN-10	RJ	P8082RCP
M92105-6 1145338UF	Collected: 09-JUN-10 10:32 By: HG		Received: 09-JUN-10 By: JB			
M92105-6	SW846 7470A	14-JUN-10 15:06	MA	14-JUN-10	MA	HG
M92105-6	SW846 6010B	14-JUN-10 18:52	DA	11-JUN-10	EM	AS,BA,CD,CR,CU,NI,PB,SE,ZN

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M92105

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M92105-6	SW846 6010B	15-JUN-10 15:20	DA	11-JUN-10	EM	AG
M92105-7 1145339	Collected: 09-JUN-10 13:10 By: BG		Received: 09-JUN-10 By: JB			
M92105-7	SW846 8260B	19-JUN-10 09:07	DFT			V8260RCP
M92105-7	CT-ETPH 7/06	22-JUN-10 04:20	KD	16-JUN-10	AJ	BCTTPH
M92105-7	SW846 8082	26-JUN-10 21:45	SL	16-JUN-10	RJ	P8082RCP
M92105-8 1145339UF	Collected: 09-JUN-10 13:10 By: BG		Received: 09-JUN-10 By: JB			
M92105-8	SW846 7470A	14-JUN-10 15:24	MA	14-JUN-10	MA	HG
M92105-8	SW846 6010B	14-JUN-10 18:56	DA	11-JUN-10	EM	AS,BA,CD,CR,CU,NI,PB,SE,ZN
M92105-8	SW846 6010B	15-JUN-10 15:25	DA	11-JUN-10	EM	AG
M92105-9 1145340	Collected: 09-JUN-10 13:55 By: HG		Received: 09-JUN-10 By: JB			
M92105-9	SW846 8260B	19-JUN-10 09:36	DFT			V8260RCP
M92105-9	CT-ETPH 7/06	22-JUN-10 04:59	KD	16-JUN-10	AJ	BCTTPH
M92105-9	SW846 8082	26-JUN-10 22:05	SL	16-JUN-10	RJ	P8082RCP
M92105-10 1145340UF	Collected: 09-JUN-10 13:55 By: HG		Received: 09-JUN-10 By: JB			
M92105-10	SW846 7470A	14-JUN-10 15:27	MA	14-JUN-10	MA	HG
M92105-10	SW846 6010B	14-JUN-10 18:21	DA	11-JUN-10	EM	AS,BA,CD,CR,CU,NI,PB,SE,ZN
M92105-10	SW846 6010B	15-JUN-10 14:59	DA	11-JUN-10	EM	AG
M92105-11 1145341	Collected: 09-JUN-10 14:50 By: BG		Received: 09-JUN-10 By: JB			
M92105-11	SW846 8260B	19-JUN-10 10:05	DFT			V8260RCP
M92105-11	CT-ETPH 7/06	22-JUN-10 05:39	KD	16-JUN-10	AJ	BCTTPH
M92105-11	SW846 8082	26-JUN-10 22:46	SL	16-JUN-10	RJ	P8082RCP
M92105-12 1145341UF	Collected: 09-JUN-10 14:50 By: BG		Received: 09-JUN-10 By: JB			

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M92105

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M92105-12	SW846 7470A	14-JUN-10 15:30	MA	14-JUN-10	MA	HG
M92105-12	SW846 6010B	14-JUN-10 18:34	DA	11-JUN-10	EM	AS,BA,CD,CR,CU,NI,PB,SE,ZN
M92105-12	SW846 6010B	15-JUN-10 15:03	DA	11-JUN-10	EM	AG
M92105-13	Collected: 09-JUN-10 11:32 By: HG		Received: 09-JUN-10 By: JB			
1145342						
M92105-13	SW846 8260B	19-JUN-10 10:34	DFT			V8260RCP
M92105-13	CT-ETPH 7/06	22-JUN-10 06:18	KD	16-JUN-10	AJ	BCTTPH
M92105-13	SW846 8082	26-JUN-10 23:06	SL	16-JUN-10	RJ	P8082RCP
M92105-14	Collected: 09-JUN-10 11:32 By: HG		Received: 09-JUN-10 By: JB			
1145342UF						
M92105-14	SW846 7470A	14-JUN-10 15:32	MA	14-JUN-10	MA	HG
M92105-14	SW846 6010B	14-JUN-10 18:38	DA	11-JUN-10	EM	AS,BA,CD,CR,CU,NI,PB,SE,ZN
M92105-14	SW846 6010B	15-JUN-10 15:07	DA	11-JUN-10	EM	AG
M92105-15	Collected: 09-JUN-10 09:20 By: HG		Received: 09-JUN-10 By: JB			
1145343						
M92105-15	SW846 8260B	19-JUN-10 11:03	DFT			V8260RCP
M92105-16	Collected: 09-JUN-10 12:05 By: HG		Received: 09-JUN-10 By: JB			
1145344						
M92105-16	SW846 8260B	19-JUN-10 11:24	DFT			V8260RCP
M92105-16	CT-ETPH 7/06	22-JUN-10 06:58	KD	16-JUN-10	AJ	BCTTPH
M92105-16	SW846 8082	26-JUN-10 23:27	SL	16-JUN-10	RJ	P8082RCP
M92105-16	CT-ETPH 7/06	30-JUN-10 07:14	KD	29-JUN-10		
M92105-17	Collected: 09-JUN-10 12:05 By: HG		Received: 09-JUN-10 By: JB			
1145344UF						
M92105-17	SW846 7470A	14-JUN-10 15:35	MA	14-JUN-10	MA	HG
M92105-17	SW846 6010B	14-JUN-10 18:43	DA	11-JUN-10	EM	AS,BA,CD,CR,CU,NI,PB,SE,ZN
M92105-17	SW846 6010B	15-JUN-10 15:12	DA	11-JUN-10	EM	AG

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1953-MB	E45856.D	1	06/19/10	DFT	n/a	n/a	MSE1953

The QC reported here applies to the following samples: **Method:** SW846 8260B

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-15, M92105-16

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1953-MB	E45856.D	1	06/19/10	DFT	n/a	n/a	MSE1953

The QC reported here applies to the following samples: **Method:** SW846 8260B

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-15, M92105-16

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1953-MB	E45856.D	1	06/19/10	DFT	n/a	n/a	MSE1953

The QC reported here applies to the following samples: **Method:** SW846 8260B

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-15, M92105-16

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	84%	70-130%
2037-26-5	Toluene-D8	91%	70-130%
460-00-4	4-Bromofluorobenzene	75%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1953-BS	E45853.D	1	06/19/10	DFT	n/a	n/a	MSE1953
MSE1953-BSD	E45854.D	1	06/19/10	DFT	n/a	n/a	MSE1953

The QC reported here applies to the following samples: **Method:** SW846 8260B

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-15, M92105-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	40.9	82	50.4	101	21	70-130/25
107-13-1	Acrylonitrile	50	229	458* [a]	228	456* [a]	0	70-130/25
71-43-2	Benzene	50	52.8	106	53.6	107	2	70-130/25
108-86-1	Bromobenzene	50	53.7	107	52.8	106	2	70-130/25
75-27-4	Bromodichloromethane	50	45.2	90	45.6	91	1	70-130/25
75-25-2	Bromoform	50	54.5	109	55.1	110	1	70-130/25
74-83-9	Bromomethane	50	52.8	106	52.8	106	0	70-130/25
78-93-3	2-Butanone (MEK)	50	46.6	93	50.1	100	7	70-130/25
104-51-8	n-Butylbenzene	50	49.7	99	48.0	96	3	70-130/25
135-98-8	sec-Butylbenzene	50	52.2	104	51.9	104	1	70-130/25
98-06-6	tert-Butylbenzene	50	46.2	92	45.9	92	1	70-130/25
75-15-0	Carbon disulfide	50	53.4	107	53.6	107	0	70-130/25
56-23-5	Carbon tetrachloride	50	49.1	98	49.0	98	0	70-130/25
108-90-7	Chlorobenzene	50	60.1	120	62.2	124	3	70-130/25
75-00-3	Chloroethane	50	49.0	98	48.3	97	1	70-130/25
67-66-3	Chloroform	50	46.6	93	47.1	94	1	70-130/25
74-87-3	Chloromethane	50	43.5	87	42.3	85	3	70-130/25
95-49-8	o-Chlorotoluene	50	45.8	92	45.4	91	1	70-130/25
106-43-4	p-Chlorotoluene	50	45.7	91	46.5	93	2	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	50	38.2	76	36.2	72	5	70-130/25
124-48-1	Dibromochloromethane	50	51.6	103	51.8	104	0	70-130/25
106-93-4	1,2-Dibromoethane	50	56.7	113	58.6	117	3	70-130/25
95-50-1	1,2-Dichlorobenzene	50	55.7	111	55.2	110	1	70-130/25
541-73-1	1,3-Dichlorobenzene	50	53.6	107	52.7	105	2	70-130/25
106-46-7	1,4-Dichlorobenzene	50	55.5	111	56.3	113	1	70-130/25
75-71-8	Dichlorodifluoromethane	50	42.8	86	41.3	83	4	70-130/25
75-34-3	1,1-Dichloroethane	50	46.5	93	46.9	94	1	70-130/25
107-06-2	1,2-Dichloroethane	50	41.3	83	42.2	84	2	70-130/25
75-35-4	1,1-Dichloroethene	50	52.3	105	52.0	104	1	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	49.1	98	50.9	102	4	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	48.9	98	49.6	99	1	70-130/25
78-87-5	1,2-Dichloropropane	50	49.6	99	52.4	105	5	70-130/25
142-28-9	1,3-Dichloropropane	50	50.1	100	51.2	102	2	70-130/25
594-20-7	2,2-Dichloropropane	50	36.1	72	34.1	68* [a]	6	70-130/25
563-58-6	1,1-Dichloropropene	50	51.0	102	51.4	103	1	70-130/25
10061-01-5	cis-1,3-Dichloropropene	50	49.4	99	51.0	102	3	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1953-BS	E45853.D	1	06/19/10	DFT	n/a	n/a	MSE1953
MSE1953-BSD	E45854.D	1	06/19/10	DFT	n/a	n/a	MSE1953

The QC reported here applies to the following samples: **Method:** SW846 8260B

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-15, M92105-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	49.3	99	51.1	102	4	70-130/25
100-41-4	Ethylbenzene	50	56.7	113	57.7	115	2	70-130/25
76-13-1	Freon 113	50	56.0	112	54.9	110	2	70-130/25
87-68-3	Hexachlorobutadiene	50	54.6	109	53.8	108	1	70-130/25
591-78-6	2-Hexanone	50	44.2	88	47.0	94	6	70-130/25
98-82-8	Isopropylbenzene	50	56.2	112	56.7	113	1	70-130/25
99-87-6	p-Isopropyltoluene	50	53.3	107	52.1	104	2	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	43.8	88	42.6	85	3	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	36.0	72	40.5	81	12	70-130/25
74-95-3	Methylene bromide	50	50.2	100	50.7	101	1	70-130/25
75-09-2	Methylene chloride	50	49.1	98	49.9	100	2	70-130/25
91-20-3	Naphthalene	50	55.6	111	57.5	115	3	70-130/25
103-65-1	n-Propylbenzene	50	47.9	96	48.1	96	0	70-130/25
100-42-5	Styrene	50	57.3	115	57.8	116	1	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	60.5	121	61.0	122	1	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	42.3	85	40.9	82	3	70-130/25
127-18-4	Tetrachloroethene	50	62.9	126	63.5	127	1	70-130/25
109-99-9	Tetrahydrofuran	50	36.1	72	32.9	66* [a]	9	70-130/25
108-88-3	Toluene	50	54.4	109	56.4	113	4	70-130/25
110-57-6	Trans-1,4-Dichloro-2-Butene	50	31.8	64* [a]	32.8	66* [a]	3	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	64.7	129	67.0	134* [a]	3	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	57.2	114	57.9	116	1	70-130/25
71-55-6	1,1,1-Trichloroethane	50	48.4	97	49.1	98	1	70-130/25
79-00-5	1,1,2-Trichloroethane	50	51.6	103	52.9	106	2	70-130/25
79-01-6	Trichloroethene	50	53.6	107	56.8	114	6	70-130/25
75-69-4	Trichlorofluoromethane	50	50.2	100	48.8	98	3	70-130/25
96-18-4	1,2,3-Trichloropropane	50	36.0	72	36.5	73	1	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	46.7	93	46.8	94	0	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	48.0	96	47.6	95	1	70-130/25
75-01-4	Vinyl chloride	50	40.9	82	40.8	82	0	70-130/25
	m,p-Xylene	100	119	119	121	121	2	70-130/25
95-47-6	o-Xylene	50	61.6	123	61.9	124	0	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE1953-BS	E45853.D	1	06/19/10	DFT	n/a	n/a	MSE1953
MSE1953-BSD	E45854.D	1	06/19/10	DFT	n/a	n/a	MSE1953

The QC reported here applies to the following samples: **Method:** SW846 8260B

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-15, M92105-16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	84%	85%	70-130%
2037-26-5	Toluene-D8	92%	93%	70-130%
460-00-4	4-Bromofluorobenzene	78%	78%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M92105-1MS	E45862.D	5	06/19/10	DFT	n/a	n/a	MSE1953
M92105-1MSD	E45863.D	5	06/19/10	DFT	n/a	n/a	MSE1953
M92105-1	E45861.D	1	06/19/10	DFT	n/a	n/a	MSE1953

The QC reported here applies to the following samples: **Method:** SW846 8260B

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-15, M92105-16

CAS No.	Compound	M92105-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	148	59* a	146	58* a	1	70-130/30
107-13-1	Acrylonitrile	ND		250	1160	464* b	1140	456* b	2	70-130/30
71-43-2	Benzene	ND		250	264	106	263	105	0	70-130/30
108-86-1	Bromobenzene	ND		250	263	105	268	107	2	70-130/30
75-27-4	Bromodichloromethane	ND		250	220	88	211	84	4	70-130/30
75-25-2	Bromoform	ND		250	258	103	261	104	1	70-130/30
74-83-9	Bromomethane	ND		250	270	108	257	103	5	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	204	82	210	84	3	70-130/30
104-51-8	n-Butylbenzene	ND		250	242	97	248	99	2	70-130/30
135-98-8	sec-Butylbenzene	ND		250	256	102	263	105	3	70-130/30
98-06-6	tert-Butylbenzene	ND		250	222	89	226	90	2	70-130/30
75-15-0	Carbon disulfide	ND		250	205	82	217	87	6	70-130/30
56-23-5	Carbon tetrachloride	ND		250	237	95	243	97	3	70-130/30
108-90-7	Chlorobenzene	ND		250	312	125	322	129	3	70-130/30
75-00-3	Chloroethane	ND		250	238	95	241	96	1	70-130/30
67-66-3	Chloroform	ND		250	238	95	230	92	3	70-130/30
74-87-3	Chloromethane	ND		250	211	84	215	86	2	70-130/30
95-49-8	o-Chlorotoluene	ND		250	221	88	224	90	1	70-130/30
106-43-4	p-Chlorotoluene	ND		250	227	91	235	94	3	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	183	73	191	76	4	70-130/30
124-48-1	Dibromochloromethane	ND		250	245	98	245	98	0	70-130/30
106-93-4	1,2-Dibromoethane	ND		250	305	122	301	120	1	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	284	114	286	114	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	270	108	276	110	2	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	276	110	286	114	4	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	201	80	203	81	1	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	231	92	233	93	1	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	210	84	211	84	0	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	257	103	261	104	2	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	252	101	253	101	0	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	245	98	245	98	0	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	251	100	258	103	3	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	257	103	257	103	0	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	190	76	197	79	4	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	247	99	252	101	2	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND		250	240	96	243	97	1	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M92105-1MS	E45862.D	5	06/19/10	DFT	n/a	n/a	MSE1953
M92105-1MSD	E45863.D	5	06/19/10	DFT	n/a	n/a	MSE1953
M92105-1	E45861.D	1	06/19/10	DFT	n/a	n/a	MSE1953

The QC reported here applies to the following samples: **Method:** SW846 8260B

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-15, M92105-16

CAS No.	Compound	M92105-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		250	242	97	251	100	4	70-130/30
100-41-4	Ethylbenzene	ND		250	283	113	293	117	3	70-130/30
76-13-1	Freon 113	ND		250	276	110	274	110	1	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	272	109	277	111	2	70-130/30
591-78-6	2-Hexanone	ND		250	207	83	224	90	8	70-130/30
98-82-8	Isopropylbenzene	ND		250	275	110	281	112	2	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	260	104	266	106	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	211	84	213	85	1	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	199	80	188	75	6	70-130/30
74-95-3	Methylene bromide	ND		250	254	102	255	102	0	70-130/30
75-09-2	Methylene chloride	ND		250	248	99	250	100	1	70-130/30
91-20-3	Naphthalene	ND		250	277	111	302	121	9	70-130/30
103-65-1	n-Propylbenzene	ND		250	232	93	238	95	3	70-130/30
100-42-5	Styrene	ND		250	290	116	297	119	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	309	124	314	126	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	219	88	223	89	2	70-130/30
127-18-4	Tetrachloroethene	5.9		250	324	127	327	128	1	70-130/30
109-99-9	Tetrahydrofuran	ND		250	198	79	205	82	3	70-130/30
108-88-3	Toluene	ND		250	280	112	277	111	1	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND		250	148	59* [b]	156	62* [b]	5	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	319	128	353	141* [b]	10	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	285	114	307	123	7	70-130/30
71-55-6	1,1,1-Trichloroethane	1.0		250	239	95	235	94	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	273	109	269	108	1	70-130/30
79-01-6	Trichloroethene	ND		250	271	108	265	106	2	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	243	97	243	97	0	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	175	70	186	74	6	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	230	92	235	94	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	234	94	240	96	3	70-130/30
75-01-4	Vinyl chloride	ND		250	192	77	200	80	4	70-130/30
	m,p-Xylene	ND		500	606	121	616	123	2	70-130/30
95-47-6	o-Xylene	ND		250	308	123	317	127	3	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M92105-1MS	E45862.D	5	06/19/10	DFT	n/a	n/a	MSE1953
M92105-1MSD	E45863.D	5	06/19/10	DFT	n/a	n/a	MSE1953
M92105-1	E45861.D	1	06/19/10	DFT	n/a	n/a	MSE1953

The QC reported here applies to the following samples: **Method:** SW846 8260B

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-15, M92105-16

CAS No.	Surrogate Recoveries	MS	MSD	M92105-1	Limits
1868-53-7	Dibromofluoromethane	86%	84%	87%	70-130%
2037-26-5	Toluene-D8	92%	92%	96%	70-130%
460-00-4	4-Bromofluorobenzene	78%	78%	75%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) Outside control limits. Blank Spike meets program technical requirements.

Volatile Internal Standard Area Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Check Std:	MSE1953-CC1937	**Injection Date:**	06/19/10
Lab File ID:	E45853.D	**Injection Time:**	02:38
Instrument ID:	GCMSE	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	142582	9.17	215334	10.05	95180	13.30	98537	15.86	39055	6.69
Upper Limit [a]	285164	9.67	430668	10.55	190360	13.80	197074	16.36	78110	7.19
Lower Limit [b]	71291	8.67	107667	9.55	47590	12.80	49269	15.36	19528	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSE1953-BS	142582	9.17	215334	10.05	95180	13.30	98537	15.86	39055	6.69
MSE1953-BSD	143781	9.17	217102	10.05	96892	13.30	101393	15.86	38094	6.69
MSE1953-MB	138771	9.17	205446	10.05	85337	13.30	96628	15.86	36692	6.69
ZZZZZZ	135732	9.17	204697	10.05	86970	13.30	96935	15.86	38741	6.69
ZZZZZZ	137059	9.17	204994	10.05	86605	13.30	96283	15.86	37964	6.69
ZZZZZZ	135871	9.17	202738	10.05	86761	13.30	99251	15.86	38574	6.69
ZZZZZZ	136444	9.17	205938	10.04	87647	13.30	98370	15.86	39107	6.68
M92105-1	135930	9.17	195704	10.05	85081	13.30	96096	15.86	36792	6.69
M92105-1MS	139761	9.17	212602	10.05	93837	13.30	101318	15.86	38622	6.69
M92105-1MSD	141533	9.17	212949	10.04	92520	13.30	100212	15.86	39412	6.68
M92105-3	137835	9.17	202053	10.04	85988	13.30	98951	15.86	41527	6.69
M92105-5	133931	9.17	199643	10.05	83656	13.30	97081	15.86	35226	6.69
M92105-7	136714	9.17	204015	10.05	85547	13.30	98270	15.86	34963	6.69
M92105-9	130701	9.17	195896	10.05	82767	13.30	94478	15.86	35537	6.69
M92105-11	133691	9.17	196002	10.04	83152	13.31	94931	15.86	36032	6.70
M92105-13	134048	9.17	199155	10.04	82883	13.31	95013	15.86	35218	6.69
M92105-15	138093	9.17	203782	10.04	86125	13.31	100214	15.86	37573	6.69
M92105-16	132155	9.17	196006	10.05	82904	13.30	96754	15.86	35141	6.69
ZZZZZZ	136592	9.17	202378	10.05	85511	13.30	97687	15.86	35072	6.69
ZZZZZZ	133744	9.17	197001	10.05	86620	13.31	98260	15.86	35655	6.69
ZZZZZZ	138152	9.17	207236	10.05	85999	13.30	100207	15.86	37824	6.69
ZZZZZZ	132070	9.17	196300	10.05	82567	13.30	98017	15.86	35649	6.69
ZZZZZZ	133268	9.17	197137	10.05	84727	13.30	97291	15.86	34711	6.69
ZZZZZZ	134916	9.18	199206	10.05	82411	13.31	94337	15.86	35521	6.69

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M92105-1	E45861.D	87.0	96.0	75.0
M92105-3	E45865.D	84.0	94.0	76.0
M92105-5	E45866.D	87.0	94.0	74.0
M92105-7	E45867.D	87.0	91.0	73.0
M92105-9	E45868.D	89.0	94.0	76.0
M92105-11	E45869.D	89.0	96.0	77.0
M92105-13	E45870.D	87.0	93.0	75.0
M92105-15	E45871.D	86.0	95.0	75.0
M92105-16	E45872.D	88.0	93.0	72.0
M92105-1MS	E45862.D	86.0	92.0	78.0
M92105-1MSD	E45863.D	84.0	92.0	78.0
MSE1953-BS	E45853.D	84.0	92.0	78.0
MSE1953-BSD	E45854.D	85.0	93.0	78.0
MSE1953-MB	E45856.D	84.0	91.0	75.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21659-MB	BC41148.D	1	06/21/10	KD	06/16/10	OP21659	GBC2048

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-16

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries		Limits
3386-33-2	1-Chlorooctadecane	17%* [a]	50-149%

(a) Confirmed by reanalysis. Samples re-extracted for confirmation.

Method Blank Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21660-MB	BB30605.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064

The QC reported here applies to the following samples: **Method:** SW846 8082

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-16

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	86%	30-150%
877-09-8	Tetrachloro-m-xylene	80%	30-150%
2051-24-3	Decachlorobiphenyl	81%	30-150%
2051-24-3	Decachlorobiphenyl	81%	30-150%

Blank Spike Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21659-BS	BC41150.D	1	06/21/10	KD	06/16/10	OP21659	GBC2048

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-16

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-DRO (C9-C36)	0.7	0.313	45* [a]	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
3386-33-2	1-Chlorooctadecane	27%* [a]	50-149%

(a) Confirmed by reanalysis. Samples re-extracted for confirmation.

Blank Spike Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21660-BS	BB30606.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064

The QC reported here applies to the following samples: **Method:** SW846 8082

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	2.4	120	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	2.2	110	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	95%	30-150%
877-09-8	Tetrachloro-m-xylene	76%	30-150%
2051-24-3	Decachlorobiphenyl	74%	30-150%
2051-24-3	Decachlorobiphenyl	75%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21659-MS	BC41152.D	1	06/21/10	KD	06/16/10	OP21659	GBC2048
OP21659-MSD	BC41154.D	1	06/21/10	KD	06/16/10	OP21659	GBC2048
M92049-21	BC41156.D	1	06/21/10	KD	06/16/10	OP21659	GBC2048

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-16

CAS No.	Compound	M92049-21 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	CT-DRO (C9-C36)	ND		0.7	0.446	64	0.440	63	1	50-129/26

CAS No.	Surrogate Recoveries	MS	MSD	M92049-21	Limits
3386-33-2	1-Chlorooctadecane	32%* b	30%* b	24%* a	50-149%

(a) Outside control limits due to possible matrix interference.
(b) Outside control limits due to possible matrix interference. Analyte recovery satisfactory.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP21660-MS	BB30607.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064
OP21660-MSD	BB30608.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064
M92049-26	BB30609.D	1	06/26/10	SL	06/16/10	OP21660	GBB2064

The QC reported here applies to the following samples: **Method:** SW846 8082

M92105-1, M92105-3, M92105-5, M92105-7, M92105-9, M92105-11, M92105-13, M92105-16

CAS No.	Compound	M92049-26 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		2	1.9	95	2.4	120	23	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		2	1.8	90	2.3	115	24	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M92049-26	Limits
877-09-8	Tetrachloro-m-xylene	80%	98%	88%	30-150%
877-09-8	Tetrachloro-m-xylene	70%	73%	75%	30-150%
2051-24-3	Decachlorobiphenyl	62%	78%	67%	30-150%
2051-24-3	Decachlorobiphenyl	61%	76%	67%	30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: CT-ETPH 7/06 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
M92105-1	BC41164.D	59.0
M92105-3	BC41166.D	64.0
M92105-5	BC41168.D	72.0
M92105-7	BC41170.D	65.0
M92105-9	BC41172.D	55.0
M92105-11	BC41174.D	57.0
M92105-13	BC41176.D	68.0
M92105-16	BC41502.D	25.0* [b]
M92105-16	BC41178.D	32.0* [b]
OP21659-BS	BC41150.D	27.0* [c]
OP21659-MB	BC41148.D	17.0* [c]
OP21659-MS	BC41152.D	32.0* [d]
OP21659-MSD	BC41154.D	30.0* [d]

Surrogate Compounds	Recovery Limits
S1 = 1-Chlorooctadecane	50-149%

(a) Recovery from GC signal #1
(b) Outside control limits due to possible matrix interference. Confirmed by re-extraction/reanalysis.
(c) Confirmed by reanalysis. Samples re-extracted for confirmation.
(d) Outside control limits due to possible matrix interference. Analyte recovery satisfactory.

Semivolatile Surrogate Recovery Summary

Job Number: M92105
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: SW846 8082 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
M92105-1	BB30610.D	112.0	111.0	105.0	104.0
M92105-3	BB30611.D	91.0	88.0	83.0	82.0
M92105-5	BB30612.D	88.0	80.0	87.0	85.0
M92105-7	BB30613.D	87.0	85.0	81.0	80.0
M92105-9	BB30614.D	104.0	94.0	96.0	97.0
M92105-11	BB30616.D	95.0	91.0	84.0	83.0
M92105-13	BB30617.D	94.0	87.0	91.0	89.0
M92105-16	BB30618.D	105.0	102.0	71.0	70.0
OP21660-BS	BB30606.D	95.0	76.0	74.0	75.0
OP21660-MB	BB30605.D	86.0	80.0	81.0	81.0
OP21660-MS	BB30607.D	80.0	70.0	62.0	61.0
OP21660-MSD	BB30608.D	98.0	73.0	78.0	76.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	30-150%
S2 = Decachlorobiphenyl	30-150%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15432
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/11/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	7	14		
Antimony	6.0	.79	1.2		
Arsenic	10	.57	1.9	-0.50	<10
Barium	200	2	3.7	0.0	<200
Beryllium	4.0	.15	.2		
Boron	100	1.2	1.5		
Cadmium	4.0	.12	.12	-0.80	<4.0
Calcium	5000	15	39		
Chromium	10	.42	.5	0.10	<10
Cobalt	50	.17	.3		
Copper	25	.81	.8	-1.8	<25
Gold	50	.97	1.7		
Iron	100	2.8	4.1		
Lead	5.0	.57	1.5	-1.0	<5.0
Magnesium	5000	25	32		
Manganese	15	.12	.9		
Molybdenum	100	.24	.6		
Nickel	40	.12	.3	-0.60	<40
Palladium	50	1.2	2.5		
Platinum	50	4.4	7		
Potassium	5000	29	30		
Selenium	10	1.3	1.7	-0.50	<10
Silicon	100	2.1	7.2		
Silver	5.0	.49	.5	-0.20	<5.0
Sodium	5000	27	31		
Strontium	10	.06	.3		
Thallium	10	.56	.7		
Tin	100	.31	.4		
Titanium	50	.4	.5		
Tungsten	100	3.4	12		
Vanadium	30	.63	1.1		
Zinc	20	.72	2	-0.10	<20

Associated samples MP15432: M92105-2, M92105-4, M92105-6, M92105-8, M92105-10, M92105-12, M92105-14, M92105-17

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15432 Methods: SW846 6010B
Matrix Type: AQUEOUS Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15432
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Metal	M92105-2 Original	MS	Spikelot MPICP	% Rec	QC Limits	M92105-2 Original	DUP	RPD	QC Limits
Prep Date:				06/11/10				06/11/10	
Aluminum									
Antimony									
Arsenic	0.0	506	500	101.2	75-125	0.0	0.0	NC	0-20
Barium	170	2160	2000	99.5	75-125	170	175	2.9	0-20
Beryllium									
Boron									
Cadmium	0.0	508	500	101.6	75-125	0.0	0.0	NC	0-20
Calcium	anr								
Chromium	1.0	495	500	98.8	75-125	1.0	1.0	0.0	0-20
Cobalt									
Copper	0.0	492	500	98.4	75-125	0.0	0.0	NC	0-20
Gold									
Iron	anr								
Lead	0.0	983	1000	98.3	75-125	0.0	0.0	NC	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	2.7	495	500	98.5	75-125	2.7	2.8	3.6	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.0	496	500	99.2	75-125	0.0	0.0	NC	0-20
Silicon									
Silver	0.0	201	200	100.5	75-125	0.0	0.0	NC	0-20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	4.4	507	500	100.5	75-125	4.4	5.3	18.6	0-20

Associated samples MP15432: M92105-2, M92105-4, M92105-6, M92105-8, M92105-10, M92105-12, M92105-14, M92105-17

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15432
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15432
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:			06/11/10					06/11/10	
Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	500	500	100.0	80-120	498	500	99.6	0.4	20
Barium	2020	2000	101.0	80-120	2010	2000	100.5	0.5	20
Beryllium									
Boron									
Cadmium	503	500	100.6	80-120	498	500	99.6	1.0	20
Calcium	anr								
Chromium	489	500	97.8	80-120	486	500	97.2	0.6	20
Cobalt									
Copper	481	500	96.2	80-120	480	500	96.0	0.2	20
Gold									
Iron	anr								
Lead	977	1000	97.7	80-120	979	1000	97.9	0.2	20
Magnesium									
Manganese									
Molybdenum									
Nickel	492	500	98.4	80-120	489	500	97.8	0.6	20
Palladium									
Platinum									
Potassium									
Selenium	496	500	99.2	80-120	496	500	99.2	0.0	20
Silicon									
Silver	199	200	99.5	80-120	200	200	100.0	0.5	20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	499	500	99.8	80-120	496	500	99.2	0.6	20

Associated samples MP15432: M92105-2, M92105-4, M92105-6, M92105-8, M92105-10, M92105-12, M92105-14, M92105-17

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15432
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15432
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/11/10

Metal	M92105-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	170	169	0.8	0-10
Beryllium				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Chromium	1.00	0.00	100.0(a)	0-10
Cobalt				
Copper	0.00	0.00	NC	0-10
Gold				
Iron	anr			
Lead	0.00	0.00	NC	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	2.70	0.00	100.0(a)	0-10
Palladium				
Platinum				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc	4.40	0.00	100.0(a)	0-10

Associated samples MP15432: M92105-2, M92105-4, M92105-6, M92105-8, M92105-10, M92105-12, M92105-14, M92105-17

SERIAL DILUTION RESULTS SUMMARY

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15432
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15441 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 06/14/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.028	.048	-0.0030	<0.20

Associated samples MP15441: M92105-2, M92105-4, M92105-6, M92105-8, M92105-10, M92105-12, M92105-14, M92105-17

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15441
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/14/10 06/14/10

Metal	M92105-6 Original	MS	Spikelot HGRWS1	% Rec	QC Limits	M92105-6 Original	DUP	RPD	QC Limits
Mercury	0.0	3.1	3	103.3	75-125	0.0	0.0	NC	0-20

Associated samples MP15441: M92105-2, M92105-4, M92105-6, M92105-8, M92105-10, M92105-12, M92105-14, M92105-17

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M92105
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15441
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/14/10 06/14/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	3.0	3	100.0	80-120	3.2	3	106.7	6.5	20

Associated samples MP15441: M92105-2, M92105-4, M92105-6, M92105-8, M92105-10, M92105-12, M92105-14, M92105-17

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

New England ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

09/22/10

Technical Report for

Loureiro Eng. Associates

UTC: 2010 Quarterly GW - F&H Building

88UT045

Accutest Job Number: M94152

Sampling Date: 09/09/10

Report to:

nsemmons@loureiro.com

Total number of pages in report: 75

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Tand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (002) ND (R-188) CO MN (11546AA) NC (653) IL (002337) DoD/ISO/IEC 17025:2005 (L2235)

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Accutest Laboratories

Sample Summary

Loureiro Eng. Associates

Job No: M94152

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT045

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M94152-1	09/09/10	10:30	RJD	09/10/10	AQ	Ground Water	1152112
M94152-2	09/09/10	10:30	RJD	09/10/10	AQ	Ground Water	1152112UF
M94152-3	09/09/10	11:45	RJD	09/10/10	AQ	Ground Water	1152113
M94152-4	09/09/10	11:45	RJD	09/10/10	AQ	Ground Water	1152113UF
M94152-5	09/09/10	14:00	RJD	09/10/10	AQ	Ground Water	1152114
M94152-6	09/09/10	14:00	RJD	09/10/10	AQ	Ground Water	1152114UF
M94152-7	09/09/10	11:45	RJD	09/10/10	AQ	Ground Water	1152121
M94152-8	09/09/10	11:45	RJD	09/10/10	AQ	Ground Water	1152121UF
M94152-9	09/09/10	15:15	RJD	09/10/10	AQ	Ground Water	1152115
M94152-10	09/09/10	15:15	RJD	09/10/10	AQ	Ground Water	1152115UF

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Loureiro Eng. Associates	**Job No**	M94152
Site:	UTC: 2010 Quarterly GW - F&H Building	**Report Date**	9/22/2010 5:24:56 PM

10 Sample(s) were collected on 09/09/2010 and were received at Accutest on 09/10/2010 properly preserved, at 2.1 Deg. C and intact. These Samples received an Accutest job number of M94152. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** MSE2040

- All samples were analyzed within the recommended method holding time.
- Sample(s) M94151-2MS, M94151-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 2-Hexanone, Naphthalene are outside control limits. Blank Spike meets program technical requirements.
- MS/MSD Recovery(s) for 1,2,3-Trichlorobenzene, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Acetone, Naphthalene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Quadratic regression is employed for for compound bromoform, trans-1,4-dichloro-2-butene from initial calibration standard MSE1987-ICC1987. Initial calibration verification standard MSE1987-ICV1987 for dichlorodifluoromethane exceed 35% Difference.
- Continuing calibration check standard MSE2040-CC1987 for 1,2,3-trichlorobenzene exceed 30% Difference. This check standard met RCP criteria.
- MSE2040-BS/BSD, M94151-2MS/MSD for Acrylonitrile: Outside control limits. Associated samples are non-detect for this compound.
- BSD Recovery(s) for Naphthalene are outside control limits. Blank Spike meets program technical requirements.

Extractables by GC By Method CT-ETPH 7/06

Matrix AQ **Batch ID:** OP22681

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M94245-9MS, M94245-9MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8082

Matrix AQ **Batch ID:** OP22682

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94245-10MS, M94245-10MSD were used as the QC samples indicated.

Metals By Method SW846 6010B

Matrix AQ	**Batch ID:** MP15919

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94152-2DUP, M94152-2MS, M94152-2SDL, M94152-2DUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Cadmium, Chromium, Copper, Lead, Nickel are outside control limits for sample MP15919-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Copper, Lead, Nickel, Selenium are outside control limits for sample MP15919-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP15919-SD1 for Barium: Serial Dilution RPD acceptable due to low duplicate and sample concentrations.
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ	**Batch ID:** MP15917

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94151-3DUP, M94151-3MS were used as the QC samples for metals.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M94152).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1152112		
Lab Sample ID:	M94152-1	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E48326.D	1	09/11/10	SC	n/a	n/a	MSE2040
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152112		
Lab Sample ID:	M94152-1	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152112		
Lab Sample ID:	M94152-1	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	89%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152112		
Lab Sample ID:	M94152-1	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG21146.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.211	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	85%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152112		
Lab Sample ID:	M94152-1	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ60392.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.27	ug/l	
11104-28-2	Aroclor 1221	ND	0.27	ug/l	
11141-16-5	Aroclor 1232	ND	0.27	ug/l	
53469-21-9	Aroclor 1242	ND	0.27	ug/l	
12672-29-6	Aroclor 1248	ND	0.27	ug/l	
11097-69-1	Aroclor 1254	ND	0.27	ug/l	
11096-82-5	Aroclor 1260	ND	0.27	ug/l	
37324-23-5	Aroclor 1262	ND	0.27	ug/l	
11100-14-4	Aroclor 1268	ND	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		30-150%
877-09-8	Tetrachloro-m-xylene	87%		30-150%
2051-24-3	Decachlorobiphenyl	94%		30-150%
2051-24-3	Decachlorobiphenyl	96%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152112UF		
Lab Sample ID:	M94152-2	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	< 50	50	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	09/11/10	09/13/10	MA	SW846 7470A [1]	SW846 7470A [3]
Nickel	< 40	40	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12218
(3) Prep QC Batch: MP15917
(4) Prep QC Batch: MP15919

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1152113		
Lab Sample ID:	M94152-3	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E48327.D	1	09/11/10	SC	n/a	n/a	MSE2040
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152113		
Lab Sample ID:	M94152-3	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	10.6	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	5.9	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	2.0	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152113		
Lab Sample ID:	M94152-3	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152113		
Lab Sample ID:	M94152-3	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG21147.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.557	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	73%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152113		
Lab Sample ID:	M94152-3	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ60393.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-150%
877-09-8	Tetrachloro-m-xylene	92%		30-150%
2051-24-3	Decachlorobiphenyl	97%		30-150%
2051-24-3	Decachlorobiphenyl	102%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152113UF		
Lab Sample ID:	M94152-4	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	111	50	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	09/11/10	09/13/10	MA	SW846 7470A [1]	SW846 7470A [3]
Nickel	< 40	40	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12218
(3) Prep QC Batch: MP15917
(4) Prep QC Batch: MP15919

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1152114		
Lab Sample ID:	M94152-5	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E48328.D	1	09/11/10	SC	n/a	n/a	MSE2040
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152114		
Lab Sample ID:	M94152-5	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	1.0	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152114		
Lab Sample ID:	M94152-5	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	89%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152114		
Lab Sample ID:	M94152-5	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG21148.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.114	0.085	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	52%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152114		
Lab Sample ID:	M94152-5	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ60394.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.27	ug/l	
11104-28-2	Aroclor 1221	ND	0.27	ug/l	
11141-16-5	Aroclor 1232	ND	0.27	ug/l	
53469-21-9	Aroclor 1242	ND	0.27	ug/l	
12672-29-6	Aroclor 1248	ND	0.27	ug/l	
11097-69-1	Aroclor 1254	ND	0.27	ug/l	
11096-82-5	Aroclor 1260	ND	0.27	ug/l	
37324-23-5	Aroclor 1262	ND	0.27	ug/l	
11100-14-4	Aroclor 1268	ND	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		30-150%
877-09-8	Tetrachloro-m-xylene	88%		30-150%
2051-24-3	Decachlorobiphenyl	71%		30-150%
2051-24-3	Decachlorobiphenyl	74%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152114UF		
Lab Sample ID:	M94152-6	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	211	50	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	83.3	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	09/11/10	09/13/10	MA	SW846 7470A [1]	SW846 7470A [3]
Nickel	< 40	40	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12218
(3) Prep QC Batch: MP15917
(4) Prep QC Batch: MP15919

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1152121		
Lab Sample ID:	M94152-7	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E48329.D	1	09/11/10	SC	n/a	n/a	MSE2040
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	1.2	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152121		
Lab Sample ID:	M94152-7	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	10.2	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	6.1	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.8	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	118%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152121		
Lab Sample ID:	M94152-7	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	93%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152121		
Lab Sample ID:	M94152-7	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG21149.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.484	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	79%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152121		
Lab Sample ID:	M94152-7	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ60395.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.27	ug/l	
11104-28-2	Aroclor 1221	ND	0.27	ug/l	
11141-16-5	Aroclor 1232	ND	0.27	ug/l	
53469-21-9	Aroclor 1242	ND	0.27	ug/l	
12672-29-6	Aroclor 1248	ND	0.27	ug/l	
11097-69-1	Aroclor 1254	ND	0.27	ug/l	
11096-82-5	Aroclor 1260	ND	0.27	ug/l	
37324-23-5	Aroclor 1262	ND	0.27	ug/l	
11100-14-4	Aroclor 1268	ND	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		30-150%
877-09-8	Tetrachloro-m-xylene	80%		30-150%
2051-24-3	Decachlorobiphenyl	96%		30-150%
2051-24-3	Decachlorobiphenyl	100%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152121UF		
Lab Sample ID:	M94152-8	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	105	50	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	09/11/10	09/13/10	MA	SW846 7470A [1]	SW846 7470A [3]
Nickel	< 40	40	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12218
(3) Prep QC Batch: MP15917
(4) Prep QC Batch: MP15919

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1152115		
Lab Sample ID:	M94152-9	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E48330.D	1	09/11/10	SC	n/a	n/a	MSE2040
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152115		
Lab Sample ID:	M94152-9	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	1.9	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.5	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	119%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152115		
Lab Sample ID:	M94152-9	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152115		
Lab Sample ID:	M94152-9	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG21150.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.213	0.082	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	87%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152115		
Lab Sample ID:	M94152-9	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ60396.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.28	ug/l	
11104-28-2	Aroclor 1221	ND	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.28	ug/l	
53469-21-9	Aroclor 1242	ND	0.28	ug/l	
12672-29-6	Aroclor 1248	ND	0.28	ug/l	
11097-69-1	Aroclor 1254	ND	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.28	ug/l	
37324-23-5	Aroclor 1262	ND	0.28	ug/l	
11100-14-4	Aroclor 1268	ND	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		30-150%
877-09-8	Tetrachloro-m-xylene	82%		30-150%
2051-24-3	Decachlorobiphenyl	98%		30-150%
2051-24-3	Decachlorobiphenyl	103%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152115UF		
Lab Sample ID:	M94152-10	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Barium	82.4	50	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Copper	< 25	25	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	09/11/10	09/13/10	MA	SW846 7470A [1]	SW846 7470A [3]
Nickel	< 40	40	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Selenium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Silver	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]
Zinc	< 20	20	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12218
(3) Prep QC Batch: MP15917
(4) Prep QC Batch: MP15919

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	**SW846 8082**	AQ	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	**SW846 8082**	AQ	Certified by SOP MGC204/GC-ECD

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M94152
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Robin Pokinney (LEA)
ADDRESS: 100 Northwest Drive
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO:
PHONE #:

FACILITY INFORMATION

PROJECT NAME: UTC FCH Bldg 2010 Maintenance
LOCATION: East Hartford, CT
PROJECT NO.: 88UT045.001
FAX #:

ANALYTICAL INFORMATION

VOCs 8260B; CT ETPH; PCBs 8082; RCP + CN, Cr

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE # M94152	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	N2O4	VOCs 8260B	CT ETPH	PCBs 8082	RCP + CN, Cr	LAB USE ONLY
-1	115211Z	9/9/10	1030	CSO	GW	6	X				X	X	X	X	X		
-2	115211ZuF		↓			1			X							X	
-3	115211S		1145			6	X				X	X	X	X	X		
-4	115211SuF		↓			1			X							X	
-5	115211Y		1400			6	X				X	X	X	X	X		
-6	115211YuF		↓			1			X							X	
-7	115221		1145			6	X				X	X	X	X	X		
-8	115221uF		↓			1			X							X	
-9	115215		1515			6	X				X	X	X	X	X		
-10	115215uF		↓			1			X							X	

DATA TURNAROUND INFORMATION

- ☐ 14 DAYS STANDARD
- ☐ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

Voc 19A, 5B, 3H4

COMMENTS/REMARKS

Provide CT RCP analytical lists for VOCs + PCBs + provide CT RCP report ref. gw. # RBG/2010-377

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	9/9/10 1530	1.	2. B. C	9-9-10 18:15	2. B. C
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☑ TEMPERATURE 21 C

M94152: Chain of Custody

Page 1 of 1

Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **Accutest New England** **Client:** **Loureiro Eng. Associates**

Project Location: **UTC: 2010 Quarterly GW - F&H Building** **Project Number:** **88UT045**

Sampling Date(s): **9/9/2010**

Laboratory Sample ID(s): M94152-1, M94152-2, M94152-3, M94152-4, M94152-5, M94152-6, M94152-7, M94152-8, M94152-9, M94152-10

Methods: CT-ETPH 7/06, SW846 6010B, SW846 7470A, SW846 8082, 8260B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☐ No ☑
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☐ No ☑
	b) Were these reporting limits met?	Yes ☐ No ☑
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes ☐ No ☑
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Position: Lab Director

Printed Name: Reza Tand Date: 9/22/2010
Accutest New England

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M94152

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT045

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M94152-1 1152112	Collected: 09-SEP-10 10:30 By: RJD		Received: 10-SEP-10 By: SAP			
M94152-1	SW846 8260B	11-SEP-10 03:47	SC			V8260RCP
M94152-1	SW846 8082	17-SEP-10 21:22	CZ	16-SEP-10	MEW	P8082RCP
M94152-1	CT-ETPH 7/06	18-SEP-10 12:40	KD	16-SEP-10	MEW	BCTTPH
M94152-2 1152112UF	Collected: 09-SEP-10 10:30 By: RJD		Received: 10-SEP-10 By: SAP			
M94152-2	SW846 7470A	13-SEP-10 10:35	MA	11-SEP-10	MA	HG
M94152-2	SW846 6010B	14-SEP-10 10:45	DA	13-SEP-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M94152-3 1152113	Collected: 09-SEP-10 11:45 By: RJD		Received: 10-SEP-10 By: SAP			
M94152-3	SW846 8260B	11-SEP-10 04:16	SC			V8260RCP
M94152-3	SW846 8082	17-SEP-10 21:43	CZ	16-SEP-10	MEW	P8082RCP
M94152-3	CT-ETPH 7/06	18-SEP-10 13:16	KD	16-SEP-10	MEW	BCTTPH
M94152-4 1152113UF	Collected: 09-SEP-10 11:45 By: RJD		Received: 10-SEP-10 By: SAP			
M94152-4	SW846 7470A	13-SEP-10 10:37	MA	11-SEP-10	MA	HG
M94152-4	SW846 6010B	14-SEP-10 11:17	DA	13-SEP-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M94152-5 1152114	Collected: 09-SEP-10 14:00 By: RJD		Received: 10-SEP-10 By: SAP			
M94152-5	SW846 8260B	11-SEP-10 04:45	SC			V8260RCP
M94152-5	SW846 8082	17-SEP-10 21:58	CZ	16-SEP-10	MEW	P8082RCP
M94152-5	CT-ETPH 7/06	18-SEP-10 13:51	KD	16-SEP-10	MEW	BCTTPH
M94152-6 1152114UF	Collected: 09-SEP-10 14:00 By: RJD		Received: 10-SEP-10 By: SAP			
M94152-6	SW846 7470A	13-SEP-10 10:39	MA	11-SEP-10	MA	HG

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M94152

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT045

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M94152-6	SW846 6010B	14-SEP-10 11:22	DA	13-SEP-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M94152-7 1152121	Collected: 09-SEP-10 11:45 By: RJD		Received: 10-SEP-10 By: SAP			
M94152-7	SW846 8260B	11-SEP-10 05:13	SC			V8260RCP
M94152-7	SW846 8082	17-SEP-10 22:20	CZ	16-SEP-10	MEW	P8082RCP
M94152-7	CT-ETPH 7/06	18-SEP-10 14:27	KD	16-SEP-10	MEW	BCTTPH
M94152-8 1152121UF	Collected: 09-SEP-10 11:45 By: RJD		Received: 10-SEP-10 By: SAP			
M94152-8	SW846 7470A	13-SEP-10 10:42	MA	11-SEP-10	MA	HG
M94152-8	SW846 6010B	14-SEP-10 11:26	DA	13-SEP-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M94152-9 1152115	Collected: 09-SEP-10 15:15 By: RJD		Received: 10-SEP-10 By: SAP			
M94152-9	SW846 8260B	11-SEP-10 05:35	SC			V8260RCP
M94152-9	SW846 8082	17-SEP-10 22:41	CZ	16-SEP-10	MEW	P8082RCP
M94152-9	CT-ETPH 7/06	18-SEP-10 15:03	KD	16-SEP-10	MEW	BCTTPH
M94152-10 1152115UF	Collected: 09-SEP-10 15:15 By: RJD		Received: 10-SEP-10 By: SAP			
M94152-10	SW846 7470A	13-SEP-10 10:44	MA	11-SEP-10	MA	HG
M94152-10	SW846 6010B	14-SEP-10 11:31	DA	13-SEP-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE2040-MB	E48315.D	1	09/10/10	SC	n/a	n/a	MSE2040

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE2040-MB	E48315.D	1	09/10/10	SC	n/a	n/a	MSE2040

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE2040-MB	E48315.D	1	09/10/10	SC	n/a	n/a	MSE2040

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	70-130%
2037-26-5	Toluene-D8	102%	70-130%
460-00-4	4-Bromofluorobenzene	91%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE2040-BS	E48313.D	1	09/10/10	SC	n/a	n/a	MSE2040
MSE2040-BSD	E48314.D	1	09/10/10	SC	n/a	n/a	MSE2040

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	43.3	87	45.1	90	4	70-130/25
107-13-1	Acrylonitrile	50	228	456* [a]	250	500* [a]	9	70-130/25
71-43-2	Benzene	50	48.5	97	50.5	101	4	70-130/25
108-86-1	Bromobenzene	50	46.0	92	44.5	89	3	70-130/25
75-27-4	Bromodichloromethane	50	52.6	105	53.5	107	2	70-130/25
75-25-2	Bromoform	50	50.2	100	48.7	97	3	70-130/25
74-83-9	Bromomethane	50	47.5	95	49.3	99	4	70-130/25
78-93-3	2-Butanone (MEK)	50	37.9	76	44.6	89	16	70-130/25
104-51-8	n-Butylbenzene	50	48.7	97	47.9	96	2	70-130/25
135-98-8	sec-Butylbenzene	50	49.2	98	48.4	97	2	70-130/25
98-06-6	tert-Butylbenzene	50	49.1	98	47.7	95	3	70-130/25
75-15-0	Carbon disulfide	50	53.0	106	55.0	110	4	70-130/25
56-23-5	Carbon tetrachloride	50	50.1	100	52.2	104	4	70-130/25
108-90-7	Chlorobenzene	50	49.0	98	47.7	95	3	70-130/25
75-00-3	Chloroethane	50	47.4	95	50.7	101	7	70-130/25
67-66-3	Chloroform	50	52.7	105	56.3	113	7	70-130/25
74-87-3	Chloromethane	50	42.1	84	41.4	83	2	70-130/25
95-49-8	o-Chlorotoluene	50	48.9	98	47.9	96	2	70-130/25
106-43-4	p-Chlorotoluene	50	49.5	99	50.1	100	1	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	50	44.4	89	43.9	88	1	70-130/25
124-48-1	Dibromochloromethane	50	45.9	92	45.6	91	1	70-130/25
106-93-4	1,2-Dibromoethane	50	47.4	95	47.0	94	1	70-130/25
95-50-1	1,2-Dichlorobenzene	50	47.3	95	47.4	95	0	70-130/25
541-73-1	1,3-Dichlorobenzene	50	48.6	97	48.3	97	1	70-130/25
106-46-7	1,4-Dichlorobenzene	50	49.1	98	48.1	96	2	70-130/25
75-71-8	Dichlorodifluoromethane	50	48.7	97	49.4	99	1	70-130/25
75-34-3	1,1-Dichloroethane	50	51.8	104	54.2	108	5	70-130/25
107-06-2	1,2-Dichloroethane	50	53.4	107	54.5	109	2	70-130/25
75-35-4	1,1-Dichloroethene	50	51.6	103	53.8	108	4	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	49.1	98	49.4	99	1	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	49.4	99	51.4	103	4	70-130/25
78-87-5	1,2-Dichloropropane	50	50.7	101	49.9	100	2	70-130/25
142-28-9	1,3-Dichloropropane	50	49.6	99	48.0	96	3	70-130/25
594-20-7	2,2-Dichloropropane	50	59.3	119	59.7	119	1	70-130/25
563-58-6	1,1-Dichloropropene	50	51.1	102	51.2	102	0	70-130/25
10061-01-5	cis-1,3-Dichloropropene	50	52.7	105	52.4	105	1	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE2040-BS	E48313.D	1	09/10/10	SC	n/a	n/a	MSE2040
MSE2040-BSD	E48314.D	1	09/10/10	SC	n/a	n/a	MSE2040

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	58.3	117	57.6	115	1	70-130/25
100-41-4	Ethylbenzene	50	48.2	96	46.5	93	4	70-130/25
76-13-1	Freon 113	50	54.0	108	54.2	108	0	70-130/25
87-68-3	Hexachlorobutadiene	50	47.7	95	47.3	95	1	70-130/25
591-78-6	2-Hexanone	50	31.0	62* b	34.8	70	12	70-130/25
98-82-8	Isopropylbenzene	50	55.7	111	54.8	110	2	70-130/25
99-87-6	p-Isopropyltoluene	50	49.1	98	49.9	100	2	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	50.2	100	52.1	104	4	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	43.5	87	42.3	85	3	70-130/25
74-95-3	Methylene bromide	50	51.5	103	52.7	105	2	70-130/25
75-09-2	Methylene chloride	50	53.5	107	57.0	114	6	70-130/25
91-20-3	Naphthalene	50	34.7	69* b	33.9	68* b	2	70-130/25
103-65-1	n-Propylbenzene	50	49.2	98	47.6	95	3	70-130/25
100-42-5	Styrene	50	48.0	96	47.1	94	2	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	47.6	95	47.8	96	0	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	52.4	105	52.4	105	0	70-130/25
127-18-4	Tetrachloroethene	50	45.7	91	45.0	90	2	70-130/25
109-99-9	Tetrahydrofuran	50	42.2	84	44.6	89	6	70-130/25
108-88-3	Toluene	50	53.1	106	52.5	105	1	70-130/25
110-57-6	Trans-1,4-Dichloro-2-Butene	50	45.5	91	45.0	90	1	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	35.6	71	35.0	70	2	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	41.7	83	40.1	80	4	70-130/25
71-55-6	1,1,1-Trichloroethane	50	56.3	113	57.5	115	2	70-130/25
79-00-5	1,1,2-Trichloroethane	50	51.7	103	52.5	105	2	70-130/25
79-01-6	Trichloroethene	50	46.9	94	47.0	94	0	70-130/25
75-69-4	Trichlorofluoromethane	50	47.7	95	48.9	98	2	70-130/25
96-18-4	1,2,3-Trichloropropane	50	46.5	93	45.4	91	2	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	48.7	97	48.5	97	0	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	50.1	100	48.8	98	3	70-130/25
75-01-4	Vinyl chloride	50	47.1	94	49.0	98	4	70-130/25
	m,p-Xylene	100	99.8	100	98.6	99	1	70-130/25
95-47-6	o-Xylene	50	50.9	102	49.2	98	3	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSE2040-BS	E48313.D	1	09/10/10	SC	n/a	n/a	MSE2040
MSE2040-BSD	E48314.D	1	09/10/10	SC	n/a	n/a	MSE2040

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	101%	101%	70-130%
2037-26-5	Toluene-D8	99%	102%	70-130%
460-00-4	4-Bromofluorobenzene	93%	93%	70-130%

(a) Outside control limits. Associated samples are non-detect for this compound.
(b) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M94151-2MS	E48319.D	5	09/11/10	SC	n/a	n/a	MSE2040
M94151-2MSD	E48320.D	5	09/11/10	SC	n/a	n/a	MSE2040
M94151-2	E48318.D	1	09/11/10	SC	n/a	n/a	MSE2040

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	M94151-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	87.2	35* [a]	99.6	40* [a]	13	70-130/30
107-13-1	Acrylonitrile	ND		250	1140	456* [b]	1160	464* [b]	2	70-130/30
71-43-2	Benzene	ND		250	254	102	248	99	2	70-130/30
108-86-1	Bromobenzene	ND		250	221	88	224	90	1	70-130/30
75-27-4	Bromodichloromethane	ND		250	260	104	259	104	0	70-130/30
75-25-2	Bromoform	ND		250	225	90	236	94	5	70-130/30
74-83-9	Bromomethane	ND		250	260	104	257	103	1	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	128	51* [a]	133	53* [a]	4	70-130/30
104-51-8	n-Butylbenzene	ND		250	240	96	237	95	1	70-130/30
135-98-8	sec-Butylbenzene	ND		250	241	96	240	96	0	70-130/30
98-06-6	tert-Butylbenzene	ND		250	238	95	229	92	4	70-130/30
75-15-0	Carbon disulfide	ND		250	233	93	248	99	6	70-130/30
56-23-5	Carbon tetrachloride	ND		250	277	111	262	105	6	70-130/30
108-90-7	Chlorobenzene	ND		250	241	96	238	95	1	70-130/30
75-00-3	Chloroethane	ND		250	248	99	260	104	5	70-130/30
67-66-3	Chloroform	ND		250	273	109	270	108	1	70-130/30
74-87-3	Chloromethane	ND		250	210	84	221	88	5	70-130/30
95-49-8	o-Chlorotoluene	ND		250	236	94	235	94	0	70-130/30
106-43-4	p-Chlorotoluene	ND		250	245	98	239	96	2	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	228	91	210	84	8	70-130/30
124-48-1	Dibromochloromethane	ND		250	219	88	217	87	1	70-130/30
106-93-4	1,2-Dibromoethane	ND		250	235	94	231	92	2	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	231	92	226	90	2	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	238	95	230	92	3	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	246	98	243	97	1	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	256	102	262	105	2	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	272	109	267	107	2	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	278	111	266	106	4	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	267	107	264	106	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	249	100	247	99	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	257	103	255	102	1	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	249	100	234	94	6	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	248	99	237	95	5	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	307	123	308	123	0	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	262	105	250	100	5	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND		250	240	96	241	96	0	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M94151-2MS	E48319.D	5	09/11/10	SC	n/a	n/a	MSE2040
M94151-2MSD	E48320.D	5	09/11/10	SC	n/a	n/a	MSE2040
M94151-2	E48318.D	1	09/11/10	SC	n/a	n/a	MSE2040

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	M94151-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		250	267	107	268	107	0	70-130/30
100-41-4	Ethylbenzene	ND		250	233	93	231	92	1	70-130/30
76-13-1	Freon 113	ND		250	279	112	288	115	3	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	242	97	238	95	2	70-130/30
591-78-6	2-Hexanone	ND		250	101	40* [a]	97.0	39* [a]	4	70-130/30
98-82-8	Isopropylbenzene	ND		250	268	107	263	105	2	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	243	97	243	97	0	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	241	96	253	101	5	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	164	66* [a]	173	69* [a]	5	70-130/30
74-95-3	Methylene bromide	ND		250	268	107	253	101	6	70-130/30
75-09-2	Methylene chloride	ND		250	262	105	261	104	0	70-130/30
91-20-3	Naphthalene	ND		250	161	64* [a]	157	63* [a]	3	70-130/30
103-65-1	n-Propylbenzene	ND		250	234	94	231	92	1	70-130/30
100-42-5	Styrene	ND		250	228	91	241	96	6	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	246	98	235	94	5	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	258	103	252	101	2	70-130/30
127-18-4	Tetrachloroethene	ND		250	232	93	225	90	3	70-130/30
109-99-9	Tetrahydrofuran	ND		250	199	80	214	86	7	70-130/30
108-88-3	Toluene	ND		250	263	105	253	101	4	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND		250	190	76	217	87	13	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	170	68* [a]	162	65* [a]	5	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	194	78	193	77	1	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	287	115	289	116	1	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	259	104	248	99	4	70-130/30
79-01-6	Trichloroethene	ND		250	245	98	235	94	4	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	252	101	262	105	4	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	209	84	214	86	2	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	235	94	230	92	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	244	98	240	96	2	70-130/30
75-01-4	Vinyl chloride	ND		250	253	101	244	98	4	70-130/30
	m,p-Xylene	ND		500	489	98	485	97	1	70-130/30
95-47-6	o-Xylene	ND		250	254	102	242	97	5	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M94151-2MS	E48319.D	5	09/11/10	SC	n/a	n/a	MSE2040
M94151-2MSD	E48320.D	5	09/11/10	SC	n/a	n/a	MSE2040
M94151-2	E48318.D	1	09/11/10	SC	n/a	n/a	MSE2040

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Surrogate Recoveries	MS	MSD	M94151-2	Limits
1868-53-7	Dibromofluoromethane	106%	108%	109%	70-130%
2037-26-5	Toluene-D8	104%	101%	104%	70-130%
460-00-4	4-Bromofluorobenzene	94%	95%	92%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) Outside control limits. Associated samples are non-detect for this compound.

Volatile Internal Standard Area Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Check Std:	MSE2040-CC1987	**Injection Date:**	09/10/10
Lab File ID:	E48312.D	**Injection Time:**	21:19
Instrument ID:	GCMSE	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	156015	9.16	231446	10.05	100492	13.31	117133	15.87	29054	6.68
Upper Limit [a]	312030	9.66	462892	10.55	200984	13.81	234266	16.37	58108	7.18
Lower Limit [b]	78008	8.66	115723	9.55	50246	12.81	58567	15.37	14527	6.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSE2040-BS	152707	9.16	223738	10.05	98045	13.30	112256	15.86	28459	6.67
MSE2040-BSD	148093	9.16	222170	10.04	100321	13.30	114858	15.86	26113	6.67
MSE2040-MB	144755	9.16	214954	10.04	91033	13.30	103862	15.86	28834	6.68
ZZZZZZ	141771	9.16	207198	10.04	87592	13.30	101343	15.86	21876	6.67
ZZZZZZ	137608	9.16	194959	10.04	85196	13.31	94841	15.86	19794	6.67
M94151-2	138540	9.17	197977	10.04	85929	13.31	94160	15.86	23054	6.67
M94151-2MS	142643	9.16	207115	10.04	91781	13.30	108681	15.85	24680	6.67
M94151-2MSD	140943	9.16	213533	10.04	94191	13.31	111608	15.86	26316	6.68
ZZZZZZ	141557	9.16	206694	10.04	86130	13.30	95239	15.86	23738	6.68
ZZZZZZ	136376	9.16	191737	10.05	82556	13.30	95822	15.86	23017	6.67
ZZZZZZ	134109	9.17	199085	10.04	84769	13.31	91799	15.86	25720	6.68
ZZZZZZ	130775	9.17	193003	10.04	80097	13.30	90120	15.86	21054	6.67
M94152-1	131120	9.16	186884	10.05	80815	13.30	89740	15.86	21098	6.68
M94152-3	128370	9.16	186301	10.04	79488	13.31	87810	15.86	19595	6.68
M94152-5	126459	9.16	179596	10.04	77371	13.30	87836	15.86	20984	6.68
M94152-7	123671	9.16	178445	10.04	76900	13.30	84849	15.87	20670	6.67
M94152-9	118282	9.16	176052	10.04	75995	13.30	82728	15.86	21193	6.68
ZZZZZZ	121618	9.16	179336	10.04	77385	13.30	82304	15.86	20469	6.67
ZZZZZZ	115665	9.16	174255	10.04	75855	13.30	82269	15.86	21150	6.68
ZZZZZZ	118056	9.17	171349	10.04	73791	13.30	80338	15.86	21192	6.67
ZZZZZZ	117939	9.16	167933	10.04	73118	13.30	79986	15.86	20710	6.67
ZZZZZZ	115081	9.16	163900	10.04	72823	13.30	81135	15.86	21639	6.67
ZZZZZZ	117788	9.16	172225	10.04	73731	13.30	77589	15.86	21695	6.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M94152-1	E48326.D	112.0	102.0	89.0
M94152-3	E48327.D	115.0	101.0	92.0
M94152-5	E48328.D	114.0	99.0	89.0
M94152-7	E48329.D	118.0	103.0	93.0
M94152-9	E48330.D	119.0	102.0	92.0
M94151-2MS	E48319.D	106.0	104.0	94.0
M94151-2MSD	E48320.D	108.0	101.0	95.0
MSE2040-BS	E48313.D	101.0	99.0	93.0
MSE2040-BSD	E48314.D	101.0	102.0	93.0
MSE2040-MB	E48315.D	106.0	102.0	91.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22681-MB	BG21135.D	1	09/18/10	KD	09/16/10	OP22681	GBG681

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries		Limits
3386-33-2	1-Chlorooctadecane	93%	50-149%

Method Blank Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22682-MB	YZ60380.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572

The QC reported here applies to the following samples: **Method:** SW846 8082

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	73%	30-150%
877-09-8	Tetrachloro-m-xylene	72%	30-150%
2051-24-3	Decachlorobiphenyl	58%	30-150%
2051-24-3	Decachlorobiphenyl	56%	30-150%

Blank Spike Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22681-BS	BG21136.D	1	09/18/10	KD	09/16/10	OP22681	GBG681

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-DRO (C9-C36)	0.7	0.577	82	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
3386-33-2	1-Chlorooctadecane	82%	50-149%

Blank Spike Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22682-BS	YZ60381.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572

The QC reported here applies to the following samples: **Method:** SW846 8082

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	1.7	85	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	1.8	90	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	78%	30-150%
877-09-8	Tetrachloro-m-xylene	75%	30-150%
2051-24-3	Decachlorobiphenyl	51%	30-150%
2051-24-3	Decachlorobiphenyl	50%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22681-MS	BG21137.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
OP22681-MSD	BG21138.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
M94245-9	BG21139.D	1	09/18/10	KD	09/16/10	OP22681	GBG681

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	M94245-9 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	CT-DRO (C9-C36)	0.0765		0.7	0.578	72	0.628	79	8	50-129/26

CAS No.	Surrogate Recoveries	MS	MSD	M94245-9	Limits
3386-33-2	1-Chlorooctadecane	81%	94%	102%	50-149%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22682-MS	YZ60382.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
OP22682-MSD	YZ60383.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
M94245-10	YZ60384.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572

The QC reported here applies to the following samples: **Method:** SW846 8082

M94152-1, M94152-3, M94152-5, M94152-7, M94152-9

CAS No.	Compound	M94245-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		2	1.9	95	2.1	105	10	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		2	1.8	90	2.0	100	11	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M94245-10	Limits
877-09-8	Tetrachloro-m-xylene	73%	85%	71%	30-150%
877-09-8	Tetrachloro-m-xylene	68%	83%	60%	30-150%
2051-24-3	Decachlorobiphenyl	50%	55%	49%	30-150%
2051-24-3	Decachlorobiphenyl	49%	55%	49%	30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: CT-ETPH 7/06 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
M94152-1	BG21146.D	85.0
M94152-3	BG21147.D	73.0
M94152-5	BG21148.D	52.0
M94152-7	BG21149.D	79.0
M94152-9	BG21150.D	87.0
OP22681-BS	BG21136.D	82.0
OP22681-MB	BG21135.D	93.0
OP22681-MS	BG21137.D	81.0
OP22681-MSD	BG21138.D	94.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chlorooctadecane	50-149%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: M94152
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: SW846 8082 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
M94152-1	YZ60392.D	90.0	87.0	94.0	96.0
M94152-3	YZ60393.D	91.0	92.0	97.0	102.0
M94152-5	YZ60394.D	87.0	88.0	71.0	74.0
M94152-7	YZ60395.D	86.0	80.0	96.0	100.0
M94152-9	YZ60396.D	88.0	82.0	98.0	103.0
OP22682-BS	YZ60381.D	78.0	75.0	51.0	50.0
OP22682-MB	YZ60380.D	73.0	72.0	58.0	56.0
OP22682-MS	YZ60382.D	73.0	68.0	50.0	49.0
OP22682-MSD	YZ60383.D	85.0	83.0	55.0	55.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	30-150%
S2 = Decachlorobiphenyl	30-150%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15917
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/11/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.022	.048	-0.015	<0.20

Associated samples MP15917: M94152-2, M94152-4, M94152-6, M94152-8, M94152-10

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.1.1

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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15917
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/11/10 09/11/10

Metal	M94151-3 Original	MS	Spikelot HGRWS1	% Rec	QC Limits	M94151-3 Original	DUP	RPD	QC Limits
Mercury	0.0	3.0	3	100.0	75-125	0.0	0.0	NC	0-20

Associated samples MP15917: M94152-2, M94152-4, M94152-6, M94152-8, M94152-10

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

7.1.2

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SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15917
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/11/10 09/11/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	2.9	3	96.7	80-120	3.0	3	100.0	3.4	20

Associated samples MP15917: M94152-2, M94152-4, M94152-6, M94152-8, M94152-10

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 09/13/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	17	17		
Antimony	6.0	1.2	1.2		
Arsenic	4.0	1.1	1.9	0.10	<4.0
Barium	50	.36	3.7	1.9	<50
Beryllium	4.0	.18	.18		
Boron	100	.34	1.5		
Cadmium	4.0	.08	.12	0.10	<4.0
Calcium	5000	18	39		
Chromium	10	.48	.53	0.10	<10
Cobalt	50	.19	.28		
Copper	25	.92	.92	-0.40	<25
Gold	50	1.3	1.7		
Iron	100	5.2	5.2		
Lead	5.0	1	1.5	0.50	<5.0
Magnesium	5000	72	72		
Manganese	15	.14	.9		
Molybdenum	100	.15	.64		
Nickel	40	.25	.3	0.10	<40
Palladium	50	2.3	2.5		
Platinum	50	8.4	8.4		
Potassium	5000	44	44		
Selenium	10	1.1	1.7	0.40	<10
Silicon	100	6.4	7.2		
Silver	5.0	1	1	0.0	<5.0
Sodium	5000	29	31		
Strontium	10	.4	.4		
Thallium	5.0	.65	.74		
Tin	100	.45	.45		
Titanium	50	.84	.84		
Tungsten	100	5.8	12		
Vanadium	10	.87	1.1		
Zinc	20	.27	2	0.30	<20

Associated samples MP15919: M94152-2, M94152-4, M94152-6, M94152-8, M94152-10

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919 Methods: SW846 6010B
Matrix Type: AQUEOUS Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:				09/13/10				09/13/10	
Metal	M94152-2 Original	MS	Spikelot MPICP	% Rec	QC Limits	M94152-2 Original	DUP	RPD	QC Limits
Aluminum									
Antimony	anr								
Arsenic	0.0	507	500	101.4	75-125	0.0	0.0	NC	0-20
Barium	33.4	2060	2000	101.3	75-125	33.4	31.4	6.2	0-20
Beryllium	anr								
Boron									
Cadmium	0.0	514	500	102.8	75-125	0.0	0.10	200.0(a)	0-20
Calcium	anr								
Chromium	0.0	499	500	99.8	75-125	0.0	0.80	200.0(a)	0-20
Cobalt									
Copper	1.5	488	500	97.3	75-125	1.5	2.6	53.7 (a)	0-20
Gold									
Iron									
Lead	1.2	978	1000	97.7	75-125	1.2	0.0	200.0(a)	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	0.60	505	500	100.9	75-125	0.60	0.80	28.6 (a)	0-20
Palladium									
Platinum									
Potassium									
Selenium	1.6	502	500	100.1	75-125	1.6	1.5	6.5	0-20
Silicon									
Silver	0.0	207	200	103.5	75-125	0.0	0.0	NC	0-20
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	11.7	508	500	99.3	75-125	11.7	11.5	1.7	0-20

Associated samples MP15919: M94152-2, M94152-4, M94152-6, M94152-8, M94152-10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919 Methods: SW846 6010B
Matrix Type: AQUEOUS Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:			09/13/10					09/13/10	
Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	anr								
Arsenic	504	500	100.8	80-120	505	500	101.0	0.2	20
Barium	1980	2000	99.0	80-120	2090	2000	104.5	5.4	20
Beryllium	anr								
Boron									
Cadmium	512	500	102.4	80-120	514	500	102.8	0.4	20
Calcium	anr								
Chromium	494	500	98.8	80-120	504	500	100.8	2.0	20
Cobalt									
Copper	490	500	98.0	80-120	484	500	96.8	1.2	20
Gold									
Iron									
Lead	990	1000	99.0	80-120	983	1000	98.3	0.7	20
Magnesium									
Manganese									
Molybdenum									
Nickel	507	500	101.4	80-120	510	500	102.0	0.6	20
Palladium									
Platinum									
Potassium									
Selenium	505	500	101.0	80-120	504	500	100.8	0.2	20
Silicon									
Silver	209	200	104.5	80-120	205	200	102.5	1.9	20
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	500	500	100.0	80-120	503	500	100.6	0.6	20

Associated samples MP15919: M94152-2, M94152-4, M94152-6, M94152-8, M94152-10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 09/13/10

Metal	M94152-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	33.4	40.3	20.7 (a)	0-10
Beryllium	anr			
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	1.50	0.00	100.0(b)	0-10
Gold				
Iron				
Lead	1.20	0.00	100.0(b)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	0.600	0.00	100.0(b)	0-10
Palladium				
Platinum				
Potassium				
Selenium	1.60	0.00	100.0(b)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	11.7	12.6	7.7	0-10

Associated samples MP15919: M94152-2, M94152-4, M94152-6, M94152-8, M94152-10

SERIAL DILUTION RESULTS SUMMARY

Login Number: M94152
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial Dilution RPD acceptable due to low duplicate and sample concentrations.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

New England ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

09/22/10

Technical Report for

Loureiro Eng. Associates

UTC: 2010 Quarterly GW - F&H Building

88UT908

Accutest Job Number: M94153

Sampling Date: 09/09/10

Report to:

Loureiro Eng. Associates

rlmckinney@loureiro.com

ATTN: Robin McKinney

Total number of pages in report: **56**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Tand
Lab Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Kristen Blanchard 508-481-6200

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Accutest Laboratories

Sample Summary

Loureiro Eng. Associates

Job No: M94153

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT908

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M94153-1	09/09/10	14:40	KV	09/10/10	AQ	Ground Water	1152116
M94153-2	09/09/10	14:40	KV	09/10/10	AQ	Ground Water	1152116UF
M94153-3	09/09/10	15:06	HG	09/10/10	AQ	Ground Water	1152117
M94153-4	09/09/10	15:06	HG	09/10/10	AQ	Ground Water	1152117UF

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Loureiro Eng. Associates	**Job No**	M94153
Site:	UTC: 2010 Quarterly GW - F&H Building	**Report Date**	9/22/2010 11:21:58 AM

4 Sample(s) were collected on 09/09/2010 and were received at Accutest on 09/10/2010 properly preserved, at 2.1 Deg. C and intact. These Samples received an Accutest job number of M94153. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** MSG4036

- All samples were analyzed within the recommended method holding time.
- Sample(s) M94147-8MS, M94147-8MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Quadratic regression is employed for initial calibration standard in the batch MSG4033-ICC4033 for benzene.
- Matrix Spike Recovery(s) for Acetone are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for Acetone, Isopropylbenzene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- MSG4036-BS for Carbon disulfide: Outside control limits. Associated samples are non-detect for this compound.

Extractables by GC By Method CT-ETPH 7/06

Matrix AQ **Batch ID:** OP22681

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94245-9MS, M94245-9MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8082

Matrix AQ **Batch ID:** OP22682

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M94245-10MS, M94245-10MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010B

Matrix AQ	**Batch ID:** MP15919

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94152-2DUP, M94152-2MS, M94152-2SDL, M94152-2DUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Cadmium, Chromium, Copper, Lead, Nickel are outside control limits for sample MP15919-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Copper, Lead, Nickel, Selenium are outside control limits for sample MP15919-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP15919-SD1 for Barium: Serial Dilution RPD acceptable due to low duplicate and sample concentrations.
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ	**Batch ID:** MP15928

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94111-9DUP, M94111-9MS were used as the QC samples for metals.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M94153).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1152116		
Lab Sample ID:	M94153-1	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G100075.D	1	09/10/10	EL	n/a	n/a	MSG4036
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.9	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152116		
Lab Sample ID:	M94153-1	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	109	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	1.4	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	2.6	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152116		
Lab Sample ID:	M94153-1	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	109%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152116		
Lab Sample ID:	M94153-1	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG21152.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.221	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	74%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152116		
Lab Sample ID:	M94153-1	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ60397.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	83%		30-150%
877-09-8	Tetrachloro-m-xylene	79%		30-150%
2051-24-3	Decachlorobiphenyl	65%		30-150%
2051-24-3	Decachlorobiphenyl	68%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152116UF		
Lab Sample ID:	M94153-2	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Barium	< 50	50	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	09/15/10	09/15/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12221
(3) Prep QC Batch: MP15919
(4) Prep QC Batch: MP15928

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1152117		
Lab Sample ID:	M94153-3	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G100076.D	1	09/10/10	EL	n/a	n/a	MSG4036
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152117		
Lab Sample ID:	M94153-3	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	2.2	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.0	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152117		
Lab Sample ID:	M94153-3	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152117		
Lab Sample ID:	M94153-3	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG21153.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.774	0.082	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	63%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152117		
Lab Sample ID:	M94153-3	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ60398.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		30-150%
877-09-8	Tetrachloro-m-xylene	90%		30-150%
2051-24-3	Decachlorobiphenyl	99%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1152117UF		
Lab Sample ID:	M94153-4	**Date Sampled:**	09/09/10
Matrix:	AQ - Ground Water	**Date Received:**	09/10/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Barium	53.6	50	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	09/15/10	09/15/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	09/13/10	09/14/10	DA	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12221
(3) Prep QC Batch: MP15919
(4) Prep QC Batch: MP15928

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	**SW846 8082**	AQ	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	**SW846 8082**	AQ	Certified by SOP MGC204/GC-ECD

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M94153
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Loureiro Engineering Assoc.
ADDRESS: 100 Northwest Dr
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Robin McKinney
PHONE #: 860.747.6181

FACILITY INFORMATION

PROJECT NAME: UTC E+H Bldg 2010 GW
LOCATION: East Hartford CT
PROJECT NO.: 88UT045
FAX #: 860.747.8822

ANALYTICAL INFORMATION

LOC 8260 | CT ETPH | PCB | RCRA8 CWI: Zn

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE # M94153	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	LOC 8260	CT ETPH	PCB	RCRA8 CWI: Zn	LAB USE ONLY
-1	1152116	9/9/10	1440	KW	GW	6	2				4	X	X	X		
-2	1152116UF		1440	KW	GW	1			1						X	
-3	1152117		1506	HG		6	X				X	X	X	X		
-4	1152117UF		1506	HG		1		X							X	

DATA TURNAROUND INFORMATION

- ☐ 14 DAYS STANDARD
- ☐ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

Loc. 19AA, 5B, 3H5

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	9/9/10	1.	2.	9-9-10 18:15	2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 21°C

4.2 4

M94153: Chain of Custody
Page 1 of 1

Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **Accutest New England** **Client:** **Loureiro Eng. Associates**

Project Location: **UTC: 2010 Quarterly GW - F&H Building** **Project Number:** **88UT045**

Sampling Date(s): **9/9/2010**

Laboratory Sample ID(s): M94153-1, M94153-2, M94153-3, M94153-4

Methods: CT-ETPH 7/06, SW846 6010B, SW846 7470A, SW846 8082, SW846 8260B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☐ No ☑
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☐ No ☑
	b) Were these reporting limits met?	Yes ☐ No ☑
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes ☐ No ☑
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Position: Lab Director

Printed Name: Reza Tand Date: 9/22/2010
Accutest New England

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M94153

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M94153-1 1152116	Collected: 09-SEP-10 14:40 By: KV		Received: 10-SEP-10 By: SAP			
M94153-1	SW846 8260B	10-SEP-10 18:37	EL			V8260RCP
M94153-1	SW846 8082	17-SEP-10 22:56	CZ	16-SEP-10	MEW	P8082RCP
M94153-1	CT-ETPH 7/06	18-SEP-10 16:14	KD	16-SEP-10	MEW	BCTTPH
M94153-2 1152116UF	Collected: 09-SEP-10 14:40 By: KV		Received: 10-SEP-10 By: SAP			
M94153-2	SW846 6010B	14-SEP-10 11:35	DA	13-SEP-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M94153-2	SW846 7470A	15-SEP-10 12:49	MA	15-SEP-10	MA	HG
M94153-3 1152117	Collected: 09-SEP-10 15:06 By: HG		Received: 10-SEP-10 By: SAP			
M94153-3	SW846 8260B	10-SEP-10 19:05	EL			V8260RCP
M94153-3	SW846 8082	17-SEP-10 23:17	CZ	16-SEP-10	MEW	P8082RCP
M94153-3	CT-ETPH 7/06	18-SEP-10 16:50	KD	16-SEP-10	MEW	BCTTPH
M94153-4 1152117UF	Collected: 09-SEP-10 15:06 By: HG		Received: 10-SEP-10 By: SAP			
M94153-4	SW846 6010B	14-SEP-10 11:40	DA	13-SEP-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M94153-4	SW846 7470A	15-SEP-10 12:51	MA	15-SEP-10	MA	HG

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4036-MB	G100059.D	1	09/10/10	EL	n/a	n/a	MSG4036

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94153-1, M94153-3

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4036-MB	G100059.D	1	09/10/10	EL	n/a	n/a	MSG4036

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94153-1, M94153-3

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4036-MB	G100059.D	1	09/10/10	EL	n/a	n/a	MSG4036

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94153-1, M94153-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	109%	70-130%
460-00-4	4-Bromofluorobenzene	100%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4036-BS	G100056.D	1	09/10/10	EL	n/a	n/a	MSG4036
MSG4036-BSD	G100057.D	1	09/10/10	EL	n/a	n/a	MSG4036

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94153-1, M94153-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	46.6	93	46.2	92	1	70-130/25
107-13-1	Acrylonitrile	50	48.4	97	49.2	98	2	70-130/25
71-43-2	Benzene	50	56.2	112	55.4	111	1	70-130/25
108-86-1	Bromobenzene	50	54.9	110	54.5	109	1	70-130/25
75-27-4	Bromodichloromethane	50	56.7	113	56.2	112	1	70-130/25
75-25-2	Bromoform	50	49.1	98	50.5	101	3	70-130/25
74-83-9	Bromomethane	50	49.6	99	49.8	100	0	70-130/25
78-93-3	2-Butanone (MEK)	50	52.3	105	52.1	104	0	70-130/25
104-51-8	n-Butylbenzene	50	56.7	113	56.9	114	0	70-130/25
135-98-8	sec-Butylbenzene	50	58.0	116	58.1	116	0	70-130/25
98-06-6	tert-Butylbenzene	50	56.1	112	56.4	113	1	70-130/25
75-15-0	Carbon disulfide	50	66.7	133* [a]	65.2	130	2	70-130/25
56-23-5	Carbon tetrachloride	50	58.1	116	57.6	115	1	70-130/25
108-90-7	Chlorobenzene	50	54.9	110	53.9	108	2	70-130/25
75-00-3	Chloroethane	50	52.3	105	52.5	105	0	70-130/25
67-66-3	Chloroform	50	53.0	106	52.8	106	0	70-130/25
74-87-3	Chloromethane	50	52.0	104	53.5	107	3	70-130/25
95-49-8	o-Chlorotoluene	50	55.5	111	55.8	112	1	70-130/25
106-43-4	p-Chlorotoluene	50	57.2	114	57.7	115	1	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	50	48.3	97	50.4	101	4	70-130/25
124-48-1	Dibromochloromethane	50	58.6	117	58.8	118	0	70-130/25
106-93-4	1,2-Dibromoethane	50	51.5	103	51.9	104	1	70-130/25
95-50-1	1,2-Dichlorobenzene	50	54.9	110	55.2	110	1	70-130/25
541-73-1	1,3-Dichlorobenzene	50	55.5	111	56.1	112	1	70-130/25
106-46-7	1,4-Dichlorobenzene	50	55.2	110	55.1	110	0	70-130/25
75-71-8	Dichlorodifluoromethane	50	48.0	96	46.6	93	3	70-130/25
75-34-3	1,1-Dichloroethane	50	53.8	108	53.3	107	1	70-130/25
107-06-2	1,2-Dichloroethane	50	54.1	108	53.6	107	1	70-130/25
75-35-4	1,1-Dichloroethene	50	54.2	108	53.8	108	1	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	51.7	103	51.1	102	1	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	53.9	108	53.5	107	1	70-130/25
78-87-5	1,2-Dichloropropane	50	54.1	108	54.1	108	0	70-130/25
142-28-9	1,3-Dichloropropane	50	51.5	103	52.1	104	1	70-130/25
594-20-7	2,2-Dichloropropane	50	58.4	117	56.9	114	3	70-130/25
563-58-6	1,1-Dichloropropene	50	57.3	115	55.6	111	3	70-130/25
10061-01-5	cis-1,3-Dichloropropene	50	56.8	114	56.0	112	1	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4036-BS	G100056.D	1	09/10/10	EL	n/a	n/a	MSG4036
MSG4036-BSD	G100057.D	1	09/10/10	EL	n/a	n/a	MSG4036

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94153-1, M94153-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	61.5	123	61.8	124	0	70-130/25
100-41-4	Ethylbenzene	50	55.8	112	54.9	110	2	70-130/25
76-13-1	Freon 113	50	56.0	112	55.4	111	1	70-130/25
87-68-3	Hexachlorobutadiene	50	54.9	110	55.7	111	1	70-130/25
591-78-6	2-Hexanone	50	50.3	101	49.2	98	2	70-130/25
98-82-8	Isopropylbenzene	50	64.4	129	64.8	130	1	70-130/25
99-87-6	p-Isopropyltoluene	50	57.7	115	58.2	116	1	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	50.9	102	51.1	102	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	49.9	100	51.7	103	4	70-130/25
74-95-3	Methylene bromide	50	52.4	105	53.4	107	2	70-130/25
75-09-2	Methylene chloride	50	50.3	101	50.4	101	0	70-130/25
91-20-3	Naphthalene	50	51.8	104	53.8	108	4	70-130/25
103-65-1	n-Propylbenzene	50	57.2	114	57.9	116	1	70-130/25
100-42-5	Styrene	50	57.1	114	57.2	114	0	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	55.5	111	55.3	111	0	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	53.1	106	54.6	109	3	70-130/25
127-18-4	Tetrachloroethene	50	55.2	110	54.0	108	2	70-130/25
109-99-9	Tetrahydrofuran	50	47.0	94	47.5	95	1	70-130/25
108-88-3	Toluene	50	56.9	114	56.2	112	1	70-130/25
110-57-6	Trans-1,4-Dichloro-2-Butene	50	50.5	101	51.7	103	2	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	52.0	104	53.2	106	2	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	54.4	109	54.8	110	1	70-130/25
71-55-6	1,1,1-Trichloroethane	50	55.3	111	54.9	110	1	70-130/25
79-00-5	1,1,2-Trichloroethane	50	53.3	107	53.7	107	1	70-130/25
79-01-6	Trichloroethene	50	53.4	107	52.9	106	1	70-130/25
75-69-4	Trichlorofluoromethane	50	55.5	111	54.5	109	2	70-130/25
96-18-4	1,2,3-Trichloropropane	50	52.4	105	53.3	107	2	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	57.4	115	57.2	114	0	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	57.1	114	57.2	114	0	70-130/25
75-01-4	Vinyl chloride	50	58.5	117	57.5	115	2	70-130/25
	m,p-Xylene	100	111	111	110	110	1	70-130/25
95-47-6	o-Xylene	50	56.0	112	55.1	110	2	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4036-BS	G100056.D	1	09/10/10	EL	n/a	n/a	MSG4036
MSG4036-BSD	G100057.D	1	09/10/10	EL	n/a	n/a	MSG4036

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94153-1, M94153-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	106%	106%	70-130%
2037-26-5	Toluene-D8	110%	109%	70-130%
460-00-4	4-Bromofluorobenzene	100%	100%	70-130%

(a) Outside control limits. Associated samples are non-detect for this compound.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M94147-8MS	G100077.D	5	09/10/10	EL	n/a	n/a	MSG4036
M94147-8MSD	G100078.D	5	09/10/10	EL	n/a	n/a	MSG4036
M94147-8	G100069.D	1	09/10/10	EL	n/a	n/a	MSG4036

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94153-1, M94153-3

CAS No.	Compound	M94147-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	163	65* [a]	159	64* [a]	2	70-130/30
107-13-1	Acrylonitrile	ND		250	255	102	258	103	1	70-130/30
71-43-2	Benzene	ND		250	274	110	284	114	4	70-130/30
108-86-1	Bromobenzene	ND		250	271	108	274	110	1	70-130/30
75-27-4	Bromodichloromethane	ND		250	272	109	281	112	3	70-130/30
75-25-2	Bromoform	ND		250	231	92	233	93	1	70-130/30
74-83-9	Bromomethane	ND		250	256	102	259	104	1	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	209	84	206	82	1	70-130/30
104-51-8	n-Butylbenzene	ND		250	276	110	282	113	2	70-130/30
135-98-8	sec-Butylbenzene	ND		250	287	115	292	117	2	70-130/30
98-06-6	tert-Butylbenzene	ND		250	277	111	283	113	2	70-130/30
75-15-0	Carbon disulfide	ND		250	290	116	303	121	4	70-130/30
56-23-5	Carbon tetrachloride	ND		250	274	110	286	114	4	70-130/30
108-90-7	Chlorobenzene	ND		250	269	108	272	109	1	70-130/30
75-00-3	Chloroethane	ND		250	270	108	274	110	1	70-130/30
67-66-3	Chloroform	ND		250	270	108	273	109	1	70-130/30
74-87-3	Chloromethane	ND		250	266	106	273	109	3	70-130/30
95-49-8	o-Chlorotoluene	ND		250	274	110	280	112	2	70-130/30
106-43-4	p-Chlorotoluene	ND		250	283	113	289	116	2	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	243	97	249	100	2	70-130/30
124-48-1	Dibromochloromethane	ND		250	279	112	285	114	2	70-130/30
106-93-4	1,2-Dibromoethane	ND		250	255	102	260	104	2	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	274	110	280	112	2	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	274	110	280	112	2	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	274	110	281	112	3	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	242	97	247	99	2	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	273	109	279	112	2	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	269	108	280	112	4	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	271	108	274	110	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	261	104	264	106	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	270	108	276	110	2	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	264	106	274	110	4	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	256	102	261	104	2	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	274	110	279	112	2	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	275	110	285	114	4	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND		250	268	107	275	110	3	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M94147-8MS	G100077.D	5	09/10/10	EL	n/a	n/a	MSG4036
M94147-8MSD	G100078.D	5	09/10/10	EL	n/a	n/a	MSG4036
M94147-8	G100069.D	1	09/10/10	EL	n/a	n/a	MSG4036

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94153-1, M94153-3

CAS No.	Compound	M94147-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		250	297	119	303	121	2	70-130/30
100-41-4	Ethylbenzene	ND		250	271	108	276	110	2	70-130/30
76-13-1	Freon 113	ND		250	277	111	283	113	2	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	268	107	269	108	0	70-130/30
591-78-6	2-Hexanone	ND		250	187	75	186	74	1	70-130/30
98-82-8	Isopropylbenzene	ND		250	320	128	327	131* [a]	2	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	284	114	288	115	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	257	103	263	105	2	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	246	98	250	100	2	70-130/30
74-95-3	Methylene bromide	ND		250	263	105	273	109	4	70-130/30
75-09-2	Methylene chloride	ND		250	259	104	262	105	1	70-130/30
91-20-3	Naphthalene	ND		250	260	104	264	106	2	70-130/30
103-65-1	n-Propylbenzene	ND		250	283	113	290	116	2	70-130/30
100-42-5	Styrene	ND		250	274	110	281	112	3	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	268	107	272	109	1	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	271	108	271	108	0	70-130/30
127-18-4	Tetrachloroethene	ND		250	266	106	273	109	3	70-130/30
109-99-9	Tetrahydrofuran	ND		250	248	99	250	100	1	70-130/30
108-88-3	Toluene	ND		250	274	110	287	115	5	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND		250	242	97	237	95	2	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	251	100	258	103	3	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	261	104	264	106	1	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	278	111	283	113	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	261	104	268	107	3	70-130/30
79-01-6	Trichloroethene	ND		250	265	106	269	108	1	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	284	114	289	116	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	258	103	257	103	0	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	281	112	288	115	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	282	113	288	115	2	70-130/30
75-01-4	Vinyl chloride	ND		250	286	114	296	118	3	70-130/30
	m,p-Xylene	ND		500	540	108	551	110	2	70-130/30
95-47-6	o-Xylene	ND		250	270	108	275	110	2	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M94147-8MS	G100077.D	5	09/10/10	EL	n/a	n/a	MSG4036
M94147-8MSD	G100078.D	5	09/10/10	EL	n/a	n/a	MSG4036
M94147-8	G100069.D	1	09/10/10	EL	n/a	n/a	MSG4036

The QC reported here applies to the following samples: **Method:** SW846 8260B

M94153-1, M94153-3

CAS No.	Surrogate Recoveries	MS	MSD	M94147-8	Limits
1868-53-7	Dibromofluoromethane	109%	106%	107%	70-130%
2037-26-5	Toluene-D8	108%	109%	108%	70-130%
460-00-4	4-Bromofluorobenzene	101%	100%	102%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

Volatile Internal Standard Area Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Check Std:	MSG4036-CC4033	**Injection Date:**	09/10/10
Lab File ID:	G100055.D	**Injection Time:**	09:16
Instrument ID:	GCMSG	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	228957	9.13	347244	10.01	187209	13.29	179942	15.87	76558	6.67
Upper Limit [a]	457914	9.63	694488	10.51	374418	13.79	359884	16.37	153116	7.17
Lower Limit [b]	114479	8.63	173622	9.51	93605	12.79	89971	15.37	38279	6.17

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG4036-BS	219419	9.13	330968	10.01	180220	13.29	172111	15.87	87418	6.67
MSG4036-BSD	214701	9.13	328297	10.01	178591	13.29	167997	15.87	88399	6.67
MSG4036-MB	222449	9.13	334698	10.01	174457	13.29	170182	15.87	90999	6.67
ZZZZZZ	222298	9.13	338329	10.01	175526	13.29	172794	15.87	86435	6.68
ZZZZZZ	211486	9.13	324664	10.01	171552	13.29	164885	15.87	80412	6.67
ZZZZZZ	220332	9.13	334564	10.01	175705	13.29	165946	15.87	69623	6.67
ZZZZZZ	214197	9.13	328770	10.01	170009	13.29	164274	15.87	76051	6.66
ZZZZZZ	218339	9.13	331585	10.01	173704	13.29	166182	15.87	80001	6.67
ZZZZZZ	212405	9.13	327748	10.01	171307	13.29	164295	15.87	76746	6.67
ZZZZZZ	218168	9.13	334703	10.01	173624	13.29	167198	15.87	75934	6.66
ZZZZZZ	211538	9.13	325633	10.01	168182	13.29	162128	15.87	75561	6.67
ZZZZZZ	209476	9.13	324882	10.01	169065	13.29	160583	15.87	74051	6.67
M94147-8	212897	9.13	328451	10.01	170250	13.29	162713	15.87	81730	6.67
ZZZZZZ	205909	9.13	317455	10.01	165907	13.29	159874	15.87	79602	6.67
ZZZZZZ	212961	9.13	327199	10.01	170374	13.29	163439	15.87	87378	6.67
ZZZZZZ	212853	9.13	327097	10.01	171176	13.29	162981	15.87	88544	6.67
ZZZZZZ	206175	9.13	320817	10.01	166697	13.29	160076	15.87	86766	6.68
ZZZZZZ	213843	9.13	331154	10.01	172571	13.29	164136	15.87	85038	6.67
M94153-1	211641	9.13	324008	10.01	170275	13.29	163138	15.87	86175	6.67
M94153-3	206547	9.13	320332	10.01	167113	13.29	160189	15.87	85918	6.67
M94147-8MS	212500	9.13	330432	10.01	179202	13.29	168116	15.87	85847	6.67
M94147-8MSD	208111	9.13	320124	10.01	175350	13.29	164085	15.87	81985	6.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M94153-1	G100075.D	105.0	109.0	102.0
M94153-3	G100076.D	107.0	108.0	101.0
M94147-8MS	G100077.D	109.0	108.0	101.0
M94147-8MSD	G100078.D	106.0	109.0	100.0
MSG4036-BS	G100056.D	106.0	110.0	100.0
MSG4036-BSD	G100057.D	106.0	109.0	100.0
MSG4036-MB	G100059.D	102.0	109.0	100.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22681-MB	BG21135.D	1	09/18/10	KD	09/16/10	OP22681	GBG681

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M94153-1, M94153-3

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries		Limits
3386-33-2	1-Chlorooctadecane	93%	50-149%

Method Blank Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22682-MB	YZ60380.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572

The QC reported here applies to the following samples: **Method:** SW846 8082

M94153-1, M94153-3

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	73%	30-150%
877-09-8	Tetrachloro-m-xylene	72%	30-150%
2051-24-3	Decachlorobiphenyl	58%	30-150%
2051-24-3	Decachlorobiphenyl	56%	30-150%

Blank Spike Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22681-BS	BG21136.D	1	09/18/10	KD	09/16/10	OP22681	GBG681

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M94153-1, M94153-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-DRO (C9-C36)	0.7	0.577	82	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
3386-33-2	1-Chlorooctadecane	82%	50-149%

Blank Spike Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22682-BS	YZ60381.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572

The QC reported here applies to the following samples: **Method:** SW846 8082

M94153-1, M94153-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	1.7	85	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	1.8	90	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	78%	30-150%
877-09-8	Tetrachloro-m-xylene	75%	30-150%
2051-24-3	Decachlorobiphenyl	51%	30-150%
2051-24-3	Decachlorobiphenyl	50%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22681-MS	BG21137.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
OP22681-MSD	BG21138.D	1	09/18/10	KD	09/16/10	OP22681	GBG681
M94245-9	BG21139.D	1	09/18/10	KD	09/16/10	OP22681	GBG681

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M94153-1, M94153-3

CAS No.	Compound	M94245-9 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	CT-DRO (C9-C36)	0.0765		0.7	0.578	72	0.628	79	8	50-129/26

CAS No.	Surrogate Recoveries	MS	MSD	M94245-9	Limits
3386-33-2	1-Chlorooctadecane	81%	94%	102%	50-149%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22682-MS	YZ60382.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
OP22682-MSD	YZ60383.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572
M94245-10	YZ60384.D	1	09/17/10	CZ	09/16/10	OP22682	GYZ2572

The QC reported here applies to the following samples: **Method:** SW846 8082

M94153-1, M94153-3

CAS No.	Compound	M94245-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		2	1.9	95	2.1	105	10	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		2	1.8	90	2.0	100	11	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M94245-10	Limits
877-09-8	Tetrachloro-m-xylene	73%	85%	71%	30-150%
877-09-8	Tetrachloro-m-xylene	68%	83%	60%	30-150%
2051-24-3	Decachlorobiphenyl	50%	55%	49%	30-150%
2051-24-3	Decachlorobiphenyl	49%	55%	49%	30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: CT-ETPH 7/06 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
M94153-1	BG21152.D	74.0
M94153-3	BG21153.D	63.0
OP22681-BS	BG21136.D	82.0
OP22681-MB	BG21135.D	93.0
OP22681-MS	BG21137.D	81.0
OP22681-MSD	BG21138.D	94.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chlorooctadecane	50-149%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: M94153
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: SW846 8082 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
M94153-1	YZ60397.D	83.0	79.0	65.0	68.0
M94153-3	YZ60398.D	88.0	90.0	99.0	104.0
OP22682-BS	YZ60381.D	78.0	75.0	51.0	50.0
OP22682-MB	YZ60380.D	73.0	72.0	58.0	56.0
OP22682-MS	YZ60382.D	73.0	68.0	50.0	49.0
OP22682-MSD	YZ60383.D	85.0	83.0	55.0	55.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	30-150%
S2 = Decachlorobiphenyl	30-150%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 09/13/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	17	17		
Antimony	6.0	1.2	1.2		
Arsenic	4.0	1.1	1.9	0.10	<4.0
Barium	50	.36	3.7	1.9	<50
Beryllium	4.0	.18	.18		
Boron	100	.34	1.5		
Cadmium	4.0	.08	.12	0.10	<4.0
Calcium	5000	18	39		
Chromium	10	.48	.53	0.10	<10
Cobalt	50	.19	.28		
Copper	25	.92	.92	-0.40	<25
Gold	50	1.3	1.7		
Iron	100	5.2	5.2		
Lead	5.0	1	1.5	0.50	<5.0
Magnesium	5000	72	72		
Manganese	15	.14	.9		
Molybdenum	100	.15	.64		
Nickel	40	.25	.3	0.10	<40
Palladium	50	2.3	2.5		
Platinum	50	8.4	8.4		
Potassium	5000	44	44		
Selenium	10	1.1	1.7	0.40	<10
Silicon	100	6.4	7.2		
Silver	5.0	1	1	0.0	<5.0
Sodium	5000	29	31		
Strontium	10	.4	.4		
Thallium	5.0	.65	.74		
Tin	100	.45	.45		
Titanium	50	.84	.84		
Tungsten	100	5.8	12		
Vanadium	10	.87	1.1		
Zinc	20	.27	2	0.30	<20

Associated samples MP15919: M94153-2, M94153-4

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:				09/13/10				09/13/10	
Metal	M94152-2 Original	MS	Spikelot MPICP	% Rec	QC Limits	M94152-2 Original	DUP	RPD	QC Limits
Aluminum									
Antimony	anr								
Arsenic	0.0	507	500	101.4	75-125	0.0	0.0	NC	0-20
Barium	33.4	2060	2000	101.3	75-125	33.4	31.4	6.2	0-20
Beryllium	anr								
Boron									
Cadmium	0.0	514	500	102.8	75-125	0.0	0.10	200.0(a)	0-20
Calcium	anr								
Chromium	0.0	499	500	99.8	75-125	0.0	0.80	200.0(a)	0-20
Cobalt									
Copper	1.5	488	500	97.3	75-125	1.5	2.6	53.7 (a)	0-20
Gold									
Iron									
Lead	1.2	978	1000	97.7	75-125	1.2	0.0	200.0(a)	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	0.60	505	500	100.9	75-125	0.60	0.80	28.6 (a)	0-20
Palladium									
Platinum									
Potassium									
Selenium	1.6	502	500	100.1	75-125	1.6	1.5	6.5	0-20
Silicon									
Silver	0.0	207	200	103.5	75-125	0.0	0.0	NC	0-20
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	11.7	508	500	99.3	75-125	11.7	11.5	1.7	0-20

Associated samples MP15919: M94153-2, M94153-4

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919 Methods: SW846 6010B
Matrix Type: AQUEOUS Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:			09/13/10					09/13/10	
Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	anr								
Arsenic	504	500	100.8	80-120	505	500	101.0	0.2	20
Barium	1980	2000	99.0	80-120	2090	2000	104.5	5.4	20
Beryllium	anr								
Boron									
Cadmium	512	500	102.4	80-120	514	500	102.8	0.4	20
Calcium	anr								
Chromium	494	500	98.8	80-120	504	500	100.8	2.0	20
Cobalt									
Copper	490	500	98.0	80-120	484	500	96.8	1.2	20
Gold									
Iron									
Lead	990	1000	99.0	80-120	983	1000	98.3	0.7	20
Magnesium									
Manganese									
Molybdenum									
Nickel	507	500	101.4	80-120	510	500	102.0	0.6	20
Palladium									
Platinum									
Potassium									
Selenium	505	500	101.0	80-120	504	500	100.8	0.2	20
Silicon									
Silver	209	200	104.5	80-120	205	200	102.5	1.9	20
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	500	500	100.0	80-120	503	500	100.6	0.6	20

Associated samples MP15919: M94153-2, M94153-4

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 09/13/10

Metal	M94152-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	33.4	40.3	20.7 (a)	0-10
Beryllium	anr			
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	1.50	0.00	100.0(b)	0-10
Gold				
Iron				
Lead	1.20	0.00	100.0(b)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	0.600	0.00	100.0(b)	0-10
Palladium				
Platinum				
Potassium				
Selenium	1.60	0.00	100.0(b)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	11.7	12.6	7.7	0-10

Associated samples MP15919: M94153-2, M94153-4

SERIAL DILUTION RESULTS SUMMARY

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15919
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial Dilution RPD acceptable due to low duplicate and sample concentrations.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15928
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/15/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.022	.048	-0.062	<0.20

Associated samples MP15928: M94153-2, M94153-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15928
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/15/10 09/15/10

Metal	M94111-9 Original	MS	Spikelot HGRWS1	% Rec	QC Limits	M94111-9 Original	DUP	RPD	QC Limits
Mercury	0.0	3.0	3	100.0	75-125	0.0	0.0	NC	0-20

Associated samples MP15928: M94153-2, M94153-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M94153
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP15928
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/15/10 09/15/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	3.0	3	100.0	80-120	3.0	3	100.0	0.0	20

Associated samples MP15928: M94153-2, M94153-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.3

7

New England ACCUTEST LABORATORIES

12/28/10

Technical Report for

Loureiro Eng. Associates

UTC: 2010 Quarterly GW - F&H Building

88UT045

Accutest Job Number: M96492

Sampling Date: 12/09/10

Report to:

Loureiro Eng. Associates
100 Northwest Dr.
Plainville, CT 06062
rlmckinney@loureiro.com

ATTN: Robin McKinney

Total number of pages in report: **121**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Tand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

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Accutest Laboratories

Sample Summary

Loureiro Eng. Associates

Job No: M96492

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT045

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M96492-1	12/09/10	12:00	DR	12/09/10	AQ	Ground Water	1159172
M96492-2	12/09/10	12:00	DR	12/09/10	AQ	Ground Water	1159172UF
M96492-3	12/09/10	14:10	DR	12/09/10	AQ	Ground Water	1159173
M96492-4	12/09/10	14:10	DR	12/09/10	AQ	Ground Water	1159173UF
M96492-5	12/09/10	15:30	DR	12/09/10	AQ	Ground Water	1159174
M96492-6	12/09/10	15:30	DR	12/09/10	AQ	Ground Water	1159174UF
M96492-7	12/09/10	11:12	HG	12/09/10	AQ	Ground Water	1159175
M96492-8	12/09/10	11:12	HG	12/09/10	AQ	Ground Water	1159175UF
M96492-9	12/09/10	12:35	HG	12/09/10	AQ	Ground Water	1159176
M96492-10	12/09/10	12:35	HG	12/09/10	AQ	Ground Water	1159176UF
M96492-11	12/09/10	14:50	HG	12/09/10	AQ	Ground Water	1159177
M96492-12	12/09/10	14:50	HG	12/09/10	AQ	Ground Water	1159177UF
M96492-13	12/09/10	13:05	HG	12/09/10	AQ	Ground Water	1159178

Accutest Laboratories

Sample Summary
(continued)

Loureiro Eng. Associates

Job No: M96492

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT045

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M96492-14	12/09/10	13:05	HG	12/09/10	AQ	Ground Water	1159178UF
M96492-15	12/09/10	09:00	HG	12/09/10	AQ	Ground Water	1159181
M96492-16	12/09/10	12:00	HG	12/09/10	AQ	Ground Water	1159180
M96492-17	12/09/10	12:00	HG	12/09/10	AQ	Ground Water	1159180UF
M96492-18	12/09/10	12:35	HG	12/09/10	AQ	Ground Water	1159179
M96492-19	12/09/10	12:35	HG	12/09/10	AQ	Ground Water	1159179UF
M96492-20	12/09/10	14:10	HG	12/09/10	AQ	Ground Water	1159792

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Loureiro Eng. Associates	**Job No**	M96492
Site:	UTC: 2010 Quarterly GW - F&H Building	**Report Date**	12/28/2010 10:31:11 AM

20 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 12/09/2010 and were received at Accutest on 12/09/2010 properly preserved, at 0.8 Deg. C and intact. These Samples received an Accutest job number of M96492. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** MSG4112

- All samples were analyzed within the recommended method holding time.
- Sample(s) M96594-1MS, M96594-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- MS/MSD Recovery(s) for 2-Butanone (MEK), 2-Hexanone, Acetone, Trans-1,4-Dichloro-2-Butene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.

Matrix AQ **Batch ID:** MSN1841

- All samples were analyzed within the recommended method holding time.
- Sample(s) M96630-11MS, M96630-11MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 1,2,4-Trichlorobenzene, Hexachlorobutadiene are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for 2-Butanone (MEK), Acetone, Chloroethane, Hexachlorobutadiene, Tetrahydrofuran are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 2-Butanone (MEK), Acetone, Chloroethane, Tetrahydrofuran are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Blank Spike Duplicate Recovery(s) for Tetrahydrofuran, Chloroethane are outside control limits. Blank Spike meets program technical requirements.
- MSN1841-BS/BSD/MS/MSD for Acrylonitrile: Outside control limits. Associated samples are non-detect for this compound.
- Initial calibration verification standard MSN1823-ICV1823 for acetone, 2-butanone exceed 30% Difference.
- Quadratic regression is employed for initial calibration standard MSN1823-ICC1823 for 2,2-dichloropropane.
- Continuing calibration check standard MSN1841-CC1823 for 1,2,4-trichlorobenzene, hexachlorobutadiene exceed 30% Difference. This check standard met RCP criteria.

Extractables by GC By Method CT-ETPH 7/06

Matrix AQ **Batch ID:** OP23609

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96366-13MS, M96366-13MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8082

Matrix AQ	**Batch ID:** OP23604

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M96366-15MS, M96366-15MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010C

Matrix AQ	**Batch ID:** MP16377

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96521-9DUP, M96521-9MS, M96521-9SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Lead are outside control limits for sample MP16377-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ	**Batch ID:** MP16386

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96492-2DUP, M96492-2MS were used as the QC samples for metals.

Matrix AQ	**Batch ID:** MP16398

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M96575-6DUP, M96575-6MS were used as the QC samples for metals.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M96492).

New England ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1159172		
Lab Sample ID:	M96492-1	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G102060.D	1	12/21/10	EL	n/a	n/a	MSG4112
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159172		
Lab Sample ID:	M96492-1	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	1.7	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	1.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159172		
Lab Sample ID:	M96492-1	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159172		
Lab Sample ID:	M96492-1	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23890.D	1	12/21/10	KD	12/13/10	OP23609	GBG788
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	0.100	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	99%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159172		
Lab Sample ID:	M96492-1	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE23165.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		30-150%
877-09-8	Tetrachloro-m-xylene	72%		30-150%
2051-24-3	Decachlorobiphenyl	76%		30-150%
2051-24-3	Decachlorobiphenyl	74%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159172UF		
Lab Sample ID:	M96492-2	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Barium	161	50	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	12/15/10	12/15/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12522
(2) Instrument QC Batch: MA12527
(3) Prep QC Batch: MP16377
(4) Prep QC Batch: MP16386

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1159173		
Lab Sample ID:	M96492-3	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G102061.D	1	12/21/10	EL	n/a	n/a	MSG4112
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159173		
Lab Sample ID:	M96492-3	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159173		
Lab Sample ID:	M96492-3	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159173		
Lab Sample ID:	M96492-3	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23892.D	1	12/21/10	KD	12/13/10	OP23609	GBG788
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	64%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159173		
Lab Sample ID:	M96492-3	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE23166.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		30-150%
877-09-8	Tetrachloro-m-xylene	69%		30-150%
2051-24-3	Decachlorobiphenyl	78%		30-150%
2051-24-3	Decachlorobiphenyl	76%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159173UF		
Lab Sample ID:	M96492-4	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Barium	195	50	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Chromium	22.1	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	12/15/10	12/15/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12522
(2) Instrument QC Batch: MA12527
(3) Prep QC Batch: MP16377
(4) Prep QC Batch: MP16386

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1159174		
Lab Sample ID:	M96492-5	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G102062.D	1	12/21/10	EL	n/a	n/a	MSG4112
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159174		
Lab Sample ID:	M96492-5	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159174		
Lab Sample ID:	M96492-5	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159174		
Lab Sample ID:	M96492-5	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23894.D	1	12/21/10	KD	12/13/10	OP23609	GBG788
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	0.156	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	69%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159174		
Lab Sample ID:	M96492-5	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE23167.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		30-150%
877-09-8	Tetrachloro-m-xylene	71%		30-150%
2051-24-3	Decachlorobiphenyl	76%		30-150%
2051-24-3	Decachlorobiphenyl	74%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159174UF		
Lab Sample ID:	M96492-6	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Barium	< 50	50	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	12/15/10	12/15/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12522
(2) Instrument QC Batch: MA12527
(3) Prep QC Batch: MP16377
(4) Prep QC Batch: MP16386

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1159175		
Lab Sample ID:	M96492-7	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G102063.D	1	12/21/10	EL	n/a	n/a	MSG4112
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159175		
Lab Sample ID:	M96492-7	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	2.0	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159175		
Lab Sample ID:	M96492-7	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159175		
Lab Sample ID:	M96492-7	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23896.D	1	12/21/10	KD	12/13/10	OP23609	GBG788
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	0.750	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	65%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159175		
Lab Sample ID:	M96492-7	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE23168.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		30-150%
877-09-8	Tetrachloro-m-xylene	67%		30-150%
2051-24-3	Decachlorobiphenyl	71%		30-150%
2051-24-3	Decachlorobiphenyl	70%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159175UF		
Lab Sample ID:	M96492-8	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Barium	< 50	50	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	12/15/10	12/15/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12522
(2) Instrument QC Batch: MA12527
(3) Prep QC Batch: MP16377
(4) Prep QC Batch: MP16386

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1159176		
Lab Sample ID:	M96492-9	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G102064.D	1	12/21/10	EL	n/a	n/a	MSG4112
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159176		
Lab Sample ID:	M96492-9	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	8.0	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.4	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.0	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159176		
Lab Sample ID:	M96492-9	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159176		
Lab Sample ID:	M96492-9	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23898.D	1	12/21/10	KD	12/13/10	OP23609	GBG788
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	0.341	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	69%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159176		
Lab Sample ID:	M96492-9	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE23169.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		30-150%
877-09-8	Tetrachloro-m-xylene	66%		30-150%
2051-24-3	Decachlorobiphenyl	67%		30-150%
2051-24-3	Decachlorobiphenyl	66%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159176UF		
Lab Sample ID:	M96492-10	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Barium	54.5	50	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	12/15/10	12/15/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12522
(2) Instrument QC Batch: MA12527
(3) Prep QC Batch: MP16377
(4) Prep QC Batch: MP16386

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1159177		
Lab Sample ID:	M96492-11	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G102065.D	1	12/21/10	EL	n/a	n/a	MSG4112
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159177		
Lab Sample ID:	M96492-11	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	45.2	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159177		
Lab Sample ID:	M96492-11	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159177		
Lab Sample ID:	M96492-11	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23902.D	1	12/21/10	KD	12/13/10	OP23609	GBG788
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	0.117	0.082	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	77%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159177		
Lab Sample ID:	M96492-11	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE23170.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		30-150%
877-09-8	Tetrachloro-m-xylene	70%		30-150%
2051-24-3	Decachlorobiphenyl	54%		30-150%
2051-24-3	Decachlorobiphenyl	53%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159177UF		
Lab Sample ID:	M96492-12	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Barium	< 50	50	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	12/15/10	12/15/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12522
(2) Instrument QC Batch: MA12527
(3) Prep QC Batch: MP16377
(4) Prep QC Batch: MP16386

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1159178		
Lab Sample ID:	M96492-13	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G102066.D	1	12/21/10	EL	n/a	n/a	MSG4112
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	75.6	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	28.4	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	15.0	1.0	ug/l	
75-25-2	Bromoform	17.6	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	21.5	1.0	ug/l	
108-90-7	Chlorobenzene	66.6	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	53.3	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	103	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	40.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	26.4	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	83.3	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	117	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	23.5	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	84.3	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159178		
Lab Sample ID:	M96492-13	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	43.9	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	105	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	36.4	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	35.3	5.0	ug/l	
75-09-2	Methylene chloride	55.8	2.0	ug/l	
91-20-3	Naphthalene	61.7	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	75.9	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	79.0	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	62.1	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	46.3	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	40.6	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	30.5	1.0	ug/l	
75-69-4	Trichlorofluoromethane	71.7	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159178		
Lab Sample ID:	M96492-13	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	74%		70-130%
460-00-4	4-Bromofluorobenzene	96%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159178		
Lab Sample ID:	M96492-13	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE23171.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	0.80	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		30-150%
877-09-8	Tetrachloro-m-xylene	69%		30-150%
2051-24-3	Decachlorobiphenyl	41%		30-150%
2051-24-3	Decachlorobiphenyl	41%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159178UF		
Lab Sample ID:	M96492-14	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	23.9	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Barium	936	50	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Cadmium	13.6	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Chromium	130	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Copper	521	25	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Lead	21.7	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Mercury	11.4	0.80	ug/l	4	12/17/10	12/17/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	346	40	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Selenium	77.4	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Silver	235	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Zinc	640	20	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12522
(2) Instrument QC Batch: MA12535
(3) Prep QC Batch: MP16377
(4) Prep QC Batch: MP16398

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1159181		
Lab Sample ID:	M96492-15	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G102067.D	1	12/21/10	EL	n/a	n/a	MSG4112
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159181		
Lab Sample ID:	M96492-15	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159181		
Lab Sample ID:	M96492-15	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159180		
Lab Sample ID:	M96492-16	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N48738.D	1	12/23/10	JP	n/a	n/a	MSN1841
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159180		
Lab Sample ID:	M96492-16	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159180		
Lab Sample ID:	M96492-16	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159180		
Lab Sample ID:	M96492-16	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23904.D	1	12/21/10	KD	12/13/10	OP23609	GBG788
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	0.084	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	89%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159180		
Lab Sample ID:	M96492-16	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE23172.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	67%		30-150%
877-09-8	Tetrachloro-m-xylene	65%		30-150%
2051-24-3	Decachlorobiphenyl	41%		30-150%
2051-24-3	Decachlorobiphenyl	41%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159180UF		
Lab Sample ID:	M96492-17	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Barium	< 50	50	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	12/15/10	12/15/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12522
(2) Instrument QC Batch: MA12527
(3) Prep QC Batch: MP16377
(4) Prep QC Batch: MP16386

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1159179		
Lab Sample ID:	M96492-18	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N48737.D	1	12/23/10	JP	n/a	n/a	MSN1841
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159179		
Lab Sample ID:	M96492-18	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	3.1	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159179		
Lab Sample ID:	M96492-18	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159179		
Lab Sample ID:	M96492-18	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23906.D	1	12/22/10	KD	12/13/10	OP23609	GBG788
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	0.325	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	71%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159179		
Lab Sample ID:	M96492-18	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE23173.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	62%		30-150%
877-09-8	Tetrachloro-m-xylene	62%		30-150%
2051-24-3	Decachlorobiphenyl	63%		30-150%
2051-24-3	Decachlorobiphenyl	63%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1159179UF		
Lab Sample ID:	M96492-19	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
		Percent Solids:	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Barium	53.4	50	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	12/15/10	12/15/10	MA	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	12/14/10	12/14/10	PY	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA12522
(2) Instrument QC Batch: MA12527
(3) Prep QC Batch: MP16377
(4) Prep QC Batch: MP16386

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1159792		
Lab Sample ID:	M96492-20	**Date Sampled:**	12/09/10
Matrix:	AQ - Ground Water	**Date Received:**	12/09/10
Method:	CT-ETPH 7/06 SW846 3510C	**Percent Solids:**	n/a
Project:	UTC: 2010 Quarterly GW - F&H Building		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG23908.D	1	12/22/10	KD	12/13/10	OP23609	GBG788
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	1.03	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	86%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New England ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	**SW846 8082**	AQ	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	**SW846 8082**	AQ	Certified by SOP MGC204/GC-ECD

ACCUTEST Laboratories

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CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M96492
ACCUTEST QUOTE #: KBG/2010-377

CLIENT INFORMATION

NAME: Loureiro Engineering Associates
ADDRESS: 100 Northwest Dr.
CITY: Plainville STATE: CT ZIP: 06062
SEND REPORT TO: Robin McKinney
PHONE #: 860-410-3000

FACILITY INFORMATION

PROJECT NAME: F+H Bldgs. 2010 Maintenance + GW
LOCATION: East Hartford
PROJECT NO.: 8 8UT045
FAX #:

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	VOCs 8260B	CT ETPH	PCBs 8082	Total RCRA 8 metals (Cr, Ni, Zn)	LAB USE ONLY
-1	1159172	12/9/10	1200	DR	GW	3	X				X	X				
	1159172		1200	DR		4					X		X	X		
-2	1159172ut		1200	DR		1			X		X				X	
-3	1159173		1410	DR		3	X				X	X				
	1159173		1410	DR		4					X		X	X		
-4	1159173ut		1410	DR		1			X		X				X	
-5	1159174		1530	DR		3	X				X	X				
	1159174		1530	DR		4					X		X	X		
-6	1159174ut		1530	DR		1			X		X				X	
-7	1159175		11:12	HG		3	X				X	X				16B, 5B, 2H6
	1159175	12/9/10	11:12	HG	GW	4					X		X	X		

DATA TURNAROUND INFORMATION

- [x] 14 DAYS STANDARD
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

COMMENTS/REMARKS

Provide CT RCP analytical lists for VOCs + PCBs + provide CT RCP report

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12/9/10 1630	1.	2. B.C	12-9-10 1830	2. B.C
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☑ TEMPERATURE 0.8 C

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M96492: Chain of Custody
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ACCUTEST Laboratories

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CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M96492
ACCUTEST QUOTE #: KB6/2010-377

CLIENT INFORMATION

NAME: Loureiro Engineering Associates
ADDRESS: 100 Northwest Dr. Plainville, CT
CITY, STATE, ZIP: Plainville CT 06062
SEND REPORT TO: Robin McKinney
PHONE #: 860-410-3000

FACILITY INFORMATION

PROJECT NAME: F+H Bldgs.
LOCATION: P+W, East Hartford 8KUT045
PROJECT NO.:
FAX #:

ANALYTICAL INFORMATION

MATRIX CODES: DW - DRINKING WATER; GW - GROUND WATER; WW - WASTE WATER; SO - SOIL; SL - SLUDGE; OI - OIL; LIQ - OTHER LIQUID; SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	VOCs 8260B	CT ETPH	PCBs 8082	Total RCRA 8 metals (Cr, Pb, Ag, Se, Ba, Cd, As, Hg)	LAB USE ONLY
-8	1159175ut	12/9/10	11:12	HG	GW	1			X			X				X	
-9	1159176		12:35	HG		3	X					X	X				
	1159176		12:35	HG		4						X		X	X		
-10	1159176ut		12:35	HG		1			X			X				X	
-11	1159177		14:50	HG		3	X					X	X				
	1159177		14:50	HG		4						X		X	X		
-12	1159177ut		14:50	HG		1			X			X				X	
-13	1159178		13:65	HG		3	X					X	X				
	1159178		13:65	HG		4						X	~~X~~	~~X~~	~~X~~		
-14	1159178ut		13:65	HG		1			X			X				X	
-15	1159181	12/9/10	900	HG	GW	2	X					X	X				

DATA TURNAROUND INFORMATION

- ☑ 14 DAYS STANDARD
- ☐ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☑ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

Provide CT RCP analytical lists for VOCs + PCBs + Provide CT RCP report

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12/9/10 1630	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

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M96492: Chain of Custody
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ACCUTEST Laboratories

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CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M96492
ACCUTEST QUOTE #: KBU2010-377

CLIENT INFORMATION

NAME: Loureiro Engineering Associates
ADDRESS: 100 Northwest Dr.
CITY: Plainville STATE: CT ZIP: 06062
SEND REPORT TO: Robin McKinney
PHONE #: 860-410-3000

FACILITY INFORMATION

PROJECT NAME: F+H Bldgs. PTW GCH
LOCATION: SSU, CT
PROJECT NO.:
FAX #:

ANALYTICAL INFORMATION: VOCs 8260B; VPH; PCBs 8082; Tot. ROCP 8151, Alpha

MATRIX CODES: DW - DRINKING WATER; GW - GROUND WATER; WW - WASTE WATER; SO - SOIL; SL - SLUDGE; OI - OIL; LIQ - OTHER LIQUID; SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ICE	VOCs 8260B	VPH	PCBs 8082	Tot. ROCP 8151, Alpha	LAB USE ONLY
-16	115918C	12/9/10	1200	HG	GW	3	X	X				X	X				
	115915C		1200			4	HNO3					X		X	X		
-17	115918CH		1200			1	H					X				X	
-18	115917C		1235			3	X					X	X				
	115917C		1235			4						X		XX			
-19	115917CH	12/9/10	1235	HG	GW	1			X			X			X		
-20	115C792	12/9/10	1410	HG	GW	2						X		X			

DATA TURNAROUND INFORMATION

- ☒ 14 DAYS STANDARD
- ☐ 7 DAYS *RUSH*
- ☐ 48 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☒ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

Provide QC RCP analytical for VOCs + PCBs + provide RCP report

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. 1650	12/9/10	1.	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

M96492: Chain of Custody
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Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **Accutest New England** **Client:** **Loureiro Eng. Associates**

Project Location: **UTC: 2010 Quarterly GW - F&H Building** **Project Number:** **88UT045**

Sampling Date(s): **12/9/2010**

Laboratory Sample ID(s): M96492-1, M96492-2, M96492-3, M96492-4, M96492-5, M96492-6, M96492-7, M96492-8, M96492-9, M96492-10, M96492-11, M96492-12, M96492-13, M96492-14, M96492-15, M96492-16, M96492-17, M96492-18, M96492-19, M96492-20

Methods: CT-ETPH 7/06, SW846 6010C, SW846 7470A, SW846 8082, SW846 8260B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☐ No ☑
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☐ No ☑
	b) Were these reporting limits met?	Yes ☐ No ☑
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes ☐ No ☑
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Position: Lab Director

Printed Name: Reza Tand Date: 12/28/2010
Accutest New England

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M96492

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT045

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96492-1 1159172	Collected: 09-DEC-10 12:00 By: DR		Received: 09-DEC-10 By: JB			
M96492-1	SW846 8082	18-DEC-10 13:58	AP	11-DEC-10	CA	P8082RCP
M96492-1	SW846 8260B	21-DEC-10 17:15	EL			V8260RCP
M96492-1	CT-ETPH 7/06	21-DEC-10 19:41	KD	13-DEC-10	MEW	BCTTPH
M96492-2 1159172UF	Collected: 09-DEC-10 12:00 By: DR		Received: 09-DEC-10 By: JB			
M96492-2	SW846 6010C	14-DEC-10 17:52	PY	14-DEC-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M96492-2	SW846 7470A	15-DEC-10 12:49	MA	15-DEC-10	MA	HG
M96492-3 1159173	Collected: 09-DEC-10 14:10 By: DR		Received: 09-DEC-10 By: JB			
M96492-3	SW846 8082	18-DEC-10 14:20	AP	11-DEC-10	CA	P8082RCP
M96492-3	SW846 8260B	21-DEC-10 17:43	EL			V8260RCP
M96492-3	CT-ETPH 7/06	21-DEC-10 20:17	KD	13-DEC-10	MEW	BCTTPH
M96492-4 1159173UF	Collected: 09-DEC-10 14:10 By: DR		Received: 09-DEC-10 By: JB			
M96492-4	SW846 6010C	14-DEC-10 17:56	PY	14-DEC-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M96492-4	SW846 7470A	15-DEC-10 13:22	MA	15-DEC-10	MA	HG
M96492-5 1159174	Collected: 09-DEC-10 15:30 By: DR		Received: 09-DEC-10 By: JB			
M96492-5	SW846 8082	18-DEC-10 14:43	AP	11-DEC-10	CA	P8082RCP
M96492-5	SW846 8260B	21-DEC-10 18:11	EL			V8260RCP
M96492-5	CT-ETPH 7/06	21-DEC-10 20:54	KD	13-DEC-10	MEW	BCTTPH
M96492-6 1159174UF	Collected: 09-DEC-10 15:30 By: DR		Received: 09-DEC-10 By: JB			
M96492-6	SW846 6010C	14-DEC-10 18:00	PY	14-DEC-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M96492

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT045

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96492-6	SW846 7470A	15-DEC-10 13:24	MA	15-DEC-10	MA	HG
M96492-7 1159175	Collected: 09-DEC-10 11:12 By: HG		Received: 09-DEC-10 By: JB			
M96492-7	SW846 8082	18-DEC-10 15:05	AP	11-DEC-10	CA	P8082RCP
M96492-7	SW846 8260B	21-DEC-10 18:40	EL			V8260RCP
M96492-7	CT-ETPH 7/06	21-DEC-10 21:30	KD	13-DEC-10	MEW	BCTTPH
M96492-8 1159175UF	Collected: 09-DEC-10 11:12 By: HG		Received: 09-DEC-10 By: JB			
M96492-8	SW846 6010C	14-DEC-10 18:05	PY	14-DEC-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M96492-8	SW846 7470A	15-DEC-10 13:31	MA	15-DEC-10	MA	HG
M96492-9 1159176	Collected: 09-DEC-10 12:35 By: HG		Received: 09-DEC-10 By: JB			
M96492-9	SW846 8082	18-DEC-10 15:27	AP	11-DEC-10	CA	P8082RCP
M96492-9	SW846 8260B	21-DEC-10 19:08	EL			V8260RCP
M96492-9	CT-ETPH 7/06	21-DEC-10 22:06	KD	13-DEC-10	MEW	BCTTPH
M96492-10 1159176UF	Collected: 09-DEC-10 12:35 By: HG		Received: 09-DEC-10 By: JB			
M96492-10	SW846 6010C	14-DEC-10 17:30	PY	14-DEC-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M96492-10	SW846 7470A	15-DEC-10 13:34	MA	15-DEC-10	MA	HG
M96492-11 1159177	Collected: 09-DEC-10 14:50 By: HG		Received: 09-DEC-10 By: JB			
M96492-11	SW846 8082	18-DEC-10 15:50	AP	11-DEC-10	CA	P8082RCP
M96492-11	SW846 8260B	21-DEC-10 19:36	EL			V8260RCP
M96492-11	CT-ETPH 7/06	21-DEC-10 23:19	KD	13-DEC-10	MEW	BCTTPH
M96492-12 1159177UF	Collected: 09-DEC-10 14:50 By: HG		Received: 09-DEC-10 By: JB			

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M96492

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT045

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96492-12	SW846 6010C	14-DEC-10 17:34	PY	14-DEC-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M96492-12	SW846 7470A	15-DEC-10 13:37	MA	15-DEC-10	MA	HG
M96492-13	Collected: 09-DEC-10 13:05 By: HG		Received: 09-DEC-10 By: JB			
1159178						
M96492-13	SW846 8082	18-DEC-10 16:12	AP	11-DEC-10	CA	P8082RCP
M96492-13	SW846 8260B	21-DEC-10 20:04	EL			V8260RCP
M96492-14	Collected: 09-DEC-10 13:05 By: HG		Received: 09-DEC-10 By: JB			
1159178UF						
M96492-14	SW846 6010C	14-DEC-10 17:38	PY	14-DEC-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M96492-14	SW846 7470A	17-DEC-10 12:16	MA	17-DEC-10	MA	HG
M96492-15	Collected: 09-DEC-10 09:00 By: HG		Received: 09-DEC-10 By: JB			
1159181						
M96492-15	SW846 8260B	21-DEC-10 20:33	EL			V8260RCP
M96492-16	Collected: 09-DEC-10 12:00 By: HG		Received: 09-DEC-10 By: JB			
1159180						
M96492-16	SW846 8082	18-DEC-10 16:34	AP	11-DEC-10	CA	P8082RCP
M96492-16	CT-ETPH 7/06	21-DEC-10 23:55	KD	13-DEC-10	MEW	BCTTPH
M96492-16	SW846 8260B	23-DEC-10 14:47	JP			V8260RCP
M96492-17	Collected: 09-DEC-10 12:00 By: HG		Received: 09-DEC-10 By: JB			
1159180UF						
M96492-17	SW846 6010C	14-DEC-10 17:43	PY	14-DEC-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M96492-17	SW846 7470A	15-DEC-10 13:42	MA	15-DEC-10	MA	HG
M96492-18	Collected: 09-DEC-10 12:35 By: HG		Received: 09-DEC-10 By: JB			
1159179						
M96492-18	SW846 8082	18-DEC-10 16:56	AP	11-DEC-10	CA	P8082RCP

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M96492

UTC: 2010 Quarterly GW - F&H Building
Project No: 88UT045

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M96492-18	CT-ETPH 7/06	22-DEC-10 00:32	KD	13-DEC-10	MEW	BCTTPH
M96492-18	SW846 8260B	23-DEC-10 14:18	JP			V8260RCP
M96492-19	Collected: 09-DEC-10 12:35 By: HG		Received: 09-DEC-10 By: JB			
1159179UF						
M96492-19	SW846 6010C	14-DEC-10 17:47	PY	14-DEC-10	EM	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M96492-19	SW846 7470A	15-DEC-10 13:44	MA	15-DEC-10	MA	HG
M96492-20	Collected: 09-DEC-10 14:10 By: HG		Received: 09-DEC-10 By: JB			
1159792						
M96492-20	CT-ETPH 7/06	22-DEC-10 01:08	KD	13-DEC-10	MEW	BCTTPH

New England ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4112-MB	G102046.D	1	12/21/10	EL	n/a	n/a	MSG4112

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-15

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4112-MB	G102046.D	1	12/21/10	EL	n/a	n/a	MSG4112

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-15

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4112-MB	G102046.D	1	12/21/10	EL	n/a	n/a	MSG4112

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-15

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	91%	70-130%
2037-26-5	Toluene-D8	95%	70-130%
460-00-4	4-Bromofluorobenzene	103%	70-130%

Method Blank Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1841-MB	N48736.D	1	12/23/10	JP	n/a	n/a	MSN1841

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-16, M96492-18

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1841-MB	N48736.D	1	12/23/10	JP	n/a	n/a	MSN1841

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-16, M96492-18

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1841-MB	N48736.D	1	12/23/10	JP	n/a	n/a	MSN1841

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-16, M96492-18

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	70-130%
2037-26-5	Toluene-D8	102%	70-130%
460-00-4	4-Bromofluorobenzene	103%	70-130%

Blank Spike Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4112-BS	G102043.D	1	12/21/10	EL	n/a	n/a	MSG4112

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	47.5	95	70-130
107-13-1	Acrylonitrile	50	36.5	73	70-130
71-43-2	Benzene	50	45.9	92	70-130
108-86-1	Bromobenzene	50	50.3	101	70-130
75-27-4	Bromodichloromethane	50	49.0	98	70-130
75-25-2	Bromoform	50	48.2	96	70-130
74-83-9	Bromomethane	50	43.8	88	70-130
78-93-3	2-Butanone (MEK)	50	51.0	102	70-130
104-51-8	n-Butylbenzene	50	55.3	111	70-130
135-98-8	sec-Butylbenzene	50	57.7	115	70-130
98-06-6	tert-Butylbenzene	50	55.8	112	70-130
75-15-0	Carbon disulfide	50	46.5	93	70-130
56-23-5	Carbon tetrachloride	50	51.3	103	70-130
108-90-7	Chlorobenzene	50	51.2	102	70-130
75-00-3	Chloroethane	50	40.4	81	70-130
67-66-3	Chloroform	50	46.0	92	70-130
74-87-3	Chloromethane	50	37.7	75	70-130
95-49-8	o-Chlorotoluene	50	52.3	105	70-130
106-43-4	p-Chlorotoluene	50	53.9	108	70-130
96-12-8	1,2-Dibromo-3-chloropropane	50	59.1	118	70-130
124-48-1	Dibromochloromethane	50	56.9	114	70-130
106-93-4	1,2-Dibromoethane	50	51.5	103	70-130
95-50-1	1,2-Dichlorobenzene	50	53.3	107	70-130
541-73-1	1,3-Dichlorobenzene	50	53.8	108	70-130
106-46-7	1,4-Dichlorobenzene	50	53.8	108	70-130
75-71-8	Dichlorodifluoromethane	50	50.0	100	70-130
75-34-3	1,1-Dichloroethane	50	41.0	82	70-130
107-06-2	1,2-Dichloroethane	50	44.0	88	70-130
75-35-4	1,1-Dichloroethene	50	46.7	93	70-130
156-59-2	cis-1,2-Dichloroethene	50	43.4	87	70-130
156-60-5	trans-1,2-Dichloroethene	50	44.0	88	70-130
78-87-5	1,2-Dichloropropane	50	40.0	80	70-130
142-28-9	1,3-Dichloropropane	50	48.2	96	70-130
594-20-7	2,2-Dichloropropane	50	49.6	99	70-130
563-58-6	1,1-Dichloropropene	50	47.6	95	70-130
10061-01-5	cis-1,3-Dichloropropene	50	47.6	95	70-130

Blank Spike Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4112-BS	G102043.D	1	12/21/10	EL	n/a	n/a	MSG4112

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	53.1	106	70-130
100-41-4	Ethylbenzene	50	52.1	104	70-130
76-13-1	Freon 113	50	49.1	98	70-130
87-68-3	Hexachlorobutadiene	50	61.1	122	70-130
591-78-6	2-Hexanone	50	46.4	93	70-130
98-82-8	Isopropylbenzene	50	62.6	125	70-130
99-87-6	p-Isopropyltoluene	50	60.8	122	70-130
1634-04-4	Methyl Tert Butyl Ether	50	44.1	88	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	40.6	81	70-130
74-95-3	Methylene bromide	50	46.1	92	70-130
75-09-2	Methylene chloride	50	44.5	89	70-130
91-20-3	Naphthalene	50	60.9	122	70-130
103-65-1	n-Propylbenzene	50	56.0	112	70-130
100-42-5	Styrene	50	52.8	106	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	52.9	106	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	53.4	107	70-130
127-18-4	Tetrachloroethene	50	51.2	102	70-130
109-99-9	Tetrahydrofuran	50	39.4	79	70-130
108-88-3	Toluene	50	46.0	92	70-130
110-57-6	Trans-1,4-Dichloro-2-Butene	50	45.5	91	70-130
87-61-6	1,2,3-Trichlorobenzene	50	61.9	124	70-130
120-82-1	1,2,4-Trichlorobenzene	50	56.1	112	70-130
71-55-6	1,1,1-Trichloroethane	50	50.0	100	70-130
79-00-5	1,1,2-Trichloroethane	50	45.7	91	70-130
79-01-6	Trichloroethene	50	47.6	95	70-130
75-69-4	Trichlorofluoromethane	50	50.3	101	70-130
96-18-4	1,2,3-Trichloropropane	50	53.7	107	70-130
95-63-6	1,2,4-Trimethylbenzene	50	55.3	111	70-130
108-67-8	1,3,5-Trimethylbenzene	50	56.0	112	70-130
75-01-4	Vinyl chloride	50	40.7	81	70-130
	m,p-Xylene	100	105	105	70-130
95-47-6	o-Xylene	50	51.4	103	70-130

Blank Spike Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4112-BS	G102043.D	1	12/21/10	EL	n/a	n/a	MSG4112

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-15

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	70-130%
2037-26-5	Toluene-D8	94%	70-130%
460-00-4	4-Bromofluorobenzene	100%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1841-BS	N48733.D	1	12/23/10	JP	n/a	n/a	MSN1841
MSN1841-BSD	N48734.D	1	12/23/10	JP	n/a	n/a	MSN1841

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-16, M96492-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	56.5	113	48.3	97	16	70-130/25
107-13-1	Acrylonitrile	50	178	356* [a]	159	318* [a]	11	70-130/25
71-43-2	Benzene	50	44.9	90	41.8	84	7	70-130/25
108-86-1	Bromobenzene	50	54.3	109	51.2	102	6	70-130/25
75-27-4	Bromodichloromethane	50	53.5	107	50.4	101	6	70-130/25
75-25-2	Bromoform	50	60.8	122	58.0	116	5	70-130/25
74-83-9	Bromomethane	50	49.9	100	52.8	106	6	70-130/25
78-93-3	2-Butanone (MEK)	50	56.7	113	45.7	91	21	70-130/25
104-51-8	n-Butylbenzene	50	50.8	102	47.6	95	7	70-130/25
135-98-8	sec-Butylbenzene	50	51.9	104	49.0	98	6	70-130/25
98-06-6	tert-Butylbenzene	50	52.4	105	48.9	98	7	70-130/25
75-15-0	Carbon disulfide	50	42.6	85	38.6	77	10	70-130/25
56-23-5	Carbon tetrachloride	50	57.2	114	53.1	106	7	70-130/25
108-90-7	Chlorobenzene	50	55.6	111	52.6	105	6	70-130/25
75-00-3	Chloroethane	50	36.9	74	32.8	66* [b]	12	70-130/25
67-66-3	Chloroform	50	45.0	90	40.5	81	11	70-130/25
74-87-3	Chloromethane	50	43.5	87	38.3	77	13	70-130/25
95-49-8	o-Chlorotoluene	50	47.8	96	45.1	90	6	70-130/25
106-43-4	p-Chlorotoluene	50	51.5	103	48.4	97	6	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	50	56.5	113	49.0	98	14	70-130/25
124-48-1	Dibromochloromethane	50	64.6	129	61.8	124	4	70-130/25
106-93-4	1,2-Dibromoethane	50	57.4	115	55.5	111	3	70-130/25
95-50-1	1,2-Dichlorobenzene	50	52.6	105	50.1	100	5	70-130/25
541-73-1	1,3-Dichlorobenzene	50	53.3	107	50.6	101	5	70-130/25
106-46-7	1,4-Dichlorobenzene	50	56.2	112	53.0	106	6	70-130/25
75-71-8	Dichlorodifluoromethane	50	53.9	108	48.5	97	11	70-130/25
75-34-3	1,1-Dichloroethane	50	42.2	84	38.0	76	10	70-130/25
107-06-2	1,2-Dichloroethane	50	58.0	116	54.9	110	5	70-130/25
75-35-4	1,1-Dichloroethene	50	47.6	95	42.3	85	12	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	43.1	86	39.3	79	9	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	45.0	90	40.6	81	10	70-130/25
78-87-5	1,2-Dichloropropane	50	41.0	82	39.5	79	4	70-130/25
142-28-9	1,3-Dichloropropane	50	49.3	99	47.4	95	4	70-130/25
594-20-7	2,2-Dichloropropane	50	48.6	97	43.2	86	12	70-130/25
563-58-6	1,1-Dichloropropene	50	50.0	100	46.9	94	6	70-130/25
10061-01-5	cis-1,3-Dichloropropene	50	50.3	101	47.6	95	6	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1841-BS	N48733.D	1	12/23/10	JP	n/a	n/a	MSN1841
MSN1841-BSD	N48734.D	1	12/23/10	JP	n/a	n/a	MSN1841

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-16, M96492-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	56.5	113	52.8	106	7	70-130/25
100-41-4	Ethylbenzene	50	54.1	108	51.2	102	6	70-130/25
76-13-1	Freon 113	50	45.9	92	41.4	83	10	70-130/25
87-68-3	Hexachlorobutadiene	50	67.2	134* [b]	62.9	126	7	70-130/25
591-78-6	2-Hexanone	50	57.9	116	53.0	106	9	70-130/25
98-82-8	Isopropylbenzene	50	59.9	120	55.7	111	7	70-130/25
99-87-6	p-Isopropyltoluene	50	52.9	106	49.6	99	6	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	46.0	92	42.3	85	8	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	44.0	88	40.7	81	8	70-130/25
74-95-3	Methylene bromide	50	55.5	111	55.3	111	0	70-130/25
75-09-2	Methylene chloride	50	42.8	86	38.6	77	10	70-130/25
91-20-3	Naphthalene	50	52.9	106	49.4	99	7	70-130/25
103-65-1	n-Propylbenzene	50	50.1	100	46.4	93	8	70-130/25
100-42-5	Styrene	50	59.4	119	56.7	113	5	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	62.8	126	59.0	118	6	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	44.5	89	41.6	83	7	70-130/25
127-18-4	Tetrachloroethene	50	61.9	124	59.5	119	4	70-130/25
109-99-9	Tetrahydrofuran	50	37.3	75	32.0	64* [b]	15	70-130/25
108-88-3	Toluene	50	50.2	100	46.8	94	7	70-130/25
110-57-6	Trans-1,4-Dichloro-2-Butene	50	50.0	100	48.1	96	4	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	61.1	122	57.8	116	6	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	66.1	132* [b]	61.2	122	8	70-130/25
71-55-6	1,1,1-Trichloroethane	50	49.3	99	44.0	88	11	70-130/25
79-00-5	1,1,2-Trichloroethane	50	46.4	93	44.3	89	5	70-130/25
79-01-6	Trichloroethene	50	48.4	97	45.9	92	5	70-130/25
75-69-4	Trichlorofluoromethane	50	43.8	88	39.2	78	11	70-130/25
96-18-4	1,2,3-Trichloropropane	50	47.8	96	45.1	90	6	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	51.8	104	48.6	97	6	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	51.9	104	48.8	98	6	70-130/25
75-01-4	Vinyl chloride	50	50.2	100	44.7	89	12	70-130/25
	m,p-Xylene	100	113	113	107	107	5	70-130/25
95-47-6	o-Xylene	50	55.8	112	53.4	107	4	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1841-BS	N48733.D	1	12/23/10	JP	n/a	n/a	MSN1841
MSN1841-BSD	N48734.D	1	12/23/10	JP	n/a	n/a	MSN1841

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-16, M96492-18

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	97%	94%	70-130%
2037-26-5	Toluene-D8	103%	103%	70-130%
460-00-4	4-Bromofluorobenzene	97%	97%	70-130%

(a) Outside control limits. Associated samples are non-detect for this compound.
(b) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96594-1MS	G102058.D	5	12/21/10	EL	n/a	n/a	MSG4112
M96594-1MSD	G102059.D	5	12/21/10	EL	n/a	n/a	MSG4112
M96594-1	G102053.D	1	12/21/10	EL	n/a	n/a	MSG4112

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-15

CAS No.	Compound	M96594-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	20.2		250	138	47* [a]	142	49* [a]	3	70-130/30
107-13-1	Acrylonitrile	ND		250	179	72	177	71	1	70-130/30
71-43-2	Benzene	ND		250	227	91	224	90	1	70-130/30
108-86-1	Bromobenzene	ND		250	248	99	244	98	2	70-130/30
75-27-4	Bromodichloromethane	2.1		250	240	95	237	94	1	70-130/30
75-25-2	Bromoform	ND		250	216	86	219	88	1	70-130/30
74-83-9	Bromomethane	ND		250	205	82	205	82	0	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	168	67* [a]	168	67* [a]	0	70-130/30
104-51-8	n-Butylbenzene	ND		250	275	110	266	106	3	70-130/30
135-98-8	sec-Butylbenzene	ND		250	289	116	281	112	3	70-130/30
98-06-6	tert-Butylbenzene	ND		250	279	112	273	109	2	70-130/30
75-15-0	Carbon disulfide	ND		250	211	84	211	84	0	70-130/30
56-23-5	Carbon tetrachloride	ND		250	240	96	239	96	0	70-130/30
108-90-7	Chlorobenzene	ND		250	253	101	249	100	2	70-130/30
75-00-3	Chloroethane	ND		250	190	76	189	76	1	70-130/30
67-66-3	Chloroform	7.6		250	228	88	228	88	0	70-130/30
74-87-3	Chloromethane	ND		250	175	70	174	70	1	70-130/30
95-49-8	o-Chlorotoluene	ND		250	261	104	257	103	2	70-130/30
106-43-4	p-Chlorotoluene	ND		250	270	108	263	105	3	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	281	112	269	108	4	70-130/30
124-48-1	Dibromochloromethane	ND		250	267	107	271	108	1	70-130/30
106-93-4	1,2-Dibromoethane	ND		250	252	101	251	100	0	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	266	106	260	104	2	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	269	108	261	104	3	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	266	106	259	104	3	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	242	97	240	96	1	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	200	80	198	79	1	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	208	83	206	82	1	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	226	90	223	89	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	212	85	214	86	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	215	86	215	86	0	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	196	78	196	78	0	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	235	94	232	93	1	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	240	96	240	96	0	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	236	94	230	92	3	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND		250	223	89	224	90	0	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96594-1MS	G102058.D	5	12/21/10	EL	n/a	n/a	MSG4112
M96594-1MSD	G102059.D	5	12/21/10	EL	n/a	n/a	MSG4112
M96594-1	G102053.D	1	12/21/10	EL	n/a	n/a	MSG4112

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-15

CAS No.	Compound	M96594-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		250	247	99	250	100	1	70-130/30
100-41-4	Ethylbenzene	ND		250	260	104	254	102	2	70-130/30
76-13-1	Freon 113	ND		250	234	94	231	92	1	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	297	119	286	114	4	70-130/30
591-78-6	2-Hexanone	ND		250	171	68* [a]	169	68* [a]	1	70-130/30
98-82-8	Isopropylbenzene	ND		250	318	127	308	123	3	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	302	121	294	118	3	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	209	84	214	86	2	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	193	77	195	78	1	70-130/30
74-95-3	Methylene bromide	ND		250	219	88	218	87	0	70-130/30
75-09-2	Methylene chloride	ND		250	212	85	213	85	0	70-130/30
91-20-3	Naphthalene	ND		250	294	118	287	115	2	70-130/30
103-65-1	n-Propylbenzene	ND		250	279	112	271	108	3	70-130/30
100-42-5	Styrene	ND		250	259	104	254	102	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	261	104	256	102	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	263	105	259	104	2	70-130/30
127-18-4	Tetrachloroethene	ND		250	251	100	247	99	2	70-130/30
109-99-9	Tetrahydrofuran	ND		250	184	74	193	77	5	70-130/30
108-88-3	Toluene	ND		250	233	93	228	91	2	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND		250	147	59* [a]	154	62* [a]	5	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	301	120	290	116	4	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	270	108	266	106	1	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	246	98	242	97	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	220	88	220	88	0	70-130/30
79-01-6	Trichloroethene	ND		250	236	94	230	92	3	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	236	94	232	93	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	233	93	236	94	1	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	277	111	269	108	3	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	280	112	272	109	3	70-130/30
75-01-4	Vinyl chloride	ND		250	193	77	192	77	1	70-130/30
	m,p-Xylene	ND		500	525	105	510	102	3	70-130/30
95-47-6	o-Xylene	ND		250	255	102	247	99	3	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96594-1MS	G102058.D	5	12/21/10	EL	n/a	n/a	MSG4112
M96594-1MSD	G102059.D	5	12/21/10	EL	n/a	n/a	MSG4112
M96594-1	G102053.D	1	12/21/10	EL	n/a	n/a	MSG4112

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-15

CAS No.	Surrogate Recoveries	MS	MSD	M96594-1	Limits
1868-53-7	Dibromofluoromethane	92%	91%	87%	70-130%
2037-26-5	Toluene-D8	95%	95%	94%	70-130%
460-00-4	4-Bromofluorobenzene	101%	100%	102%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96630-11MS	N48748.D	5	12/23/10	JP	n/a	n/a	MSN1841
M96630-11MSD	N48749.D	5	12/23/10	JP	n/a	n/a	MSN1841
M96630-11	N48747.D	1	12/23/10	JP	n/a	n/a	MSN1841

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-16, M96492-18

CAS No.	Compound	M96630-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	119	48* [a]	106	42* [a]	12	70-130/30
107-13-1	Acrylonitrile	ND		250	898	359* [b]	772	309* [b]	15	70-130/30
71-43-2	Benzene	2.5		250	227	90	209	83	8	70-130/30
108-86-1	Bromobenzene	ND		250	266	106	249	100	7	70-130/30
75-27-4	Bromodichloromethane	ND		250	275	110	238	95	14	70-130/30
75-25-2	Bromoform	ND		250	289	116	283	113	2	70-130/30
74-83-9	Bromomethane	ND		250	237	95	248	99	5	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	156	62* [a]	133	53* [a]	16	70-130/30
104-51-8	n-Butylbenzene	ND		250	250	100	219	88	13	70-130/30
135-98-8	sec-Butylbenzene	ND		250	259	104	233	93	11	70-130/30
98-06-6	tert-Butylbenzene	ND		250	259	104	242	97	7	70-130/30
75-15-0	Carbon disulfide	ND		250	207	83	182	73	13	70-130/30
56-23-5	Carbon tetrachloride	ND		250	284	114	251	100	12	70-130/30
108-90-7	Chlorobenzene	ND		250	267	107	270	108	1	70-130/30
75-00-3	Chloroethane	ND		250	169	68* [a]	145	58* [a]	15	70-130/30
67-66-3	Chloroform	ND		250	229	92	204	82	12	70-130/30
74-87-3	Chloromethane	ND		250	196	78	181	72	8	70-130/30
95-49-8	o-Chlorotoluene	ND		250	238	95	226	90	5	70-130/30
106-43-4	p-Chlorotoluene	ND		250	251	100	244	98	3	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	259	104	222	89	15	70-130/30
124-48-1	Dibromochloromethane	ND		250	317	127	310	124	2	70-130/30
106-93-4	1,2-Dibromoethane	ND		250	274	110	270	108	1	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	255	102	250	100	2	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	260	104	258	103	1	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	272	109	268	107	1	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	262	105	218	87	18	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	211	84	184	74	14	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	297	119	261	104	13	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	223	89	199	80	11	70-130/30
156-59-2	cis-1,2-Dichloroethene	7.7		250	218	84	201	77	8	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	216	86	197	79	9	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	207	83	188	75	10	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	241	96	233	93	3	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	246	98	217	87	13	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	249	100	227	91	9	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND		250	255	102	236	94	8	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96630-11MS	N48748.D	5	12/23/10	JP	n/a	n/a	MSN1841
M96630-11MSD	N48749.D	5	12/23/10	JP	n/a	n/a	MSN1841
M96630-11	N48747.D	1	12/23/10	JP	n/a	n/a	MSN1841

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-16, M96492-18

CAS No.	Compound	M96630-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		250	278	111	262	105	6	70-130/30
100-41-4	Ethylbenzene	ND		250	266	106	256	102	4	70-130/30
76-13-1	Freon 113	ND		250	218	87	191	76	13	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	329	132* [a]	311	124	6	70-130/30
591-78-6	2-Hexanone	ND		250	199	80	181	72	9	70-130/30
98-82-8	Isopropylbenzene	ND		250	292	117	283	113	3	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	258	103	250	100	3	70-130/30
1634-04-4	Methyl Tert Butyl Ether	0.78		250	221	88	201	80	9	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	213	85	200	80	6	70-130/30
74-95-3	Methylene bromide	ND		250	297	119	264	106	12	70-130/30
75-09-2	Methylene chloride	ND		250	202	81	188	75	7	70-130/30
91-20-3	Naphthalene	ND		250	244	98	254	102	4	70-130/30
103-65-1	n-Propylbenzene	ND		250	245	98	235	94	4	70-130/30
100-42-5	Styrene	ND		250	289	116	282	113	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	309	124	298	119	4	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	214	86	218	87	2	70-130/30
127-18-4	Tetrachloroethene	ND		250	304	122	294	118	3	70-130/30
109-99-9	Tetrahydrofuran	ND		250	173	69* [a]	165	66* [a]	5	70-130/30
108-88-3	Toluene	ND		250	247	99	234	94	5	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND		250	221	88	226	90	2	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	283	113	296	118	4	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	309	124	314	126	2	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	249	100	223	89	11	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	238	95	224	90	6	70-130/30
79-01-6	Trichloroethene	ND		250	246	98	212	85	15	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	217	87	184	74	16	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	225	90	224	90	0	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	258	103	231	92	11	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	259	104	248	99	4	70-130/30
75-01-4	Vinyl chloride	ND		250	240	96	198	79	19	70-130/30
	m,p-Xylene	ND		500	546	109	536	107	2	70-130/30
95-47-6	o-Xylene	ND		250	272	109	269	108	1	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M96630-11MS	N48748.D	5	12/23/10	JP	n/a	n/a	MSN1841
M96630-11MSD	N48749.D	5	12/23/10	JP	n/a	n/a	MSN1841
M96630-11	N48747.D	1	12/23/10	JP	n/a	n/a	MSN1841

The QC reported here applies to the following samples: **Method:** SW846 8260B

M96492-16, M96492-18

CAS No.	Surrogate Recoveries	MS	MSD	M96630-11	Limits
1868-53-7	Dibromofluoromethane	98%	97%	92%	70-130%
2037-26-5	Toluene-D8	105%	104%	102%	70-130%
460-00-4	4-Bromofluorobenzene	96%	96%	106%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) Outside control limits. Associated samples are non-detect for this compound.

Volatile Internal Standard Area Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Check Std:	MSG4112-CC4085	**Injection Date:**	12/21/10
Lab File ID:	G102042.D	**Injection Time:**	08:41
Instrument ID:	GCMSG	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	211553	9.13	344134	10.01	184934	13.29	164337	15.86	82391	6.68
Upper Limit [a]	423106	9.63	688268	10.51	369868	13.79	328674	16.36	164782	7.18
Lower Limit [b]	105777	8.63	172067	9.51	92467	12.79	82169	15.36	41196	6.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG4112-BS	213513	9.13	346307	10.01	184806	13.28	162186	15.86	87913	6.68
MSG4112-MB	205220	9.13	334663	10.01	171964	13.29	149250	15.86	75626	6.68
ZZZZZZ	203120	9.13	336075	10.01	171784	13.28	148527	15.86	70575	6.71
ZZZZZZ	200390	9.13	332737	10.01	169992	13.29	141182	15.86	76971	6.68
ZZZZZZ	197580	9.13	325634	10.01	169369	13.29	145411	15.86	99799	6.68
ZZZZZZ	192398	9.13	315739	10.01	167689	13.29	152325	15.86	102471	6.68
ZZZZZZ	205432	9.13	333904	10.01	175482	13.29	161119	15.86	79391	6.68
M96594-1	211117	9.13	340510	10.01	175980	13.28	152991	15.86	65016	6.69
ZZZZZZ	208741	9.13	335486	10.01	174132	13.28	149762	15.86	78211	6.68
ZZZZZZ	206235	9.13	338021	10.01	175340	13.29	152673	15.86	82404	6.69
ZZZZZZ	204605	9.13	333089	10.01	171708	13.29	147974	15.86	92068	6.68
ZZZZZZ	201933	9.13	331740	10.01	170300	13.28	145119	15.86	99326	6.68
M96594-1MS	203188	9.13	331497	10.01	178930	13.28	156175	15.86	77992	6.69
M96594-1MSD	203549	9.13	334360	10.01	181386	13.28	159232	15.86	86840	6.67
M96492-1	202624	9.13	331490	10.01	172207	13.29	144177	15.86	85039	6.69
M96492-3	200464	9.13	329245	10.01	170706	13.28	141916	15.86	75816	6.68
M96492-5	198340	9.13	325283	10.01	170082	13.29	142691	15.86	66933	6.68
M96492-7	195572	9.13	322926	10.01	165995	13.29	140660	15.86	83792	6.69
M96492-9	196358	9.13	323704	10.01	167038	13.29	140019	15.86	80571	6.69
M96492-11	163190	9.13	251460	10.01	133979	13.29	119254	15.86	65731	6.68
M96492-13	195116	9.13	319988	10.01	141159	13.29	128064	15.86	81146	6.68
M96492-15	158176	9.13	241748	10.01	128351	13.28	115022	15.86	61130	6.67

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Check Std:	MSN1841-CC1823	**Injection Date:**	12/23/10
Lab File ID:	N48732.D	**Injection Time:**	11:50
Instrument ID:	GCMSN	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	152017	8.61	227681	9.46	125732	12.71	98397	15.27	68120	6.19
Upper Limit [a]	304034	9.11	455362	9.96	251464	13.21	196794	15.77	136240	6.69
Lower Limit [b]	76009	8.11	113841	8.96	62866	12.21	49199	14.77	34060	5.69

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSN1841-BS	131078	8.60	184705	9.46	103167	12.71	93775	15.27	61570	6.19
MSN1841-BSD	134691	8.60	183463	9.46	101450	12.71	93422	15.27	59135	6.19
MSN1841-MB	128414	8.61	176554	9.46	94080	12.71	81211	15.27	60818	6.19
M96492-18	129430	8.61	177631	9.46	94017	12.71	80122	15.27	72786	6.19
M96492-16	124712	8.60	175242	9.46	93261	12.72	79529	15.27	71000	6.19
ZZZZZZ	122569	8.61	168363	9.46	90970	12.71	79624	15.27	54288	6.19
ZZZZZZ	124925	8.60	170668	9.47	93324	12.71	86252	15.27	55835	6.19
ZZZZZZ	130654	8.61	181028	9.47	97195	12.71	90735	15.27	57610	6.19
ZZZZZZ	132570	8.61	184458	9.46	97059	12.72	86209	15.27	60223	6.19
ZZZZZZ	133577	8.61	183661	9.46	96719	12.71	83604	15.27	57208	6.19
ZZZZZZ	147620	8.60	211148	9.46	98457	12.71	94187	15.27	63091	6.19
ZZZZZZ	124595	8.61	173634	9.46	105971	12.71	92481	15.27	51630	6.19
ZZZZZZ	120348	8.61	166952	9.46	91072	12.71	77082	15.27	52192	6.19
M96630-11	137595	8.61	198381	9.46	107324	12.71	93806	15.27	57278	6.19
M96630-11MS	130324	8.61	180616	9.47	104763	12.71	95000	15.27	53983	6.19
M96630-11MSD	148889	8.60	208180	9.46	116312	12.71	105912	15.27	57609	6.19
ZZZZZZ	127298	8.61	176490	9.46	94781	12.71	82595	15.27	55536	6.19
ZZZZZZ	124961	8.61	169506	9.47	94288	12.71	81026	15.27	50681	6.19
ZZZZZZ	128779	8.61	176631	9.46	96562	12.72	87502	15.27	52696	6.19
ZZZZZZ	133212	8.61	186477	9.46	101851	12.71	89969	15.27	56707	6.19
ZZZZZZ	125725	8.60	169985	9.47	93310	12.71	80249	15.27	57293	6.19
ZZZZZZ	124721	8.61	175269	9.46	93697	12.72	81324	15.27	53958	6.19
ZZZZZZ	135063	8.61	190852	9.46	104418	12.71	84449	15.27	54143	6.19
ZZZZZZ	112969	8.61	154145	9.46	84154	12.71	70670	15.27	50956	6.19

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M96492-1	G102060.D	90.0	94.0	105.0
M96492-3	G102061.D	90.0	94.0	105.0
M96492-5	G102062.D	91.0	94.0	104.0
M96492-7	G102063.D	91.0	94.0	103.0
M96492-9	G102064.D	90.0	94.0	103.0
M96492-11	G102065.D	90.0	94.0	102.0
M96492-13	G102066.D	93.0	74.0	96.0
M96492-15	G102067.D	92.0	94.0	101.0
M96492-16	N48738.D	97.0	102.0	102.0
M96492-18	N48737.D	95.0	101.0	103.0
M96594-1MS	G102058.D	92.0	95.0	101.0
M96594-1MSD	G102059.D	91.0	95.0	100.0
M96630-11MS	N48748.D	98.0	105.0	96.0
M96630-11MSD	N48749.D	97.0	104.0	96.0
MSG4112-BS	G102043.D	92.0	94.0	100.0
MSG4112-MB	G102046.D	91.0	95.0	103.0
MSN1841-BS	N48733.D	97.0	103.0	97.0
MSN1841-BSD	N48734.D	94.0	103.0	97.0
MSN1841-MB	N48736.D	95.0	102.0	103.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

New England ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23609-MB	BG23880.D	1	12/21/10	KD	12/13/10	OP23609	GBG788

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-16, M96492-18, M96492-20

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries		Limits
3386-33-2	1-Chlorooctadecane	85%	50-149%

Method Blank Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23604-MB	BE23159.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375

The QC reported here applies to the following samples: **Method:** SW846 8082

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-16, M96492-18

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	68%	30-150%
877-09-8	Tetrachloro-m-xylene	64%	30-150%
2051-24-3	Decachlorobiphenyl	43%	30-150%
2051-24-3	Decachlorobiphenyl	42%	30-150%

Blank Spike Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23609-BS	BG23882.D	1	12/21/10	KD	12/13/10	OP23609	GBG788

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-16, M96492-18, M96492-20

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-ETPH (C9-C36)	0.7	0.450	64	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
3386-33-2	1-Chlorooctadecane	78%	50-149%

Blank Spike Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23604-BS	BE23160.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375

The QC reported here applies to the following samples: **Method:** SW846 8082

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-16, M96492-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	1.7	85	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	1.6	80	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	79%	30-150%
877-09-8	Tetrachloro-m-xylene	75%	30-150%
2051-24-3	Decachlorobiphenyl	47%	30-150%
2051-24-3	Decachlorobiphenyl	46%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23609-MS	BG23884.D	1	12/21/10	KD	12/13/10	OP23609	GBG788
OP23609-MSD	BG23886.D	1	12/21/10	KD	12/13/10	OP23609	GBG788
M96366-13	BG23888.D	1	12/21/10	KD	12/13/10	OP23609	GBG788

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-16, M96492-18, M96492-20

CAS No.	Compound	M96366-13 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	CT-ETPH (C9-C36)	ND		0.7	0.570	81	0.530	76	7	50-129/26

CAS No.	Surrogate Recoveries	MS	MSD	M96366-13	Limits
3386-33-2	1-Chlorooctadecane	101%	92%	95%	50-149%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23604-MS	BE23161.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
OP23604-MSD	BE23162.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375
M96366-15	BE23163.D	1	12/18/10	AP	12/11/10	OP23604	GBE1375

The QC reported here applies to the following samples: **Method:** SW846 8082

M96492-1, M96492-3, M96492-5, M96492-7, M96492-9, M96492-11, M96492-13, M96492-16, M96492-18

CAS No.	Compound	M96366-15 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		2	1.8	90	1.8	90	0	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		2	1.6	80	1.7	85	6	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M96366-15	Limits
877-09-8	Tetrachloro-m-xylene	76%	78%	73%	30-150%
877-09-8	Tetrachloro-m-xylene	75%	75%	72%	30-150%
2051-24-3	Decachlorobiphenyl	50%	53%	53%	30-150%
2051-24-3	Decachlorobiphenyl	49%	53%	52%	30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: CT-ETPH 7/06 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
M96492-1	BG23890.D	99.0
M96492-3	BG23892.D	64.0
M96492-5	BG23894.D	69.0
M96492-7	BG23896.D	65.0
M96492-9	BG23898.D	69.0
M96492-11	BG23902.D	77.0
M96492-16	BG23904.D	89.0
M96492-18	BG23906.D	71.0
M96492-20	BG23908.D	86.0
OP23609-BS	BG23882.D	78.0
OP23609-MB	BG23880.D	85.0
OP23609-MS	BG23884.D	101.0
OP23609-MSD	BG23886.D	92.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chlorooctadecane	50-149%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: M96492
Account: LEA Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

Method: SW846 8082 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
M96492-1	BE23165.D	75.0	72.0	76.0	74.0
M96492-3	BE23166.D	72.0	69.0	78.0	76.0
M96492-5	BE23167.D	73.0	71.0	76.0	74.0
M96492-7	BE23168.D	71.0	67.0	71.0	70.0
M96492-9	BE23169.D	69.0	66.0	67.0	66.0
M96492-11	BE23170.D	72.0	70.0	54.0	53.0
M96492-13	BE23171.D	72.0	69.0	41.0	41.0
M96492-16	BE23172.D	67.0	65.0	41.0	41.0
M96492-18	BE23173.D	62.0	62.0	63.0	63.0
OP23604-BS	BE23160.D	79.0	75.0	47.0	46.0
OP23604-MB	BE23159.D	68.0	64.0	43.0	42.0
OP23604-MS	BE23161.D	76.0	75.0	50.0	49.0
OP23604-MSD	BE23162.D	78.0	75.0	53.0	53.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	30-150%
S2 = Decachlorobiphenyl	30-150%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

New England ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16377
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:					12/14/10		12/14/10		12/14/10
Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Aluminum	200	15	15						
Antimony	6.0	.9	1.2						
Arsenic	4.0	1	1.9	-0.60	<4.0	-0.70	<4.0	-0.50	<4.0
Barium	50	.42	3.7	0.90	<50	1.2	<50	1.1	<50
Beryllium	4.0	.14	.2						
Boron	100	.33	1.5						
Cadmium	4.0	.11	.12	0.10	<4.0	0.10	<4.0	0.10	<4.0
Calcium	5000	23	39						
Chromium	10	.47	.53	-0.30	<10	0.60	<10	0.0	<10
Cobalt	50	.17	.28						
Copper	25	.86	.86	1.0	<25	1.0	<25	0.90	<25
Gold	50	1.6	1.7						
Iron	100	3.9	4.1						
Lead	5.0	1.5	1.5	0.60	<5.0	0.20	<5.0	1.1	<5.0
Magnesium	5000	37	37						
Manganese	15	.11	.9						
Molybdenum	100	.21	.64						
Nickel	40	.21	.3	0.20	<40	0.30	<40	0.30	<40
Palladium	50	2.4	2.5						
Platinum	50	7.3	7.3						
Potassium	5000	29	30						
Selenium	10	1.1	1.7	1.0	<10	1.4	<10	0.90	<10
Silicon	100	1.2	7.2						
Silver	5.0	.6	.6	-0.30	<5.0	-0.30	<5.0	-0.10	<5.0
Sodium	5000	15	31						
Strontium	10	.13	.31						
Thallium	5.0	.7	.74						
Tin	100	.36	.43						
Titanium	50	.57	.57						
Tungsten	100	4.8	12						
Vanadium	10	.73	1.1						
Zinc	20	.24	2	0.40	<20	3.2	<20	1.9	<20

Associated samples MP16377: M96492-2, M96492-4, M96492-6, M96492-8, M96492-10, M96492-12, M96492-14, M96492-17, M96492-19

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16377
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.1.1

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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16377
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Metal	M96521-9 Original	MS	Spikelot MPICP	% Rec	QC Limits	M96521-9 Original	DUP	RPD	QC Limits
Prep Date:				12/14/10				12/14/10	
Aluminum									
Antimony	anr								
Arsenic	23.5	513	500	97.9	75-125	23.5	23.7	0.8	0-20
Barium	1410	3370	2000	98.0	75-125	1410	1380	2.2	0-20
Beryllium	anr								
Boron									
Cadmium	40.7	546	500	101.1	75-125	40.7	40.2	1.2	0-20
Calcium									
Chromium	158	666	500	101.6	75-125	158	157	0.6	0-20
Cobalt									
Copper	816	1310	500	98.8	75-125	816	791	3.1	0-20
Gold									
Iron	anr								
Lead	24.1	970	1000	94.6	75-125	24.1	23.9	0.8	0-20
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	73.1	567	500	98.8	75-125	73.1	72.1	1.4	0-20
Palladium									
Platinum									
Potassium									
Selenium	23.1	505	500	96.4	75-125	23.1	22.6	2.2	0-20
Silicon									
Silver	256	472	200	108.0	75-125	256	253	1.2	0-20
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	1440	1900	500	92.0	75-125	1440	1420	1.4	0-20

Associated samples MP16377: M96492-2, M96492-4, M96492-6, M96492-8, M96492-10, M96492-12, M96492-14, M96492-17, M96492-19

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16377
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16377
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:			12/14/10					12/14/10	
Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	anr								
Arsenic	501	500	100.2	80-120	492	500	98.4	1.8	20
Barium	2010	2000	100.5	80-120	1960	2000	98.0	2.5	20
Beryllium	anr								
Boron									
Cadmium	519	500	103.8	80-120	507	500	101.4	2.3	20
Calcium									
Chromium	514	500	102.8	80-120	506	500	101.2	1.6	20
Cobalt									
Copper	499	500	99.8	80-120	491	500	98.2	1.6	20
Gold									
Iron	anr								
Lead	970	1000	97.0	80-120	954	1000	95.4	1.7	20
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	508	500	101.6	80-120	497	500	99.4	2.2	20
Palladium									
Platinum									
Potassium									
Selenium	498	500	99.6	80-120	489	500	97.8	1.8	20
Silicon									
Silver	218	200	109.0	80-120	214	200	107.0	1.9	20
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	507	500	101.4	80-120	495	500	99.0	2.4	20

Associated samples MP16377: M96492-2, M96492-4, M96492-6, M96492-8, M96492-10, M96492-12, M96492-14, M96492-17, M96492-19

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16377
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16377
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 12/14/10

Metal	M96521-9 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	23.5	19.5	17.0 (a)	0-10
Barium	1410	1430	1.6	0-10
Beryllium	anr			
Boron				
Cadmium	40.7	41.1	1.0	0-10
Calcium				
Chromium	158	162	2.2	0-10
Cobalt				
Copper	816	811	0.6	0-10
Gold				
Iron	anr			
Lead	24.1	27.3	13.3 (a)	0-10
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	73.1	74.0	1.2	0-10
Palladium				
Platinum				
Potassium				
Selenium	23.1	24.2	4.8	0-10
Silicon				
Silver	256	257	0.6	0-10
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	1440	1450	0.8	0-10

Associated samples MP16377: M96492-2, M96492-4, M96492-6, M96492-8, M96492-10, M96492-12, M96492-14, M96492-17, M96492-19

SERIAL DILUTION RESULTS SUMMARY

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16377
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.1.4

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BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16386 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/15/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.022	.048	0.012	<0.20

Associated samples MP16386: M96492-2, M96492-4, M96492-6, M96492-8, M96492-10, M96492-12, M96492-17, M96492-19

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16386
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/15/10 12/15/10

Metal	M96492-2 Original	MS	Spikelot HGRWS1	% Rec	QC Limits	M96492-2 Original	DUP	RPD	QC Limits
Mercury	0.0	3.2	3	106.7	75-125	0.0	0.0	NC	0-20

Associated samples MP16386: M96492-2, M96492-4, M96492-6, M96492-8, M96492-10, M96492-12, M96492-17, M96492-19

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16386
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/15/10 12/15/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	3.0	3	100.0	80-120	3.0	3	100.0	0.0	20

Associated samples MP16386: M96492-2, M96492-4, M96492-6, M96492-8, M96492-10, M96492-12, M96492-17, M96492-19

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16398
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/17/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.022	.048	-0.015	<0.20

Associated samples MP16398: M96492-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.3.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16398
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/17/10 12/17/10

Metal	M96575-6 Original	MS	Spikelot HGRWS1	% Rec	QC Limits	M96575-6 Original	DUP	RPD	QC Limits
Mercury	0.0	3.1	3	103.3	75-125	0.0	0.0	NC	0-20

Associated samples MP16398: M96492-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M96492
Account: LEA - Loureiro Eng. Associates
Project: UTC: 2010 Quarterly GW - F&H Building

QC Batch ID: MP16398
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/17/10 12/17/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	2.9	3	96.7	80-120	2.8	3	93.3	3.5	20

Associated samples MP16398: M96492-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.3.3

7

Appendix C

Quality Assurance/Quality Control Documentation

APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

1. QUALITY ASSURANCE /QUALITY CONTROL SUMMARY

During the course of the 2010 Post-Remediation Groundwater Monitoring activities, analytical and observational data were obtained for the F&H Buildings Remediation Area (hereinafter referred to as the "Project Area"). These data included analytical data on groundwater samples, field activities documentation, sample tracking documentation, and other documentation associated with sample collection and analysis.

During the course of groundwater monitoring activities, the need to maintain accurate and complete documentation was a paramount concern. Included in this document is a description of the activities undertaken to document, manage, verify, organize, and present the data compiled; a discussion of the types and quantities of Quality Assurance/Quality Control (QA/QC) samples that were collected during field activities; and an evaluation of the analytical data generated as a result of laboratory QA/QC procedures. The evaluation of laboratory QA/QC information includes a Data Quality Assessment (DQA) and a Data Usability Evaluation (DUE) that was performed in accordance with the methodology described in the November 2007 guidance document entitled, *Reasonable Confidence Protocols* and presented in more detail in the May 2009 document entitled *Laboratory Quality Assurance Quality Control, Data Quality Assessment, Data Usability Evaluation Guidance Document* published by the Connecticut Department of Environmental Protection (CTDEP), as revised.

2. DATA MANAGEMENT PROCEDURES

This section has been organized to present those activities performed by personnel to document the record of post-remediation groundwater monitoring activities performed in the field and discuss the QA/QC activities performed in the field. These discussions are followed by a description of the activities undertaken by personnel in the office to ensure the necessary data have been accumulated, that the data have been properly managed, tracked, verified, entered into the database repository, presented appropriately, and at the conclusion of monitoring events, filed for future use.

2.1 Standard Operating Procedures

Prior to conducting groundwater monitoring activities at the Project Area, Standard Operating Procedures (SOPs) had been developed by Loureiro Engineering Associates, Inc. (LEA) for the most common procedures associated with the sampling and analysis of various media for environmental investigations. Development of these SOPs has taken into account the need for precision, accuracy, completeness, representativeness, and comparability of data.

Although it is understood that there are limits on data accuracy and precision that are inherent in the collection and analysis of samples and in the operation of measuring devices, adherence to standard procedures increases consistency and the level of confidence with which the data collected are evaluated. Data collected under standard procedures can also be used more reliably in comparing results over time on a given project or from other projects or published information.

Data evaluation is also dependent upon the representativeness of the samples or measurements collected and the completeness of information associated with collection of the data. Collection and measurement techniques identified in the SOPs have been designed to take these factors into account, thus increasing the level of confidence that can be placed in the data.

Although adherence to SOPs is imperative for the successful completion of any project, there will be instances where exceptions to the SOPs must be made to obtain reliable data. When exceptions are made, documentation of both the situation requiring deviation and the actual deviation in procedure was recorded in the field documentation.

Each SOP was developed by LEA personnel experienced in the performance of the specific activity. At least two senior-level people, one being the Director of Quality, reviewed the SOP

to ensure that the identified procedures satisfy the stated objectives and that the prescribed procedures are technically correct, appropriately applied, and in conformance with applicable regulatory criteria and standard practices. These individuals signified their approval by signing and dating the SOP.

SOPs for the following activities have been included as Attachment C-1 of this document.

- Low Flow Sampling;
- Liquid Sample Collection and Field Analysis; and
- Quality Assurance/Quality Control Measures for Field Activities.

2.2 Field Quality Assurance Procedures

Field QA/QC procedures begin with the use and maintenance of field equipment and instrumentation and include the proper calibration of the equipment.

2.2.1 Use and Maintenance of Field Equipment and Instrumentation

Field equipment and instruments were operated and maintained in a manner that is consistent with the manufacturer's recommended practices. Deviations from standard use of the equipment or required repairs or adaptations made in the field were noted in the Field Record and/or field logbook. Operation and maintenance manuals for equipment were kept in a single location that was known and accessible to personnel that would be likely to use the equipment.

Field personnel either returned equipment in a condition that permitted its optimal use on the following day of field operations, or notified the appropriate personnel so that repairs or replacements could be arranged in an expedient fashion. The use of expendable equipment was recorded and reported to appropriate personnel so replacements could be ordered in a timely manner and an adequate supply was available.

Prior to starting a particular field investigation, the field services manager or designated personnel ensured that adequate supplies and equipment were available for project completion. It was the responsibility of field personnel to inform the field services manager or other authorized personnel that supplies were depleted and that re-ordering was necessary.

2.2.2 Calibration Procedures and Frequency

Instruments and equipment were calibrated with sufficient frequency and in such a manner that accuracy and reproducibility of results were consistent with the appropriate manufacturer's specifications or project-specific requirements. Calibration was performed at intervals recommended by the manufacturer or more frequently, as conditions dictate. The field instruments that required calibration during the groundwater monitoring activities included the photo-ionization detector (PID); the pH, dissolved oxygen, and specific conductance sensors of the flow-through cells; and the turbidity meters. Documentation of the calibration that was performed was recorded on field documentation forms, analytical records, or other appropriate daily record of activities.

2.2.3 Decontamination

Decontamination procedures are described in applicable SOPs presented in Attachment C-1. These procedures were designed to avoid cross-contamination between samples, the transport of contaminated material between onsite locations, and the transport of contaminated material from onsite or off-site locations. As described in Section 3.2 of this appendix, equipment blanks were collected to confirm the efficiency of decontamination procedures.

2.3 Sample Tracking

Sample tracking activities focus on the timely assignment and tracking of information relevant to field samples collected during the groundwater sampling activities. Samples collected during the groundwater sampling activities were designated using the procedures discussed below.

Field sample tracking included the following tasks:

- Assignment of sample identification numbers and other sample identifiers to new samples to be taken, and entry to a tracking system;
- Production of sample bottle labels from the tracking system;
- Completion of chain-of-custody forms, and entry of this information to the tracking system;
- Entry of additional tracking dates to the tracking system;
- QA checking of the sample tracking information, and processing of change requests; and,

- Production of tracking reports and summary sheets, with distribution to appropriate project staff.

A computer-based sample-tracking system, based on a dBase® database computer program, was used for sample tracking.

2.3.1 Sample Location Identification

Samples were designated with location identifiers previously assigned using the procedure described in the SOPs included in Attachment C-1. In general, sample identification information included the sample type (e.g. monitoring well.); and the sample point number.

Monitoring wells have been provided with location identifiers using a systematic method to prevent duplication of location identifiers. Additionally, a two letter prefix identifying the project area (in this case "HB") was also included in the location identifiers. For example, monitoring well number 1 is designated as HB-MW-01.

The system of location identifiers provides a relatively easy means of finding the referenced locations on Project Area drawings.

2.3.2 Sample Labeling and Custody

Prior to sample collection, project-specific sample numbers were obtained, and labels were generated with all required information, as noted in the sample collection SOPs. Each sample was labeled using waterproof ink on a computer-generated label, and sealed immediately after collection. At a minimum, each sample label contained the following information:

- Project number;
- Date;
- Sample number; and
- Time of sample collection.

In order to ensure accurate identification of all sample containers, sample labels and tags were firmly affixed to the sample container. The sampler was responsible for ensuring that the sample container was dry enough for the label to remain securely attached, or used a suitable transparent adhesive tape when the adhesive labels were not applicable or there was any question as to whether the gummed label would be secure.

All sampling information was recorded on the field sampling records. Written chain-of-custody procedures were followed whenever samples were collected, transferred, stored, analyzed, or destroyed. The objective of these procedures was to create an accurate written record that could be used to trace the possession and handling of the samples from the point of collection through analysis. A sample was determined to be in someone's "custody" under any of the following conditions:

- It was in one's actual possession;
- It was in one's view, after being in one's physical possession;
- It was placed and kept in a locked location after being in one's physical possession; and
- It was kept in a secured area that is restricted to authorized personnel only.

Each time sample custody changed hands, the chain-of-custody form indicated that change. All efforts were made to limit the number of people involved in the collection and handling of samples. The field sampler was responsible for the care and custody of the samples collected until they were transferred under the appropriate chain-of-custody procedures. Specific chain-of-custody procedures are described in the LEA SOP for *Quality Assurance/Quality Control Measures for Field Activities* included in Attachment C-1 of this document.

2.3.3 Field Documentation

Daily Field Reports and other project information tracking forms were used to record general field data collection activities or pertinent field observation or occurrences. These forms consist of the loose-leaf field documentation forms completed daily by field crews. Entries were made in waterproof ink and each page was consecutively numbered for each sampling day. Each daily entry included the following information:

- Name of person recording information;
- Names of all field personnel;
- Project name and number;
- Date;
- Start and end times;
- Weather conditions;

- Equipment used;
- Samples collected;
- Field parameters measured; and,
- Equipment calibration performed.

Other information that was recorded in the field logs included the level of personal protective equipment used, difficulties, accidents, incidents, equipment problems or malfunctions, or deviations from proposed scope of work.

Any corrections made in the field logs were crossed out, not erased, and initialed by the person making the correction. Each page of the logs was signed by the person responsible for recording information on that day. All lines on a page, and all pages, were used or crossed out and initialed.

This information was transmitted from field to office personnel at the end of each working day, or as soon thereafter as possible, for input into LEA's Information Management System (IMS). The Daily Field Reports and forms, in turn, were placed in the central project file.

2.3.4 Mapping

The location of each monitoring well was previously surveyed by a State of Connecticut licensed surveyor. All of the information used to locate sampling points within the Project Area was transferred to AutoCAD® drawings that served as the base maps for data presentation in this report.

2.4 Field Sampling Quality Assurance

QA samples were collected in general accordance with the LEA SOP for *QA/QC Measures for Field Activities*, included in Attachment C-1 of this document. The purpose of the QA samples is to confirm the reliability and validity of the field data gathered during the course of the groundwater monitoring activities. Field duplicate samples were used to provide a measurement of the consistency of samples collected from the same monitoring well and an estimate of variance and bias. Trip blank samples and equipment blank samples were used to provide a measurement of cross-contamination sources and decontamination efficiency, respectively, for groundwater sampling. Performance Evaluation (PE) samples were used to assess the overall

accuracy and bias of the analytical methods being used and provide an indication of overall laboratory performance. Section 3 provides a discussion of the QA/QC sampling results.

2.5 Sample Shipping

Following sample collection, the filled sample containers were placed in coolers and packed appropriately to avoid bottle breakage. Either freezer packs or ice packed in re-sealable plastic bags or plastic containers were placed in the coolers to keep the samples at a temperature less than or equal to 4° Celsius during transport. At the end of each sampling day, samples were picked up by the analytical laboratory's courier service or brought back to LEA's Plainville, Connecticut, office and placed into LEA's External Laboratory Refrigerator for pick up the next day by the analytical laboratory's courier service.

2.5.1 Samples Submitted for Laboratory Analysis

Groundwater samples collected and submitted to the laboratory for analysis were appropriately labeled and logged on chain-of-custody forms. Copies of completed chain-of-custody records for samples submitted for analysis or archiving were submitted to the Project Manager at the end of each working day or as soon thereafter as possible.

2.5.2 Laboratory Analytical Results

The analytical results provided by the laboratory were provided in electronic data deliverable (EDD) format as well as .pdf format to the Project Manager. After documentation of receipt of the results, the EDD was entered into the electronic database by the Database Manager.

2.6 Database Management

The electronic analytical database was maintained in the LEA IMS in a dBASE® format. The database management functions are described in the following paragraphs.

2.6.1 Database Administration

Database administration included coordination of data entry and verification and review of data for completeness and correctness. The Database Manager interfaced with the Project Manager and field personnel to ensure that the database met the project objectives.

2.6.2 Electronic Data Entry

The EDD files provided by the analytical laboratory were uploaded to the electronic analytical database by the Database Manager. Data received from the laboratory in electronic format were checked for completeness by comparing data received with data analyses requested in the chain-of-custody forms. Analytical data were verified to assure the accuracy of the EDD, as compared to the analytical laboratory reports. Data verification involved having a qualified person other than the Database Manager manually check a printout from the electronic database against the laboratory reports. Any deviations from the laboratory reports were reported to the Database Manager, and the subsequent changes re-checked to verify their accuracy. In addition, the sample identification number, location, constituent, and qualifier codes were also verified.

2.6.3 Archiving of Electronic Data

Archiving of the electronic project database was routinely accomplished. Data were backed up on a no-less-than weekly basis. The permanent archive for the analytical and geological/hydrological data is both electronic and hard copy files maintained by LEA.

2.6.4 Data Verification

The field personnel performed an initial review of data obtained from field measurements. This review consisted of checking procedures utilized in the field, ensuring that field measurement instruments were properly calibrated, verifying the accuracy of transcriptions, and comparing data obtained in the field to historic measurements. Field records were subsequently reviewed following completion of each day's field activities for completeness and consistency.

An internal review of analytical data was the responsibility of laboratory personnel. The analyst initiated the data review process by examining and accepting the data. The data reviewer then reviewed the completed data package. The data reviewer provided a technical review for accuracy and precision according to the methods employed and laboratory protocols. The data package was also reviewed for completeness (i.e., all pertinent information is included, all appropriate forms are signed and dated, calculations are correct, and holding times and quality control sample acceptance criteria have been met). A final review of the data was provided by the Project Manager to ensure that the data package met the project specifications.

2.7 Data Presentation

The objective of data presentation was to illustrate the analytical data for the Project Area in formats that facilitated data interpretation and visualization. These formats include tables, figures, and drawings, as appropriate.

2.7.1 Analytical Data Presentation

Use of the electronic database for storage and retrieval of a wide range of both sample collection and analytical information maximized the ease and accuracy of data review and presentation. Tables of analytical and sampling information were produced in multiple formats to assist in the data evaluation process. Examples of analytical data presentations incorporated in this report include: tabular listings of analyses conducted, sorted by location and sample identification number, and summaries of exceedances of tabulated numeric criteria in the CTDEP's Remediation Standard Regulations (RSRs).

2.7.2 Facility Drawings

Facility drawings were created using AutoCAD® software. Base maps were generated using available information provided by Pratt & Whitney.

2.8 File Organization

Files of original analytical data obtained during the groundwater monitoring events were maintained throughout data evaluation process and ultimately archived in a central file. Incoming data were logged into the project file both on the project analytical database and on hardcopy and then were appropriately placed in the file. Analytical results from the laboratories were keyed electronically to the sample identification numbers assigned during sample collection. Original field documentation forms, paper copies of laboratory reports, and other project files information were transferred from the project file to a designated archive location upon the completion of the project. Computerized data were stored in both hard copy and electronic back-up formats.

3. QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

QA/QC samples collected during the 2010 Post-remediation Groundwater Monitoring Program included: duplicate groundwater samples; equipment blank samples; trip blank samples and PE samples. The duplicate samples, equipment blanks and PE samples were analyzed for the same suite of constituents as the field samples, and trip blanks were analyzed for volatile organic compounds (VOCs) only.

3.1 Field Duplicate Samples

Field duplicate samples were collected to provide a measure of the reproducibility of field sampling and laboratory analytical methodologies. Duplicate samples were coded in a fashion that did not alert the laboratory to the fact that the samples are replicates. Consistency between analytical results for field duplicate samples indicates consistent field sampling, sample handling, and analytical laboratory procedures. The consistency between field duplicate pairs is often measured by calculating the relative percent difference (RPD) for detects in a field duplicate pair when a compound was reported at greater than two times the sample quantitation limit in both samples. Field duplicate precision were met when the RPD was less than or equal to 30 % for aqueous samples (which is based upon the United States Environmental Protection Agency (EPA) Region I Tier II Validation Guidance). If the RPD exceeded the acceptable limit, the affected compound(s) results were considered to be estimated values (no directional bias) and data usability was evaluated based on the project objectives. The RPD is calculated using the following formula:

$$RPD = \frac{|X_1 - X_2|}{(X_1 + X_2)/2} \times 100\%$$

where X_1 and X_2 represent the two reported concentration measurements.

One duplicate groundwater sample was collected during each quarterly monitoring event and was submitted for analysis for VOCs, extractable total petroleum hydrocarbons (ETPH), polychlorinated biphenyls (PCBs), Resource Conservation and Recovery Act (RCRA) 8 metals, copper, nickel and zinc. A summary of field duplicate data for groundwater samples is presented in Table C-1, and a summary of constituents analyzed in duplicate groundwater samples along with the computed RPD values for each pair is presented in Table C-2

3.1.1 Volatile Organic Compounds

There were five instances in which VOCs were reported at concentrations greater than two times the reporting limit. The RPDs for these sample pairs ranged up to 4.9%, with the exception of tetrachloroethylene detected at concentrations of 3.1 μg/l and 8.0 μg/l in the duplicate samples collected from monitoring well HB-MW-06 during the December 2010 monitoring event. The tetrachloroethylene results exhibited an RPD of 88.3%, which is expected at the low part-per-billion concentration levels reported. Therefore, the results of the duplicate samples collected are considered acceptable

3.1.2 Extractable Total Petroleum Hydrocarbons

There were three instances in which compounds were reported at concentrations greater than two times the reporting limit. The RPDs for these sample pairs were 4.80%, 14%, and 31.2%. The duplicate pair resulting in an RPD of 31.2% is just outside of the acceptance criterion (30%); however, it should be noted that elevated RPDs are expected at low concentration levels.

3.1.3 Polychlorinated Biphenyls

PCBs were not detected in any groundwater sample collected. Therefore, an RPD assessment could not be performed.

3.1.4 Metals

With the exception of barium, there were no instances in which metals were reported at concentrations greater than two times the reporting limit. Barium was detected in two of the duplicate sample pairs collected with RPDs of 2.04% and 5.6%. The results are therefore considered acceptable.

3.2 Equipment Blank Samples

Equipment blank samples are used to indicate if any cross-contamination of samples between uses of sampling equipment or contamination to samples from disposable equipment may have occurred. Field equipment blank samples are collected by pouring laboratory-provided water (analyte-free, de-ionized) through and/or over decontaminated or disposable sampling equipment into appropriate containers. The criteria for evaluating equipment blanks were such that no

target compound should be present at or above the sample quantitation limit in any given equipment blank.

One equipment blank sample was collected during each quarterly monitoring event and submitted to the laboratory for analysis for VOCs, ETPH, PCBs, and metals. No constituents were detected in any of the equipment blank samples collected in 2010. A summary of all equipment blank samples analyzed is provided as Table C-3.

3.3 Trip Blank Samples

Trip blank samples are used to indicate if any cross-contamination between samples or contamination from other sources of VOCs may have occurred during transport, storage, or laboratory analysis of samples. Trip blanks were prepared by Accutest Laboratories (Accutest) using ultra-pure, de-ionized water and submitted to the sampling team whenever glassware was delivered. A trip blank accompanied all project VOC sample containers through all custody changes in possession, coolers and refrigerators. The trip blanks were never opened by the sampling team.

A total of four trip blank samples, one for each day that sampling was conducted, were submitted to Accutest for analysis. No constituents were reported above laboratory detection limits in any of the trip blank samples that were analyzed during the 2010 sampling events. A summary of all trip blank samples analyzed is provided as Table C-4.

3.4 Performance Evaluation Samples

Double blind aqueous PE samples were submitted to Accutest during the December 2010 monitoring event. The PE sample data were used to assess the overall accuracy and bias of the analytical methods being used and provide an indication of overall laboratory performance. Data for the PE samples also provided information about the magnitude and direction of quantitative bias for the laboratory methods, including sample preparation (extraction and cleanup) and analysis (chromatography and calibration).

The PE samples for this project were prepared by Environmental Resource Associates (ERA) of Arvada, Colorado. All results for PE samples were compared with vendor-certified acceptance limits. The PE samples results were evaluated for pass and fail. Fails were categorized as bias high, bias low, false negatives and false positives. Performance evaluation sample certified

values and results of the performance sample evaluation are included as Attachment C-3. The following is a summary of the performance evaluation samples results by analytical class.

Analysis of performance evaluation samples for metals, VOCs, TPH, and PCBs indicated satisfactory results with the exception of toluene and 1,2-dichloropropane, which were reported slightly below the vendor's acceptance range, and mercury which was reported present, although was absent in the vendor's sample (false positive). None of these constituents were identified in the actual groundwater samples collected.

4. ASSESSMENT OF LABORATORY QA/QC INFORMATION

All data were analyzed using the Connecticut Reasonable Confidence Protocols (RCPs), which are analytical methods based on the respective Environmental Protection Agency (EPA) methods. The RCPs provide specific requirements for QA/QC that the laboratory must follow during analysis of environmental samples. In addition, the RCP methods require the laboratory to report the QA/QC analytical data associated with the analysis of each sample in the laboratory report and further require that the laboratory provide a narrative of any non-conformances for QA/QC data the were outside the acceptable limits for such data, as described in the specific RCP method.

QA/QC information provided by laboratories was evaluated with respect to quality by conducting a DQA and DUE in accordance with the methodology described in the November 2007 guidance document entitled *Reasonable Confidence Protocols* and in more detail in the May 2009 document entitled *Laboratory Quality Assurance Quality Control, Data Quality Assessment, Data Usability Evaluation Guidance Document*. The DQA process is intended to assess the quality of the analytical data generated by the laboratories. The DUE is performed to determine, once the quality of the analytical data is known, whether the quality of that data will affect its usability for the intended purpose.

4.1 Data Quality Assessment and Usability

The DQA was performed to assess the quality of the analytical data in each laboratory analytical report package. The DQA resulted in identifying data for which the quality could affect its potential use in decision-making. The DUE, which took into account the objectives for the data collection effort, and the intended use of the data, was performed using the information developed during the DQA. The RCP Data Quality Assessment Summary Reports that were generated during that assessment process are included as Attachment C-2.

Each analytical data package was reviewed in accordance with the DQA review process. Several deficiencies were noted. These included:

- Results for Laboratory Control Sample (LCS) for VOCs outside the accepted range of variability;
- Recoveries for Matrix Spike/Matrix Spike Duplicate (MS/MSD) for VOCs outside the accepted range of variability;

- Recoveries for initial calibration curve and continuing calibration curve outside the accepted range of variability for specific VOC constituents; and
- Recovery for surrogates was outside the accepted range of variability for ETPH.

After the laboratory analytical data were evaluated during the DQA, a DUE was performed. The DUE took into account the following:

- the site-specific conceptual site model (CSM);
- knowledge of the contaminant types, concentrations, and distribution;
- objectives for the data collection effort and the intended use of the data (i.e. the data quality objectives (DQOs)); and
- results from field QA/QC sampling.

A low percent recovery of 67% was reported for trans-1,4-dichloro-2-butene in the matrix spike (MS)/matrix spike duplicate (MSD) analysis for groundwater collected from well FB-MW-02 on March 4, 2010, indicating a low bias. Low percent recoveries of 59%/58% and 59%/62% were reported for acetone and trans-1,4-dichloro-2-butene, respectively in the MS/MSD analysis for groundwater collected from well HB-MW-07 on June 9, 2010, indicating a low bias. Although percent recoveries were reported below the acceptable QA/QC limits for multiple VOC constituents, these constituents have not been historically identified in groundwater and are therefore not constituents of concern.

Low percent recoveries were reported for trans-1,4-dichloro-2-butene (64%/66%), tetrahydrofuran (66%) and 2,2-dichloropropane (68%) in the LCS run on June 9, 2010, indicating a low bias. Low percent recoveries of 68% and 69%/68% were reported for 2-hexanone and naphthalene, respectively, in the LCS run on September 9, 2010, indicating a low bias. In addition, low percent recoveries of 64% and 66% were also reported for tetrahydrofuran and chloroethane, respectively, in the LCS run on December 9, 2010, indicating a low bias. Although these constituents were not reported above laboratory detection limits in the samples associated with the LCS, these constituents have not been historically identified in groundwater and are therefore not constituents of concern.

Low percent recoveries of 25% and 32% were reported for the surrogates associated with the ETPH run for groundwater collected from HB-MW-07 on June 9, 2010. These low percent recoveries indicate a low bias. ETPH was not reported above laboratory reporting limits in the associated groundwater sample; however, ETPH was reported at concentrations of 0.213

milligrams per liter (mg/l) and 0.10 mg/l in a duplicate sample during the December 2010 sampling event. Therefore it is possible that the low surrogate recovery reported in June 2010 resulted in a non-detect for ETPH.

In general, the QA/QC deficiencies identified related to constituents that are not identified as constituents of concern for the Project Area. The low surrogate recovery reported for ETPH in groundwater collected from well HB-MW-07 in June 2010 has been identified as an issue that affected data usability. The ETPH concentrations in groundwater collected from this well should continue to be monitored to assess trends. Taking into consideration multiple lines of evidence, results from the DUE indicated that the data generated during the 2010 quarterly groundwater sampling events were usable for the intended purpose.

TABLES

ATTACHMENT C-1

LEA Standard Operating Procedures

ATTACHMENT C-2

Data Quality Assessment Worksheets

ATTACHMENT C-3

Performance Evaluation Sample Results

Table C-1
SUMMARY OF DUPLICATE SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEAAnalyt. Lab.	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides/ PCBs	Fuels/Oils	Metals	Miscellaneous Analyses
FB-MW-01	1139120	03/04/2010	4.00 - 14.00	GWS		x			x	X	x	
FB-MW-01	1139123	03/04/2010	4.00 - 14.00	GWS		X			x	X	x	
HB-MW-06	1145338	06/09/2010	4.00 - 14.00	GWS		X			x	x	x	
HB-MW-06	1145342	06/09/2010	4.00 - 14.00	GWS		X			x	X	x	
HB-MW-06	1152113	09/09/2010	4.00 - 14.00	GWS		X			x	X	X	
HB-MW-06	1152121	09/09/2010	4.00 - 14.00	GWS		X			x	X	X	
HB-MW-06	1159176	12/09/2010	4.00 - 14.00	GWS		X			x	X	X	
HB-MW-06	1159179	12/09/2010	4.00 - 14.00	GWS		X			x	X	X	

Printed on 01/05/2011

Table C-2
SUMMARY OF ANALYTICAL RESULTS - FIELD DUPLICATES
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	FB-MW-01	FB-MW-01	RPD (%)		HB-MW-06	HB-MW-06	RPD (%)
	Sample ID	1139120	1139123			1145338	1145342	
	Sample Date	03/04/2010	03/04/2010			06/09/2010	06/09/2010	
	Sample Time	10:30	10:30			11:32	11:32	
	Sample Depth	4.00' - 14.00	4.00' - 14.00			4.00' - 14.00	4.00' - 14.00	
	Laboratory	ACTM	ACTM			ACTM	ACTM	
	Lab. Number	M89656-7	M89656-13			M92105-5	M92105-13	
Constituent	Units							
Xylenes,m- & p-	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Depth of Well	Ft	13.80	13.80	0.00		13.62	13.62	0.00
Depth to Water	Ft	9.41	9.41	0.00		8.88	8.88	0.00
Oxygen, Dissolved (field)	mg/L	4.17	4.17	0.00		1.49	1.49	0.00
Specific Conductivity (field)	uS/cm	315	315	0.00		428	428	0.00
Temperature	C	10.59	10.59	0.00		15.38	15.38	0.00
Turbidity (field)	NTU	3.66	3.66	0.00		4.75	4.75	0.00
pH (field measurement)	SU	6.54	6.54	0.00		6.26	6.26	0.00
Date PCBs Analyzed	-	03/14/2010	03/14/2010			06/26/2010	06/26/2010	
Date Metals Analyzed	-	03/08/2010	03/08/2010			06/14/2010	06/14/2010	
Date Organics Analyzed	-	03/05/2010	03/05/2010			06/19/2010	06/19/2010	
Date Physical Analyzed	-	03/16/2010	03/16/2010			06/22/2010	06/22/2010	
Arsenic (unfiltered)	mg/L	<0.0040 U	<0.0040 U			<0.0040 U	<0.0040 U	
Barium (unfiltered)	mg/L	<0.2 U	<0.2 U			<0.2 U	<0.2 U	
Cadmium (unfiltered)	mg/L	<0.0040 U	<0.0040 U			<0.0040 U	<0.0040 U	
Chromium, Total (unfiltered)	mg/L	<0.01 U	<0.01 U			<0.01 U	<0.01 U	
Copper (unfiltered)	mg/L	<0.025 U	<0.025 U			<0.025 U	<0.025 U	
Lead (unfiltered)	mg/L	<0.0050 U	<0.0050 U			<0.0050 U	<0.0050 U	
Mercury (unfiltered)	mg/L	<0.00020 U	<0.00020 U			<0.00020 U	<0.00020 U	
Nickel (unfiltered)	mg/L	<0.04 U	<0.04 U			<0.04 U	<0.04 U	
Selenium (unfiltered)	mg/L	<0.01 U	<0.01 U			<0.01 U	<0.01 U	
Silver (unfiltered)	mg/L	<0.0050 U	<0.0050 U			<0.0050 U	<0.0050 U	
Zinc (unfiltered)	mg/L	<0.02 U	<0.02 U			<0.02 U	<0.02 U	
Arochlor 1016	ug/L	<0.25 U	<0.26 U			<0.28 U	<0.25 U	
Arochlor 1221	ug/L	<0.25 U	<0.26 U			<0.28 U	<0.25 U	
Arochlor 1232	ug/L	<0.25 U	<0.26 U			<0.28 U	<0.25 U	
Arochlor 1242	ug/L	<0.25 U	<0.26 U			<0.28 U	<0.25 U	
Arochlor 1248	ug/L	<0.25 U	<0.26 U			<0.28 U	<0.25 U	

Table C-2
SUMMARY OF ANALYTICAL RESULTS - FIELD DUPLICATES
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	FB-MW-01	FB-MW-01	RPD (%)		HB-MW-06	HB-MW-06	RPD (%)
	Sample ID	1139120	1139123			1145338	1145342	
	Sample Date	03/04/2010	03/04/2010			06/09/2010	06/09/2010	
	Sample Time	10:30	10:30			11:32	11:32	
	Sample Depth	4.00' - 14.00	4.00' - 14.00			4.00' - 14.00	4.00' - 14.00	
	Laboratory	ACTM	ACTM			ACTM	ACTM	
	Lab. Number	M89656-7	M89656-13			M92105-5	M92105-13	
Constituent	Units							
Arochlor 1254	ug/L	<0.25 U	<0.26 U			<0.28 U	<0.25 U	
Arochlor 1260	ug/L	<0.25 U	<0.26 U			<0.28 U	<0.25 U	
Arochlor 1262	ug/L	<0.25 U	<0.26 U			<0.28 U	<0.25 U	
Arochlor 1268	ug/L	<0.25 U	<0.26 U			<0.28 U	<0.25 U	
Oxidation-Reduction Potential	mV	147.5	147.5	0.00		157.4	157.4	0.00
Total Petroleum Hydrocarbons (CT ETPH)	mg/L	0.363	0.265	31.2		<0.089 U	0.168	
Naphthalene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,2-Dichloropropane	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
Acetone	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Acrylonitrile	ug/L	<25 U	<25 U			<25 U	<25 U	
Benzene	ug/L	<0.50 U	<0.50 U			<0.50 U	<0.50 U	
1,2,3-Trichlorobenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,2,4-Trichlorobenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,2,4-Trimethylbenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
o-Dichlorobenzene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
1,3,5-Trimethylbenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
m-Dichlorobenzene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
p-Dichlorobenzene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Bromobenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Butyl Benzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Chlorobenzene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Ethylbenzene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Isopropylbenzene (Cumene)	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Propylbenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
sec-Butylbenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
tert-Butylbenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Hexachlorobutadiene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Methyl Ethyl ketone	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	

Table C-2
SUMMARY OF ANALYTICAL RESULTS - FIELD DUPLICATES
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	FB-MW-01	FB-MW-01	RPD (%)		HB-MW-06	HB-MW-06	RPD (%)
	Sample ID	1139120	1139123			1145338	1145342	
	Sample Date	03/04/2010	03/04/2010			06/09/2010	06/09/2010	
	Sample Time	10:30	10:30			11:32	11:32	
	Sample Depth	4.00' - 14.00	4.00' - 14.00			4.00' - 14.00	4.00' - 14.00	
	Laboratory	ACTM	ACTM			ACTM	ACTM	
	Lab. Number	M89656-7	M89656-13			M92105-5	M92105-13	
Constituent	Units							
trans-1,4-Dichlorobutene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Carbon Disulfide	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Carbon Tetrachloride	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
4-Isopropyltoluene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,1,1,2-Tetrachloroethane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,1,1-Trichloroethane	ug/L	<1.0 U	<1.0 U			2.0	2.1	4.9
1,1,2,2-Tetrachloroethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
1,1,2-Trichloroethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
1,1,2-Trichlorotrifluoroethane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,1-Dichloroethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Ethylene Dibromide	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
1,2-Dichloroethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Chloroethane	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
Methyl tert-Butyl ether	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
1,1-Dichloroethylene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
trans-1,2-Dichloroethylene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
cis-1,2-Dichloroethylene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Vinyl Chloride	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Tetrachloroethylene	ug/L	<1.0 U	1.1			16.8	17.5	4.1
Trichloroethylene	ug/L	<1.0 U	<1.0 U			1.0	1.1	9.5
Tetrahydrofuran	ug/L	<10 U	<10 U			<10 U	<10 U	
2-Hexanone	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Bromomethane	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
Bromodichloromethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Chloromethane	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
Chlorodibromomethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Methylene Dibromide	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Methylene Chloride	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	

Table C-2
SUMMARY OF ANALYTICAL RESULTS - FIELD DUPLICATES
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	FB-MW-01	FB-MW-01	RPD (%)		HB-MW-06	HB-MW-06	RPD (%)
	Sample ID	1139120	1139123			1145338	1145342	
	Sample Date	03/04/2010	03/04/2010			06/09/2010	06/09/2010	
	Sample Time	10:30	10:30			11:32	11:32	
	Sample Depth	4.00' - 14.00	4.00' - 14.00			4.00' - 14.00	4.00' - 14.00	
	Laboratory	ACTM	ACTM			ACTM	ACTM	
	Lab. Number	M89656-7	M89656-13			M92105-5	M92105-13	
Constituent	Units							
Dichlorodifluoromethane	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
Bromoform	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Chloroform	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Trichlorofluoromethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Methyl Isobutyl ketone	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,2,3-Trichloropropane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,2-Dibromo-3-Chloropropane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,3-Dichloropropane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
sec-Dichloropropane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,1-Dichloropropene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
trans-1,3-Dichloropropene	ug/L	<0.50 U	<0.50 U			<0.50 U	<0.50 U	
cis-1,3-Dichloropropene	ug/L	<0.50 U	<0.50 U			<0.50 U	<0.50 U	
Styrene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Toluene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
o-Chlorotoluene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
p-Chlorotoluene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
o-Xylene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	

Table C-2
SUMMARY OF ANALYTICAL RESULTS - FIELD DUPLICATES
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	HB-MW-06	HB-MW-06	RPD (%)		HB-MW-06	HB-MW-06	RPD (%)
	Sample ID	1152113	1152121			1159176	1159179	
	Sample Date	09/09/2010	09/09/2010			12/09/2010	12/09/2010	
	Sample Time	11:45	11:45			12:35	12:35	
	Sample Depth	4.00' - 14.00	4.00' - 14.00			4.00' - 14.00	4.00' - 14.00	
	Laboratory	ACTM	ACTM			ACTM	ACTM	
	Lab. Number	M94152-3	M94152-7			M96492-10	M96492-18	
Constituent	Units							
Xylenes,m- & p-	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Depth of Well	Ft	13.61	13.61	0.00		13.68	13.68	0.00
Depth to Water	Ft	9.62	9.62	0.00		9.94	9.94	0.00
Oxygen, Dissolved (field)	mg/L	0.12	0.12	0.00		10.79	10.79	0.00
Specific Conductivity (field)	uS/cm	606	606	0.00		314	314	0.00
Temperature	C	21.9	21.9	0.00		14.14	14.14	0.00
Turbidity (field)	NTU	1.4	1.4	0.00		1.62	1.62	0.00
pH (field measurement)	SU	5.93	5.93	0.00		5.29	5.29	0.00
Date PCBs Analyzed	-	09/17/2010	09/17/2010			12/18/2010	12/18/2010	
Date Metals Analyzed	-	09/14/2010	09/14/2010			12/14/2010	12/14/2010	
Date Organics Analyzed	-	09/11/2010	09/11/2010			12/21/2010	12/23/2010	
Date Physical Analyzed	-	09/18/2010	09/18/2010			12/21/2010	12/22/2010	
Arsenic (unfiltered)	mg/L	<0.0040 U	<0.0040 U			<0.0040 U	<0.0040 U	
Barium (unfiltered)	mg/L	0.111	0.105	5.6		0.0545	0.0534	2.04
Cadmium (unfiltered)	mg/L	<0.0040 U	<0.0040 U			<0.0040 U	<0.0040 U	
Chromium, Total (unfiltered)	mg/L	<0.01 U	<0.01 U			<0.01 U	<0.01 U	
Copper (unfiltered)	mg/L	<0.025 U	<0.025 U			<0.025 U	<0.025 U	
Lead (unfiltered)	mg/L	<0.0050 U	<0.0050 U			<0.0050 U	<0.0050 U	
Mercury (unfiltered)	mg/L	<0.00020 U	<0.00020 U			<0.00020 U	<0.00020 U	
Nickel (unfiltered)	mg/L	<0.04 U	<0.04 U			<0.04 U	<0.04 U	
Selenium (unfiltered)	mg/L	<0.01 U	<0.01 U			<0.01 U	<0.01 U	
Silver (unfiltered)	mg/L	<0.0050 U	<0.0050 U			<0.0050 U	<0.0050 U	
Zinc (unfiltered)	mg/L	<0.02 U	<0.02 U			<0.02 U	<0.02 U	
Arochlor 1016	ug/L	<0.25 U	<0.27 U			<0.25 U	<0.25 U	
Arochlor 1221	ug/L	<0.25 U	<0.27 U			<0.25 U	<0.25 U	
Arochlor 1232	ug/L	<0.25 U	<0.27 U			<0.25 U	<0.25 U	
Arochlor 1242	ug/L	<0.25 U	<0.27 U			<0.25 U	<0.25 U	
Arochlor 1248	ug/L	<0.25 U	<0.27 U			<0.25 U	<0.25 U	

Table C-2
SUMMARY OF ANALYTICAL RESULTS - FIELD DUPLICATES
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	HB-MW-06	HB-MW-06	RPD (%)		HB-MW-06	HB-MW-06	RPD (%)
	Sample ID	1152113	1152121			1159176	1159179	
	Sample Date	09/09/2010	09/09/2010			12/09/2010	12/09/2010	
	Sample Time	11:45	11:45			12:35	12:35	
	Sample Depth	4.00' - 14.00	4.00' - 14.00			4.00' - 14.00	4.00' - 14.00	
	Laboratory	ACTM	ACTM			ACTM	ACTM	
	Lab. Number	M94152-3	M94152-7			M96492-10	M96492-18	
Constituent	Units							
Arochlor 1254	ug/L	<0.25 U	<0.27 U			<0.25 U	<0.25 U	
Arochlor 1260	ug/L	<0.25 U	<0.27 U			<0.25 U	<0.25 U	
Arochlor 1262	ug/L	<0.25 U	<0.27 U			<0.25 U	<0.25 U	
Arochlor 1268	ug/L	<0.25 U	<0.27 U			<0.25 U	<0.25 U	
Oxidation-Reduction Potential	mV	-42.2	-42.2	0.00		111.9	111.9	0.00
Total Petroleum Hydrocarbons (CT ETPH)	mg/L	0.557	0.484	14.0		0.341	0.325	4.80
Naphthalene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,2-Dichloropropane	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
Acetone	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Acrylonitrile	ug/L	<25 U	<25 U			<25 U	<25 U	
Benzene	ug/L	<0.50 U	<0.50 U			<0.50 U	<0.50 U	
1,2,3-Trichlorobenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,2,4-Trichlorobenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,2,4-Trimethylbenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
o-Dichlorobenzene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
1,3,5-Trimethylbenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
m-Dichlorobenzene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
p-Dichlorobenzene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Bromobenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Butyl Benzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Chlorobenzene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Ethylbenzene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Isopropylbenzene (Cumene)	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Propylbenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
sec-Butylbenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
tert-Butylbenzene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Hexachlorobutadiene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Methyl Ethyl ketone	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	

Table C-2
SUMMARY OF ANALYTICAL RESULTS - FIELD DUPLICATES
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Loureiro Engineering Associates, Inc.

	Location ID	HB-MW-06	HB-MW-06	RPD (%)		HB-MW-06	HB-MW-06	RPD (%)
	Sample ID	1152113	1152121			1159176	1159179	
	Sample Date	09/09/2010	09/09/2010			12/09/2010	12/09/2010	
	Sample Time	11:45	11:45			12:35	12:35	
	Sample Depth	4.00' - 14.00	4.00' - 14.00			4.00' - 14.00	4.00' - 14.00	
	Laboratory	ACTM	ACTM			ACTM	ACTM	
	Lab. Number	M94152-3	M94152-7			M96492-10	M96492-18	
Constituent	Units							
trans-1,4-Dichlorobutene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Carbon Disulfide	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Carbon Tetrachloride	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
4-Isopropyltoluene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,1,1,2-Tetrachloroethane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,1,1-Trichloroethane	ug/L	5.9	6.1	3.3		2.4	<1.0 U	
1,1,2,2-Tetrachloroethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
1,1,2-Trichloroethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
1,1,2-Trichlorotrifluoroethane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,1-Dichloroethane	ug/L	<1.0 U	1.2			<1.0 U	<1.0 U	
Ethylene Dibromide	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
1,2-Dichloroethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Chloroethane	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
Methyl tert-Butyl ether	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
1,1-Dichloroethylene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
trans-1,2-Dichloroethylene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
cis-1,2-Dichloroethylene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Vinyl Chloride	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Tetrachloroethylene	ug/L	10.6	10.2	3.9		8.0	3.1	88.3
Trichloroethylene	ug/L	2.0	1.8	11		1.0	<1.0 U	
Tetrahydrofuran	ug/L	<10 U	<10 U			<10 U	<10 U	
2-Hexanone	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Bromomethane	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
Bromodichloromethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Chloromethane	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
Chlorodibromomethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Methylene Dibromide	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Methylene Chloride	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	

Table C-2
SUMMARY OF ANALYTICAL RESULTS - FIELD DUPLICATES
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

	Location ID	HB-MW-06	HB-MW-06	RPD (%)		HB-MW-06	HB-MW-06	RPD (%)
	Sample ID	1152113	1152121			1159176	1159179	
	Sample Date	09/09/2010	09/09/2010			12/09/2010	12/09/2010	
	Sample Time	11:45	11:45			12:35	12:35	
	Sample Depth	4.00' - 14.00	4.00' - 14.00			4.00' - 14.00	4.00' - 14.00	
	Laboratory	ACTM	ACTM			ACTM	ACTM	
	Lab. Number	M94152-3	M94152-7			M96492-10	M96492-18	
Constituent	Units							
Dichlorodifluoromethane	ug/L	<2.0 U	<2.0 U			<2.0 U	<2.0 U	
Bromoform	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Chloroform	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Trichlorofluoromethane	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
Methyl Isobutyl ketone	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,2,3-Trichloropropane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,2-Dibromo-3-Chloropropane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,3-Dichloropropane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
sec-Dichloropropane	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
1,1-Dichloropropene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
trans-1,3-Dichloropropene	ug/L	<0.50 U	<0.50 U			<0.50 U	<0.50 U	
cis-1,3-Dichloropropene	ug/L	<0.50 U	<0.50 U			<0.50 U	<0.50 U	
Styrene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
Toluene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	
o-Chlorotoluene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
p-Chlorotoluene	ug/L	<5.0 U	<5.0 U			<5.0 U	<5.0 U	
o-Xylene	ug/L	<1.0 U	<1.0 U			<1.0 U	<1.0 U	

Table C-3
SUMMARY OF EQUIPMENT BLANK SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEAAnalyt. Lab.	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides/ PCBs	Fuels/Oils	Metals	Miscellaneous Analyses
EQUIPMENT	1139125	03/04/2010		BKE		x			x	x	x	
EQUIPMENT	1145344	06/09/2010		BKE		x			x	x	x	
EQUIPMENT	1152496	09/09/2010		BKE		x			x	x	x	
EQUIPMENT	1159180	12/09/2010		BKE		x			x	x	x	

Printed on 01/06/2011

Table C-4
SUMMARY OF TRIP BLANK SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEAAnalyt. Lab.	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides/ PCBs	Fuels/Oils	Metals	Miscellaneous Analyses
TRIP BLANK	1139124	03/04/2010		BKT		x						
TRIP BLANK	1145343	06/09/2010		BKT		x						
TRIP BLANK	1152495	09/09/2010		BKT		x						
TRIP BLANK	1159181	12/09/2010		BKT		x						

Printed on 01/06/2011

Loureiro Engineering Associates, Inc.
Standard Operating Procedure
for
Liquid Sample Collection and Field Analysis

SOP ID: 10004
Date Initiated: 02/20/90
Revision No. 006: 12/31/01

Approved By: ***/s/ Joseph T. Trzaski*** ***12/31/01***
Joseph T. Trzaski **Date**
Senior Scientist

/s/ Nick D. Skoularikis ***12/31/01***
Nick D. Skoularikis **Date**
Director of Quality

REVISION RECORD

Rev #	Date	Additions/Deletions/Modifications
Initial Issue	2/20/90	
001-004	NR	No record.
005	01/15/99	No record.
006	12/31/01	Updated to conform to new SOP format. Minor revisions throughout.

Loureiro Engineering Associates, Inc.
Standard Operating Procedure
for
Liquid Sample Collection and Field Analysis

1. Purpose and Scope

This document describes procedures to be followed for measurement of static water level elevations, detection of immiscible layers, well evacuation, sample withdrawal, and field analyses.

2. Definitions

2.1. Immiscible layers: The term is used to denote free-phase liquids that may be present in the aquifer as a result of a release. These liquids may have a density lighter than water (light non-aqueous phase liquids (LNAPL) or floaters) or heavier than water (dense non-aqueous phase liquids (DNAPL) or sinkers).

3. Equipment

3.1. Equipment required for the collection and field analysis of liquid samples includes:

- Water-level indicator (accurate to 0.01 foot). The size of the instrument depends on the size of the wells being monitored.
- Distilled water.
- Hand towels.
- Portable volatile organic compound (VOC) analyzer (Photovac MicroTIP®, Foxboro OVA® or equivalent).
- Interface probe, clear polyvinyl chloride (PVC) or fluorocarbon resin bailer (if required).
- pH and temperature meter (capable of accuracy to 0.1 pH unit).
- Specific conductivity meter.
- Bailers (clean or disposable) with disposable nylon or polyethylene rope.

- Polyethylene plastic sheeting.
- Polyethylene tubing, and appropriate pumping apparatus such as centrifugal pump, Wattera® pump with fluorocarbon resin foot valve, peristaltic pump with appropriate tubing, submersible pump or other appropriate pumping apparatus.
- Clean disposable gloves.
- Field paperwork.
- Sample collection jars.
- Indelible marker.
- Cooler(s) with ice or ice packs.
- Site-specific Health and Safety Plan (as applicable).
- Site-specific work plan, work instructions, drawings (as applicable).
- Personal protective equipment (as may be required by Site Specific Health and Safety Plan).
- Aluminum foil (if field decontamination is expected).
- Appropriate containers for collection of purge water (bucket, carboy, 55-gallon drum etc.).

4. Procedures

Immediately upon opening the well, the air in the wellhead should be sampled for VOCs using a portable VOC analyzer, such as a Photovac MicroTIP®. The well cap shall be opened slightly and the sampling port of the VOC analyzer shall be inserted into the well. The maximum reading shall be recorded on the appropriate field paperwork. The instrument shall be zeroed with ambient air prior to the measurement, and the initial and final readings shall be recorded for each well.

Measures shall be taken during well sampling to prevent surface soils from coming in contact with the purging equipment and lines. Typically, a polyethylene sheet is placed on the ground providing adequate coverage for the equipment being used.

4.1. Detection of Immiscible Layers

4.1.1. If the presence of immiscible layers is suspected or unknown, the sampling event shall include provisions for detection of immiscible phases prior to well evacuation or sample collection. Lighter and/or

denser immiscible phases may be encountered in a groundwater monitoring well.

4.1.2. An interface probe will be used to determine the existence of any immiscible layers, light or dense. Alternatively, a clear fluorocarbon resin or PVC bailer may be used to determine the existence of the phases or oil sheen in the well when no accurate determination of the immiscible layer thickness is required. For Geoprobe® wells smaller than 1" in diameter, an interface probe cannot be introduced into the well. A small diameter disposable bailer can be used to determine the existence of any immiscible layers. Alternatively the initial water purged from a well will be collected and evaluated visually for the presence of immiscible layers.

4.1.3. If immiscible layers were encountered, the levels of the immiscible liquids shall be measured to an accuracy of 0.02 feet using an electronic interface probe capable of detecting the interfaces between air, product, and water. The interface levels shall be recorded in the field notebook. Adjustments of the observed head to the theoretical hydraulic head shall be calculated based on the density conversion factor associated with the particular non-aqueous phase liquid.

4.1.4. If required, the immiscible layers and groundwater shall then be purged into 55-gallon 17H DOT drum, which shall be labeled and characterized for disposal. The immiscible layer shall be collected prior to any purging activities.

4.2. Measurement of Static Water Level

4.2.1. The static water elevations in each well shall be measured prior to each sampling event. This is performed initially to characterize the site, and in subsequent sampling rounds to determine whether horizontal or vertical flow gradients have changed. A change in hydrologic conditions may necessitate modification of the groundwater monitoring program.

4.2.2. Remove the protective cover and locking cap.

4.2.3. Each well shall have a surveyed reference point located at the top of the well casing with the locking cap removed. The reference point shall be easily recognizable, since the personnel conducting the sampling may differ from one sampling event to the next. If no distinguishable reference point is present, the measurements shall be

taken from the highest point on the well casing. The absence of a reference point and subsequent reference point used for the measurements shall be recorded on the field paperwork.

4.2.4. The following parameters shall be measured with an accuracy of 0.01 ft:

- Depth to standing water.
- Depth to bottom of well.

4.2.5. A water-level indicator will be used for measurement. Due to possible pressure differences between the well atmosphere and the ambient atmosphere, the water level will be allowed to equilibrate for 15 minutes following removal of the well cap. The results shall be recorded in the appropriate location(s) on the appropriate field forms.

4.2.6. Total depth measurements will be compared to original depths to determine the degree of siltation that may have occurred. This information shall be noted on the field form. Should significant siltation occur in any well, the well may need to be redeveloped by an approved method. This information will also be used to confirm that the proper well is being sampled (in case of cluster wells).

4.2.7. The portion of the tape immersed in the well shall be decontaminated during retrieval using a distilled water rinse followed by drying with a clean wipe, prior to use in another well. This decontamination procedure shall be amended, as needed, to accommodate the specific type of contamination anticipated.

4.3. Field Analysis

4.3.1. Parameters that are physically or chemically unstable shall be measured immediately after collection using a field test meter or other equipment. Parameters such as pH, temperature, specific conductivity, and turbidity will be measured in the field, at the temperature of the well sample. The measurement of additional parameters may be required dependent upon sampling methods or other site-specific conditions.

4.3.2. A combination of pH/temperature/specific conductivity meters shall be used. The meter shall be calibrated prior to use and at the end of the day using calibration solutions, in accordance with the instructions provided in the instrument's operating manual. Whenever a

questionable reading ("spike") is observed the calibration shall be checked. The calibration shall be checked prior to sampling each well or well cluster. Calibration information to be recorded in the field paperwork shall include the temperature, pH, and conductivity readings in each calibration solution before and after each calibration.

The pH/temperature/conductivity meters shall be placed into a sample and allowed to stabilize for a minimum of twenty seconds. The accuracy of measurement shall be 0.1 standard units for pH, and 0.1E Celsius for temperature. For conductivity, the accuracy shall be as stipulated by the range of the instrument. The sample shall be discarded in an appropriate manner upon completion of the analysis.

4.3.3. The pH/temperature/specific conductivity meters shall be decontaminated using a distilled/deionized water rinse between each sample. To the extent possible, the same probe and meter shall be used for all measurements at a given site for the duration of monitoring at the site.

4.3.4. Turbidity of the sample will be measured using a DRT turbidimeter, Model 15C or equivalent, that has been calibrated in accordance with the instructions provided in the instrument's manual. The accuracy of the measurement shall be to 1 NTU (nephelometric turbidity unit).

4.4. Well Evacuation

4.4.1. Calculate standing water in the well based on the following schedule and record on the appropriate field form:

Well Diameter (inches)	Conversion Factor (gal/feet)
½	0.01
1	0.041
1 ¼	0.064
1 ½	0.091
2	0.163
4	0.654
6	1.47

4.4.2. Generally, a centrifugal, submersible, air-lift, bladder, inertial, or peristaltic pump equipped with a fluorocarbon resin or PVC foot valve on the end of dedicated tubing, as appropriate, may be used to evacuate the monitoring wells. Alternatively, evacuation of the wells may be accomplished using a bailer.

4.4.3. A new sheet of polyethylene plastic shall be placed on the ground adjacent to the well. Sampling and purging equipment, such as pump, tubing, bailers and bailer twine, containers, etc., shall be placed on the polyethylene sheet, never on the ground.

4.4.4. Don disposable gloves, prepare pump and tubing for insertion into the well, ensuring that any tubing or pump apparatus is of sufficient length to reach the appropriate depth for pumping. Pumping shall occur within the well screened interval as indicated on the well construction diagram. If the well construction information is not available, the bottom of the tubing or pump shall be placed 1' - 2' above the bottom of the well.

4.4.5. Lower the pump and/or tubing gently into the water column to the appropriate depth and begin pumping.

4.4.6. Measure pH, temperature, specific conductivity, turbidity and other specific parameters in the well from the first water extracted during the purging process.

4.4.7. Remove a volume of water equal to 3 to 5 times the standing water from the well measured into an appropriate container. Purging of the well shall occur at a slow rate to minimize agitation of the water recharging the well.

4.4.8. If it is not possible to remove three volumes as described above, due to slow recovery of the well, the well shall be emptied and allowed to recover. In slow-yielding wells, whenever full recovery exceeds two hours, the sample shall be extracted as soon as a sufficient volume is available for a sample for each parameter.

4.4.9. Measure pH, temperature, specific conductivity, turbidity and other specific parameters **prior** to sampling.

4.4.10. Well evacuation is deemed to be complete when the following criteria have been met:

- pH measurements vary no more than ± 0.5 standard units.
- Specific conductivity measurements vary no more than ± 10%.
- Temperature measurements vary no more than ± 1EC.
- Turbidity measurements (if used) are below 5 NTU, if practicable.

Alternatively well purging shall be deemed complete if a maximum of five well volumes have been removed from the well and/or other site-specific or method-specific parameters have stabilized.

4.4.11. Measure pH, temperature, specific conductivity and turbidity (and other specific parameters) again **after** sampling to determine the effectiveness of purging and sample stability.

4.4.12. Do **not** re-use purging equipment (bailers, rope, tubing, sampling vials, etc.). Any non-disposable bailers shall be returned to the office for decontamination. Pumps shall be decontaminated between monitoring wells, in accordance with procedures noted in Section 4.7.

4.4.13. Bailer twine and other consumables, such as filter apparatus, shall be disposed of appropriately.

4.4.14. Record sampler's name, sampling time, volume of water purged, parameters measured, weather conditions, sample number, analyses required and all other pertinent information on appropriate field forms, and complete the chain of custody form. The field paperwork shall also provide an indication of other field conditions that could potentially impact water levels (such as a pond being drained, or presence of a beaver dam in nearby surface water).

4.4.15. As dictated by project-specific requirements and/or groundwater quality considerations, any water purged from the monitoring wells shall be stored in properly labeled containers for disposal.

4.4.16. Storage shall be in properly labeled containers approved for storage of hazardous materials, and in an appropriate designated location at the site.

4.5. Sample Withdrawal

4.5.1. In order to ensure that the groundwater sample is representative of the formation, it is important to minimize physical alteration (i.e. agitation during purging and/or sample collection) or chemical contamination of the sample during the withdrawal process. The sample set shall include enough dedicated bailers and sample jars to obtain samples from each well, and additional quality assurance/quality control (QA/QC) samples such as duplicates, trip blanks and equipment blanks. In addition, it is recommended to increase the supply of

sampling equipment and sample jars by about 10% to account for missing or broken glassware.

4.5.2. Use either an appropriate pump or bailer to purge each well (the same pump used for purging may be used for sample withdrawal, with the exception that samples intended for VOC analysis must be collected using either a bailer or a bladder pump.). Do not reuse a bailer in the field; used non-disposable bailers shall be returned to the office for decontamination.

4.5.3. To minimize agitation of the water column, samples shall be collected from the pump tubing in the following order into pre-labeled sample containers:

- Extractable organics (semi-volatile).
- Total petroleum hydrocarbons (TPH).
- Poly chlorinated biphenyls (PCBs).
- Metals.
- Phenols.
- Cyanide.
- Chloride and sulfate.
- Nitrate and ammonia.
- Turbidity.
- Radionuclides.

Samples to be analyzed for the following constituents shall be collected using a bailer, after any pump and tubing have been removed from the well. Removal of any down hole equipment shall be done carefully and in a manner that minimizes disturbance of the water column.

- Volatile organic compounds (VOCs).
- Purgeable organic carbon (POCs).
- Purgeable organic halogens (POX).
- Total organic halogens (TOX).
- Total organic carbon (TOC).

4.5.4. Samples shall be obtained from the monitoring wells as soon as possible after purging. This may require waiting an extended period for low-yielding wells.

4.5.5. Samples collected for VOC analysis shall be free of any air bubbles and inverted upon filling. Bacterial samples shall be collected using dedicated gloves; taking care not to allow anything to touch the inside of the sampling container.

4.5.6. Samples collected for dissolved metals analysis, which are to be filtered in the field, shall be passed through a 0.45 micron (maximum) filter (either in-line or under negative pressure) prior to placement in the sample bottle.

4.5.7. In situations where replicate samples shall be required, care shall be taken to ensure that each sample collected is independent.

4.5.8. In some situations, inorganic parameters may be sampled directly from a pump after completion of well evacuation procedures.

4.6. Post Sampling Procedures

4.6.1. As required, upon completion of all sampling procedures for a particular site, secure the lid of the cooler using packaging tape with the chain of custody inside.

4.6.2. If the laboratory is local, transport the samples directly to the laboratory and present them to the sample manager. The representative of LEA should witness the verification of the chain of custody and obtain a carbon copy for filing in the project notebook.

4.6.3. If the laboratory is distant, arrange for transport with a reputable carrier service. Typically, the laboratory specifies the carrier to be used and provides the shipping papers. The cooler and samples shall be secured for transport, and all mailing documentation secured onto the top of the cooler. Unless otherwise specified, delivery shall be overnight. Friday shipments should be mailed for Saturday delivery, once confirmed that the laboratory can accept them on Saturday. The laboratory shall provide confirmation of acceptance noting the temperature of the temperature blank and any deviations from the chain of custody.

4.7. Field Documentation

4.7.1. Field documentation shall include at a minimum: a chain-of-custody form, Field Data Record Groundwater Form, Sample Collection Form, Daily Field Report, Field Quality Review Checklist. Sample labels shall be used for proper sample identification.

4.7.1.1. The labels shall be sufficiently durable to withstand immersion for 48 hours without detaching and to withstand normal handling. The information provided shall be legible at all times.

4.7.1.2. The following information shall be provided on the sample label using an indelible-ink pen:

- Sample identification number.
- LEA Commission Number.
- Date and time of collection.
- Place of collection.
- Parameter(s) requested (if space permits).

4.7.1.3. A field logbook and/or appropriate field forms will be used to log all pertinent information with an indelible-ink pen. The following information shall be provided:

- Project and site identification.
- LEA commission number.
- Identification of well.
- Static water level measurement technique.
- Presence of immiscible layers and detection method.
- Time well purged.
- Collection method for immiscible layers and sample identification numbers.
- Well evacuation procedure/equipment.
- Sample withdrawal procedure/equipment.
- Date and time of collection.

- Types of sample containers used and sample identification numbers.
- Preservative(s) used.
- Parameters requested for analysis.
- Field analysis method(s).
- Whether or not field filtration was performed and the filter size, if appropriate.
- Field observations on day of sampling event.
- Record of site activities.
- Field personnel.
- Climatic conditions, including air temperature.
- Status of total production.
- Record of non-productive time.
- Name of all visitors to the site related to the project.

4.7.1.4. The chain-of-custody record shall include the following information:

- Company's name and location.
- Date and time of collection.
- Sample number.
- Container type, number, size.
- Preservative used.
- Signature of collector.
- Signatures of persons involved in the chain of possession.
- Analyses to be performed.
- Type and number of samples.

A separate entry shall be made for each sample, and within each sample each case that a different preservative is used.

4.7.1.5. The Field Data Record Groundwater Form shall be updated during the sampling of each well and include the following information:

- Identification of well.
- Well depth, diameter, depth to water.
- Static water level depth and measurement technique.
- Purge volume and pumping rate.
- Time well purged.
- LEA commission number.
- Date.

4.8. Equipment Decontamination

All materials and equipment, which enter a well, must be clean and free of any potential contaminants. In general, the equipment and materials entering the well shall be unused and preferably disposable. Any items not considered disposable should be decontaminated prior to commencing field activities. If field decontamination is required, the choice of decontamination procedures shall be based upon knowledge of the site-specific contaminants and as outlined in the site-specific work plan.

For sites at which the contaminants are unknown, but contamination is suspected, the decontamination procedures outlined below shall be followed.

4.8.1. Prior to commencing any field activities, the following solutions (as appropriate for the appropriate contaminants) shall be prepared and placed into 500-ml laboratory squirt bottles: 10% methanol in water; 10% nitric acid in water; 100% n-hexane; distilled, de-ionized water.

4.8.2. In the field, prepare approximately 2.5 gallons of a solution of Alconox® (or other suitable non-phosphate laboratory grade detergent) in tap water in a 5-gallon bucket.

4.8.3. Prepare a piece of 5-mil polyethylene sheeting to underlie the decontamination area. The sheeting shall be of sufficient size to contain any accidental discharge of decontamination solutions. The plastic shall be bermed to contain spills.

4.8.4. The order for decontaminating equipment is as follows:

1) Detergent scrub.
2) DI water rinse.
3) Hexane rinse (to be used only if separate-phase petroleum product, other than gasoline, is present).
4) DI water rinse.
5) 10% nitric acid rinse (to be used only when metals are suspected as potential contaminants).
6) DI water rinse.
7) Methanol rinse (<10% solution).
8) Air dry.

4.8.5. Materials considered disposable such as the bailer cord, pump tubing, filters, etc. shall not be decontaminated and shall be disposed of in accordance with all applicable municipal, state, and federal regulations.

4.8.6. Wrap each piece of decontaminated equipment in aluminum foil, as appropriate, to maintain cleanliness.

4.8.7. At the end of the project day, dispose of all spent decontamination fluids and materials such as the polyethylene sheeting and personal protective equipment in accordance with all applicable municipal, state, and federal regulations.

5. Quality Assurance/Quality Control

Typically samples taken for Quality Assurance/Quality Control for liquid sample collection include duplicate samples, equipment blanks and trip blanks. The necessity for these samples will be outlined in the site-specific work plan. In general, all QA/QC measures taken during liquid sample collection shall be in conformance with LEA's standard operating procedure (SOP) ID 10005. Standard QA/QC measure shall include the recording of pertinent information as follows:

5.1. The Field Instrument & Quality Assurance Record, which is a portion of the Daily Field Report, shall include the following information:

- Instrument make, model, and type.
- Calibration readings.
- Calibration/filtration lot numbers.
- Field personnel and signature.

5.2. The Field Quality Review Checklist, which is a portion of the Daily Field Report, shall assure the completeness of the sampling round and include the following information:

- Reviewer's name and date.
- Review of all necessary site activities and field forms.
- Statement of corrective actions for deficiencies.

6. References

6.1. EPA, *RCRA Groundwater Monitoring Technical Enforcement Guidance Document*, OSWER 9950.1, September 1986.

6.2. EPA, *Practical Guide for Groundwater Sampling*, EPA/600/2-85/104, September 1985.

6.3. DEP, Site Characterization Guidance Document, Draft, June 12, 2000.

END OF DOCUMENT

Loureiro Engineering Associates, Inc.
Standard Operating Procedure
for
Low Flow (Low Stress)
Liquid Sample Collection and Field Analysis

SOP ID: 10039
Date Initiated: 06/11/01
Revision No. 003: 04/01/05

Approved By: ***/s/ David C. Brisson*** ***04/01/05***
David C. Brisson **Date**
Project Geologist

/s/ Gail Batchelder ***04/01/05***
Gail L. Batchelder **Date**
Technical Director, Hydrogeology

/s/ Nick D. Skoularikis ***04/01/05***
Nick D. Skoularikis **Date**
Director of Quality

REVISION RECORD

Rev #	Date	Additions/Deletions/Modifications
Initial Issue	06/11/01	
001	04/01/02	Updated to reflect new SOP format.
002	12/02/02	Updated to reflect stabilization procedures.
003	04/01/05	Incorporated modified low-flow sampling procedure to include the use of a peristaltic pump.

Loureiro Engineering Associates, Inc.
Standard Operating Procedure
For
Low Flow (Low Stress)
Liquid Sample Collection and Field Analysis

1. Purpose and Scope

This standard operating procedure (SOP) describes the procedures to be followed for measurement of static water level elevations, detection of immiscible layers, well evacuation, sample withdrawal, and field analyses utilizing low flow sampling techniques.

2. Definitions

2.1. Immiscible layers: The term is used to denote free-phase liquids that may be present in the aquifer as a result of a release. These liquids may have a density lighter than water (light non-aqueous phase liquids (LNAPL) or floaters) or heavier than water (dense non-aqueous phase liquids (DNAPL) or sinkers).

3. Equipment

3.1. Equipment required for the collection and field analysis of liquid samples shall include:

- Water-level indicator (accurate to 0.01 foot).
- Distilled water.
- Hand towels.
- Portable volatile organic compound (VOC) analyzer (Photovac MicroTIP®, Foxboro OVA® or equivalent).
- Interface probe/clear view bailer (to check for light non-aqueous phase liquids only).
- Flow-through cell capable of monitoring pH, temperature, specific-conductance, oxidation reduction potential (Eh), dissolved oxygen (DO), and turbidity.
- Polyethylene plastic sheeting.

- Adjustable rate submersible pump (preferred), adjustable rate centrifugal pump, bladder pump (constructed of stainless steel or Teflon®), or adjustable rate peristaltic pump
- Appropriate tubing for the pump used, for instance polyethylene tubing (1/4 to 3/8 inch outer diameter (O.D.)) for the peristaltic pump
- Clean disposable gloves.
- Alconox®, or other non-phosphate laboratory grade detergent.
- Three 5-gallon buckets.
- Decontamination brushes.
- Distilled, de-ionized (DI) water.
- Decontamination fluids (less than 10 percent methanol in water, 100 percent n-hexane, and 10 percent nitric acid).

4. Procedure

4.1. Health & Safety Requirements

All health and safety requirements described in the site specific Health & Safety Plan and/or Job Hazard analysis shall be observed

4.2. Equipment Decontamination

All materials and equipment that enter a well must be clean and free of any potential contaminants. Do not use any contaminated equipment or materials which are not designed to be used for groundwater monitoring, even if this means that the sampling will not be performed as planned.

In general, the choice of decontamination procedures should be based upon knowledge of the site-specific contaminants and outlined in the site-specific work plan.

For sites at which the contaminants are unknown, but contamination is suspected, the decontamination procedures outlined below should be followed.

4.2.1. Prior to commencing any field activities, the following solutions (as appropriate for the appropriate contaminants) should be prepared and placed into 500-ml laboratory squirt bottles: less than 10 percent

methanol in water; 10 percent nitric acid in water; 100 percent n-hexane; distilled, de-ionized water.

4.2.2. In the field, prepare approximately 2.5 gallons of a solution of Alconox® (or other suitable non-phosphate laboratory grade detergent) in tap water in a 5-gallon bucket.

4.2.3. Prepare a piece of 5-mil polyethylene sheeting to underlie the decontamination area. The sheeting should be of sufficient size to contain any accidental discharge of decontamination solutions. The plastic should be bermed to contain spills.

4.2.4. The order for decontaminating equipment is as follows:

1) Detergent scrub.
2) DI water rinse.
3) Hexane rinse (to be used only if separate-phase petroleum product, other than gasoline, is present).
4) DI water rinse.
5) 10 percent nitric acid rinse (to be used only when metals are suspected as potential contaminants).
6) DI water rinse.
7) Methanol rinse (less than 10 percent solution).
8) Air dry.

4.2.5. Materials such as the bailer cord should not be decontaminated and should just be disposed of after each test. Note: Bailers should be used **only** to check for LNAPL before sample collection using low-flow/low stress procedures. A bailer may be used to check for DNAPL only **after** all sample collection equipment has been removed from the well.

4.2.6. Wrap each piece of decontaminated equipment in aluminum foil, as appropriate, to maintain cleanliness.

4.2.7. At the end of the project day, dispose of all spent decontamination fluids and materials such as the polyethylene sheeting and personal protective equipment in accordance with all applicable municipal, state, and federal regulations.

4.3. Sample Collection

4.3.1. Immediately upon opening the well, the air in the well head will be sampled for VOCs using a portable VOC analyzer, such as a Photovac

MicroTIP® or equivalent. The instrument shall be zeroed with ambient air prior to the measurement, and the highest reading observed shall be recorded for each well. Measurements should be taken until stabilization of the readings has occurred.

4.4. Detection of Immiscible Layers

4.4.1. Should evidence warrant, a sampling event shall include provisions for the detection of immiscible phases prior to well evacuation or sample collection. LNAPLs are relatively insoluble liquid organic compounds with densities less than that of water (1 g/ml), while DNAPLs are organic compounds with densities greater than that of water. Lighter and/or denser immiscible phases may be encountered in a groundwater monitoring well.

4.4.2. An interface probe will be used to determine the existence of any immiscible layers, light or dense. Alternatively, a clear fluorocarbon resin or PVC bailer may be used to determine the existence of the phases or oil sheen in the well when no accurate determination of the immiscible layer thickness is required. As noted above, efforts to detect LNAPL only can be performed prior to sample collection. Efforts to detect DNAPL can be performed only AFTER sample collection has occurred.

4.4.3. Should elevations of the immiscible layers be required, levels of the fluids shall be measured to an accuracy of 0.01 feet using an electronic interface probe capable of detecting the interfaces between air, product, and water. The interface levels shall be recorded in the field form. Adjustments of the observed head to the theoretical hydraulic head shall be calculated based on the density conversion factor associated with the particular non-aqueous phase liquid.

4.4.4. If LNAPL is detected in a well, collection of a groundwater sample from that well is not recommended unless otherwise specified in the site-specific work plan or work instruction. However, if a groundwater sample must be collected from that well, low-flow sampling is the recommended technique, although care must be taken to minimize mobilization of the LNAPL into the zone from which the sample will be collected.

4.5. Measurement of Static Water Level

4.5.1. The static water elevations in each well shall be measured prior to each sampling event. This is performed initially to characterize the site, and in subsequent sampling rounds to determine whether horizontal or vertical flow gradients have changed. A change in hydrologic conditions may necessitate modification of the groundwater monitoring program.

4.5.2. Remove the protective cover and locking cap from the well.

4.5.3. Each well shall have a surveyed reference point located at the top of the well casing with the locking cap removed. The reference point shall be easily recognizable, since the personnel conducting the sampling may differ from one sampling event to the next.

4.5.4. The following parameters shall be measured with an accuracy of 0.01 ft:

- Depth to standing water.
- Depth to bottom of well.

4.5.5. A water-level indicator with a fiberglass tape will be used for measurement. As a result of possible pressure differences between the well atmosphere and the ambient atmosphere, the water level will be allowed fifteen minutes to equilibrate upon removal of the well cap. If excess pressure is encountered the water level will be allowed greater than fifteen minutes to equilibrate upon removal of the well cap. The results shall be recorded on the appropriate field form(s).

4.5.6. Total depth measurements will be compared to original depths to determine the degree of siltation that may have occurred. This information shall be noted on the field forms. Should significant siltation occur in any well, the well shall be redeveloped by an approved method.

4.5.7. The portion of the tape immersed in the well shall be decontaminated during retrieval using a distilled water rinse followed by drying with a clean wipe, prior to use in another well. This decontamination procedure shall be amended, as needed, to accommodate the specific type of contamination anticipated.

4.5.8. The static water level should be monitored and recorded throughout the purging and sampling of each well.

4.6. Field Analysis

4.6.1. Parameters that are physically or chemically unstable shall be tested utilizing a flow-through cell. Such parameters as pH, temperature, specific conductance, DO, Eh, and turbidity will be measured in the field at the temperature of the well sample.

4.6.2. Parameters such as pH, temperature, specific conductance, DO, and Eh shall be measured using a flow-through-cell (YSI model 6820 or equivalent). The meter shall be calibrated prior to use and at the end of the day using supplied solutions in accordance with the instructions provided by the manufacturer. Calibration information will be recorded in the field before and after each calibration.

4.5.3 Turbidity can be measured with a separate turbidimeter, although some flow-through cells include a turbidimeter. It is useful to have a separate turbidimeter on hand to check the validity of the turbidity values obtained using the flow-through cell if there is difficulty reaching low turbidity values or if the turbidity readings recorded do not seem to be consistent with visual observation of the water samples. All samples, including turbidity samples and samples to be submitted for analysis, must be collected before the groundwater passes through the flow-through cell to prevent cross-contamination by potentially stagnant fluid within the flow-through cell. This can be accomplished by using a bypass assembly or disconnecting the tubing from the flow-cell inlet prior to sampling.

4.7. Well Evacuation

4.7.1. Calculate standing water in the well based on the following schedule and record on the appropriate field form:

Well Diameter (inches)	Conversion Factor (gal/feet)
2	0.163
4	0.654
6	1.47

4.7.2. Generally, a submersible, air-lift, bladder, or peristaltic pump equipped with appropriate tubing of inert materials (such as polyethylene), shall be used to evacuate the monitoring wells.

4.7.3. A new piece of polyethylene plastic shall be placed on the ground adjacent to the well. Sampling and purging equipment such as the pump, tubing, containers, etc., shall be placed on the polyethylene sheet, never on the ground.

4.7.4. The pumps and tubing shall be prepared for insertion into the well while wearing disposable gloves. Make sure that any tubing or pump apparatus is of sufficient length to reach the appropriate depth for pumping.

4.7.5. Lower the pump and/or tubing gently into the water column to the midpoint of the saturated portion of the screened interval, unless otherwise specified. A site-specific sampling plan should specify the sampling depth, or provide specific criteria for the selection of intake depth for each well. If possible keep the pump intake two feet above the bottom of the well. Start the pump at the lowest speed setting and slowly increase the speed until discharge occurs. The initial pumping rate shall be approximately 0.1 liters per minute, however, the pumping rate shall not exceed 0.25 liters per minute. Measure the water level to ensure that drawdown in excess of 0.3 feet does not occur in the well. Adjust the pumping rate as necessary until little or no drawdown occurs. If the drawdown exceeds 0.3 feet, reduce pumping rate if possible. If drawdown still does not stabilize at a depth above the pump intake, shut the pump down and allow the well to recharge. It should be noted that stable drawdowns of 0.3 feet are desirable but not mandatory. Stabilization of the drawdown to a depth greater than 0.3 feet is acceptable as long as the depth at which stabilization occurs is above the pump intake. However, it is important that the stabilization depth is clearly recorded and maintained.

4.7.6. Monitor and record the water level and pumping rate at a minimum of every five minutes during purging. Calculate the volume of the discharge tubing, bladder pump (if used), and the flow-through cell. Monitor and record indicator field parameters (turbidity, pH, Eh, DO, temperature and specific conductance) in the well from the first water extracted during the purging process and at least every five minutes thereafter. Stabilization is considered to be achieved when three consecutive readings are within the following limits and no increasing or decreasing trend in the data can be observed:

- Turbidity (10% for values less than 5 and greater than 1 NTU). It should be noted that achievements of turbidity levels less than 5 NTUs are not mandatory but efforts should be made to collect a groundwater samples with the lowest turbidity achievable.
- DO (10%, measured as milligrams per liter).
- Specific Conductance and Temperature (3%).
- pH (+/- 0.1 unit).
- ORP/Eh (+/- 10 millivolts).

4.7.7. If after 2.5 hours of purging or the purging of three well volumes, (whichever comes first) the field parameters have not stabilized, purging may be discontinued to allow sample collection. Similarly, if it is not possible to obtain stabilization as described above as a result of slow recovery of the well, the well shall be evacuated and allowed to recover, at which point the samples should be collected immediately. The appropriate sampling forms shall include a notation that sample collection occurred without stabilization. Samples obtained from slow-yielding wells shall be collected as soon as a sufficient volume is available for a sample for each parameter.

4.7.8. Do **not** re-use purging equipment. Pumps shall be decontaminated between monitoring wells, in accordance with procedures noted in Section 4.1.

4.7.9. Record sampler's name, sampling time, volume of water purged, parameters measured, weather conditions, sample number, analyses required and all other pertinent information in the field notebook and/or appropriate field forms, and complete the chain of custody form.

4.7.10. Any water purged from the monitoring wells shall be stored in appropriate containers until the laboratory analyses are available. Then it should be disposed of in accordance with all applicable local, state and federal requirements.

4.7.11. Storage shall be in containers approved for storage of hazardous materials, and in an appropriate designated location at the facility.

4.8. Sample Withdrawal

4.8.1. In order to ensure that the groundwater sample is representative of the formation, it is important to minimize physical alteration (i.e. agitation during purging and/or sample collection) or chemical contamination of the sample during the withdrawal process.

4.8.2. Use an appropriate pump to purge each well; the same pump used for purging shall be used for sample withdrawal.

4.8.3. The samples shall be collected at a location before entering the flow-through cell. To minimize the effects of water column agitation on sample quality, samples shall be collected from the pump tubing in the following order into pre-labeled sample containers:

- VOCs.
- Total petroleum hydrocarbons.
- Extractable organics (semivolatiles).
- PCBs.
- Metals.
- Phenols.
- Cyanide.
- Chloride and sulfate.
- Nitrate and ammonia.
- Turbidity.
- Radionuclides.
- Purgeable organic carbon (POCs).
- Purgeable organic halogens (POX).
- Total organic halogens (TOX).
- Total organic carbon (TOC).

4.8.4. Samples shall be obtained from the monitoring wells as soon as possible after purging. This may require waiting an extended period for low-yielding wells.

4.8.5. Samples collected for VOC analysis shall be free of any air bubbles and inverted upon filling. Bacterial samples shall be collected using dedicated gloves; taking care not to allow anything to touch the inside of the sampling container.

4.8.6. Samples collected for metals analysis, which are to be filtered in the field, shall be passed through an appropriately sized filter prior to placement in the sample bottle. Pre-rinse the filter with approximately 25 to 50 milliliters of groundwater prior to collecting the filtered metals sample. Filter sizes will generally be either 0.45 microns for dissolved metals and 10 microns for metals that could be present as colloids or adsorbed onto colloids that could be mobile in the aquifer. The appropriate filter size for the individual project must be provided in site-specific work instructions.

4.9. "What If" Scenarios

4.9.1. Certain field conditions may be encountered that influence the choice of equipment to be used or altogether limit the feasibility of low-flow sampling techniques. The following is a brief description of select scenarios to provide field personnel with a guideline if similar circumstances are encountered

4.9.2. Turbidity

4.9.2.1. If turbidity measurements do not stabilize as described above after 2.5 hours of purging or the evacuation of three well volumes, whichever comes first, sample collection can be initiated. Record observations of the color, clarity, and other observable characteristics of the groundwater (such as the presence or absence of particles) in the field paperwork

4.9.2.2. If samples are being collected for analysis for total (unfiltered) metals and the turbidity has not stabilized below 10 NTU, a sample for additional analysis for metals should also be collected after being filtered in the field through an in-line 10-micron filter, if specified in the work instructions.

4.9.3. Peristaltic Pump

4.9.3.1. Difficulty may be encountered while advancing the flexible polyethylene peristaltic pump tubing to the desired depth within a deep well or older well. Excessive friction may result from the tubing contacting the sidewall of the well casing or accumulations of material on the well casing (i.e. mineral and bacterial deposits). In these scenarios, the tubing may coil within the well during advancement and prevent the desired depth from being attained. Efforts to weight the tubing should be attempted before using alternate pumping techniques.

4.9.3.2. If such well conditions are expected, a bladder pump or similarly submersible pump should be used instead of a peristaltic pump. A bladder pump provides sufficient mass on the tubing to allow for advancement in deep or older wells.

4.9.3.3. A peristaltic pump cannot be used to sample wells in which the depth to water is greater than approximately 25 feet.

4.9.4. Sampling Depth

4.9.4.1. If conditions exist that prevent the appropriate pump or tubing from being advanced to the midpoint of the saturated portion of the screened interval, low-flow sampling techniques shall not be used. Instead, sampling shall be conducted using conventional purging and sampling techniques, as described in LEA SOP 10004 entitled *Liquid Sample Collection and Field Analysis*. Justification for not using low-flow sampling techniques must be provided in the field paperwork.

4.10. Field Documentation

4.10.1. Field documentation shall include at a minimum: a chain-of-custody form, Field Data Record Groundwater Form, Sample Collection Form, Daily Field Report. Sample labels and sample seals shall be used for proper sample identification.

4.10.1.1. The labels shall be sufficiently durable to withstand immersion for 48 hours without detaching and to withstand normal handling. The information provided shall be legible at all times.

4.10.1.2. The following information shall be provided on the sample label using an indelible pen:

- Sample identification number.
- Date and time of collection.
- Place of collection.
- Parameter(s) requested (if space permits).

4.10.1.3. Appropriate field forms will be used to log all pertinent information with an indelible pen. The following information shall be provided:

- Project and site identification.
- LEA commission number.
- Identification of well.
- Static water level measurement technique.
- Presence of immiscible layers and detection method.
- Time well purged.
- Collection method for immiscible layers and sample identification numbers.
- Well evacuation procedure/equipment.
- Sample withdrawal procedure/equipment.
- Date and time of collection.
- Types of sample containers used and sample identification numbers.
- Preservative(s) used.
- Parameters requested for analysis.
- Field analysis method(s).
- Whether or not field filtration was performed and the filter size, if appropriate.
- Field observations on day of sampling event.
- Record of site activities.
- Field personnel.

- Climatic conditions, including air temperature.
- Status of total production.
- Record of non-productive time.

4.10.1.4. The Field Sampling Record shall include at a minimum the following information:

- Identification of well.
- Date and time of collection.
- Name of collector.
- Sample number.

4.10.1.5. The chain-of-custody record shall include the following information:

- Company's name and location.
- Date and time of collection.
- Sample number.
- Container type, number, size.
- Preservative used.
- Signature of collector.
- Signatures of persons involved in the chain of possession.
- Analyses to be performed.
- Type and number of samples.

4.10.1.6. The Field Data Record Groundwater Form shall be updated during the sampling of each well and include the following information:

- Identification of well.
- Well depth, diameter, depth to water.
- Static water level depth and measurement technique.
- Purge volume and pumping rate.
- Time well is purged.

- Measurements of initial field parameters and all subsequent readings.
- Any specific circumstances, as described above, such as field filtering, lack of stabilization of parameters, water characteristics, etc.
- LEA commission number.
- Date.

4.10.1.7. The Daily Field Record shall include the following information:

- Client's name, location, LEA commission number, date.
- Instrument make, model, and type.
- Calibration readings.
- Calibration/filtration lot numbers.
- Field personnel and signature.

4.10.1.8. The Daily Field Record shall assure the completeness of the sampling round and include the following information:

- Reviewer's name, date, and LEA commission number.
- Review of all necessary site activities and field forms.
- Statement of corrective actions for deficiencies.

5. References

5.1. United States Environmental Protection Agency (EPA), Region I. *Low Stress (Low Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells,* July 30, 1996, Revision 2.

5.2. EPA. *Groundwater Sampling Guidelines for Superfund and RCRA Project Managers – Groundwater Forum Issue Paper,* Office of Solid Waste and Emergency Response, (EPA 542-S-02-001), May 2002.

5.3. Robert W. Puls and Michael Barcelona, EPA. *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures,* in Groundwater Issue, (EPA/540/S-95/504), April 1996.

5.4. Connecticut Department of Environmental Protection, Bureau of Water Management, Permitting Enforcement and Remediation Division. *Site Characterization Guidance Document,* Draft, June 12, 2000.

END OF DOCUMENT

Loureiro Engineering Associates, Inc.
Standard Operating Procedure
for
Quality Assurance/Quality Control Measures
for
Field Activities

SOP ID: 10005
Date Initiated: 02/20/90
Revision No. 004: 12/31/01

Approved By: ***/s/ Jeffrey J. Loureiro*** ***12/19/01***
Jeffrey J. Loureiro **Date**
President

/s/ Nick D. Skoularikis ***12/19/01***
Nick D. Skoularikis **Date**
Director of Quality

REVISION RECORD

Rev #	Date	Additions/Deletions/Modifications
Initial Issue	02/20/90	
001-003	-	No record.
004	12/31/01	Updated to reflect new SOP format. Added section 4.3, Results Evaluation. Minor revisions throughout.

Loureiro Engineering Associates, Inc.
Standard Operating Procedure
for
Quality Assurance/Quality Control Measures
for
Field Activities

1. Statement of Purpose

This document describes procedures to be followed for proper Quality Assurance Quality Control (QA/QC) practices which shall incorporate all activities associated with sampling tool and instrument preparation, field measurements and sampling, proper documentation of field and post-field activities, QC sample preparation, chain-of-custody protocol and laboratory analytical procedures. The use of specific QA/QC measures is project-specific as defined in the project work plan. This standard operating procedure (SOP) was adopted in accordance with the Environmental Protection Agency (EPA) document *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW-846).

2. Definitions

2.1. Trip Blank: An aliquot of organic-free water or equivalent neutral reference material carried into the field but not exposed.

2.2. Equipment Blank: An aliquot of analyte-free deionized water processed through all sample collection equipment.

2.3. Replicate Samples: Samples that have been divided into two or more portions in the field.

2.4. Collocated Samples: Independent samples collected under identical circumstances in a way that they are equally representative of the parameter of interest.

2.5. Performance Evaluation (PE) Sample: A sample that mimics actual samples in all possible aspects, except that its composition is known to the auditor and unknown to the analyst.

3. Equipment

None

4. Procedure

4.1. General

4.1.1. All QA/QC sample preparation procedures shall be properly documented including:

- Name of person(s) or laboratory involved in sample preparation.
- Reagents used.
- Sample number.
- Analyses required.
- Concentration calculations.
- Accuracy of measurements.
- Number, type, size of containers used.
- Preservation method.
- Date and time of sample preparation.

4.1.2. All information shall be included in the field logbook and/or appropriate field forms, but not necessarily in the chain-of-custody record except as needed for proper sample identification and analysis. Blind sample numbers are being used in order not to disclose the nature of the sample to the laboratory. No information that would identify the sample as a QA/QC sample shall be included in the chain-of-custody record.

4.1.3. At the conclusion of each sampling day, a quality control review shall be conducted using the Field Quality Review Checklist and the Daily Field Report.

4.2. QC Sample Preparation

4.2.1. Trip Blank

4.2.1.1. Contaminated trip blanks may indicate contamination of the samples during the field trip or shipment to the lab, cross-contamination between the samples, contaminated sample vials, or improper handling.

4.2.1.2. Trip blanks shall be used only with samples that are to be analyzed for volatile organic compounds.

4.2.1.3. One trip blank shall be included per shipping container (cooler) carrying sample soil and/or groundwater samples that are to be analyzed for volatile organic compounds

4.2.1.4. Trip blanks are prepared using analyte-free deionized organic-free water prior to field activities associated with the sampling event, usually by the laboratory providing the sampling containers. Each trip blank is placed in a 40-ml glass VOA vial and is carried in the same shipping container as the sample(s). Trip blanks should not be opened at any time during transport.

4.2.2. Equipment Blank

4.2.2.1. The purpose of an equipment/rinsate blank is to determine if decontamination procedures were adequate or if any of the equipment might contribute contaminants to the sample.

4.2.2.2. An equipment blank is prepared by running analyte-free deionized water through all sample collection equipment (bailers, pumps, filters, split-spoon) and placing it in the appropriate sample containers for analysis. If equipment has been decontaminated in the field, the equipment blank shall be collected after decontamination procedures have been performed.

4.2.2.3. Equipment blanks shall be used when sampling surface water, groundwater, soil, and sediment.

4.2.2.4. One equipment blank shall be collected for each sample bottle/preservation technique/analysis procedure per matrix per sampling event, or as otherwise specified in project-specific documents.

4.2.3. Replicate Samples

4.2.3.1. Replicate samples provide precision information on handling, shipping, storage, preparation and laboratory analysis.

4.2.3.2. Replicate samples are samples that have been divided into two or more portions in the field. An example of a replicate sample is two identical sample bottles filled with water from the same bailer retrieval. To ensure homogeneity, the bailer should be emptied into a clean, decontaminated beaker used exclusively

for the purpose and containing sufficient volume for both sample containers, and from that into the sample containers.

4.2.3.3. Replicate samples cannot be used when sampling for volatile organic compounds.

4.2.3.4. One replicate sample shall be obtained for each sample bottle/preservation technique/analysis procedure per sampling event or one out of every 20 samples, unless collocated samples are used (see below), or as otherwise specified in project-specific documents.

4.2.4. Collocated Samples

4.2.4.1. Collocated samples provide precision information on sample acquisition, homogeneity, handling, shipping, storage, preparation and laboratory analysis.

4.2.4.2. Collocated samples are independent samples collected in such a way so that presumably they are equally representative of the parameter of interest. Examples of collocated samples are groundwater samples collected sequentially, soil core samples collected side-by-side, or air samples collected essentially at the same time from the same manifold.

4.2.4.3. Collocated samples are especially useful when sampling for volatile organic compounds, for which replicate samples cannot be used.

4.2.4.4. Collocated samples shall be obtained for each sample bottle/preservation technique/analysis procedure per sampling event or one out of every 20 samples, unless replicate samples are used (see above), or as otherwise specified in project-specific documents.

4.2.5. Split Samples

4.2.5.1. The purpose of split samples is to provide an assessment of the laboratory analytical procedure.

4.2.5.2. Split samples are collocated or replicate samples sent to two (or more) different laboratories.

4.2.5.3. Split samples can be used with any sample media. Split samples can be used in conjunction with spiked samples (see

below). In case contradictory results are obtained from the samples split between different laboratories, the spiked samples can be used to verify the analytical data (provided that the spiked samples were properly prepared and the appropriate documentation is available).

4.2.5.4. When used, one split/spiked sample per sample bottle/preservation technique/analysis procedure per sampling event or every 20 samples shall be included, or as specified in project-specific documents.

4.2.6. Spiked Samples

4.2.6.1. The purpose of spiked samples is to provide information on the precision of the laboratory analytical procedure. However, besides a wrong preparation, several other sources of error exist such as analyte stability, holding time and interactions with the sample matrix.

4.2.6.2. Spiked samples are samples spiked with the contaminants of interest. The compounds used for spiking should be of the same chemical group as the contaminants being investigated, but they do not have to be the exact chemical compounds. Spiking should be carefully designed and performed prior to the field investigations. Field matrix spikes are not generally recommended because of the high level of technical expertise required for proper preparation and documentation.

4.2.6.3. Can be used with any sample media, however, liquid matrices are preferred due to uniformity of mixing.

4.2.6.4. When used, one split/spiked sample per sample bottle/preservation technique/analysis procedure per sampling event or every 20 samples shall be included, or as otherwise specified in project-specific documents. In order to ensure defensible data, performance evaluation (PE) samples, prepared by an independent vendor, are typically being used. The ordering and handling procedures and record keeping requirements are discussed in Loureiro Engineering Associates, Inc. (LEA's) *SOP for Preparation of PE Samples* (SOP 10030).

4.3. Result Evaluation

4.3.1. The analytical results on QA/QC samples should be evaluated along with the remaining analytical data as follows:

4.3.1.1. No constituents should be detected in the trip blank or equipment blank.

4.3.1.2. The relative percent differences (RPDs) shall be computed for all constituents detected in both duplicate samples used.

The RPD between two measurements (e.g., M1 and M2) is calculated as follows:

$$RPD = \frac{|M1 - M2|}{(M1 + M2)/2} \times 100\%$$

4.3.1.3. Any deviations in the performance evaluation samples shall be brought to the attention of the laboratory. An investigation shall then be performed by the laboratory of the method used, laboratory QA/QC procedures followed, and computations performed. The laboratory shall report the results of their investigation and any corrective actions taken.

5. References

5.1. EPA, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW-846).

END OF DOCUMENT

CT DEP Reasonable Confidence Protocol - Data Quality Assessment Worksheet

Laboratory: Accutest Laboratories
Project: F&H Groundwater Monitoring 2010
Commission # 88UT045
SDG: M89656
Date Samples Collected 03.04.10
RCP Certification Form Inclu Yes
Laboratory Case Narrative Inc Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M89656	1139117	-1	FB-MW-02	Acetone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139117	-1	FB-MW-02	2-Butanone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139117	-1	FB-MW-02	1,2,3-Trichlorobenzene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139117	-1	FB-MW-02	Naphthalene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139117	-1	FB-MW-02	Acetone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139117	-1	FB-MW-02	2-Butanone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139117	-1	FB-MW-02	2-Butanone	Laboratory Control Sample	131		high	
M89656	1139117	-1	FB-MW-02	2-hexanone	Laboratory Control Sample	141 / 132		high	
M89656	1139117	-1	FB-MW-02	Acetone	Laboratory Control Sample	135 / 131		high	
M89656	1139117	-1	FB-MW-02	Isopropylbenzne	Laboratory Control Sample	135 / 134		high	
M89656	1139117	-1	FB-MW-02	Trans-1,4-dichloro-2-buter	Matrix Spike / Matrix Spike Duplicate	67		low	
M89656	1139117	-1	FB-MW-02	2,2-Dichloropropane	Matrix Spike / Matrix Spike Duplicate	132		high	
M89656	1139117	-1	FB-MW-02	Isopropylbenzne	Matrix Spike / Matrix Spike Duplicate	140 / 141		high	
M89656	1139117UF	-2	FB-MW-02	NO QC Issues					
M89656	1139118	-3	HB-MW-06	Acetone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139118	-3	HB-MW-06	2-Butanone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139118	-3	HB-MW-06	1,2,3-Trichlorobenzene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139118	-3	HB-MW-06	Naphthalene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139118	-3	HB-MW-06	Acetone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139118	-3	HB-MW-06	2-Butanone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139118	-3	HB-MW-06	2-Butanone	Laboratory Control Sample	131		high	
M89656	1139118	-3	HB-MW-06	2-hexanone	Laboratory Control Sample	141 / 132		high	
M89656	1139118	-3	HB-MW-06	Acetone	Laboratory Control Sample	135 / 131		high	
M89656	1139118	-3	HB-MW-06	Isopropylbenzne	Laboratory Control Sample	135 / 134		high	
M89656	1139118UF	-4	HB-MW-06	NO QC Issues					
M89656	1139119	-5	HB-MW-04	Acetone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139119	-5	HB-MW-04	2-Butanone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139119	-5	HB-MW-04	1,2,3-Trichlorobenzene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139119	-5	HB-MW-04	Naphthalene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139119	-5	HB-MW-04	Acetone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139119	-5	HB-MW-04	2-Butanone	Continuing Calibration	>30% Diff		non-directional	

Laboratory: Accutest Laboratories
Project: F&H Groundwater Monitoring 2010
Commission # 88UT045
SDG: M89656
Date Samples Collected 03.04.10
RCP Certification Form Inclu Yes
Laboratory Case Narrative Inc Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M89656	1139119	-5	HB-MW-04	2-Butanone	Laboratory Control Sample	131		high	
M89656	1139119	-5	HB-MW-04	2-hexanone	Laboratory Control Sample	141 / 132		high	
M89656	1139119	-5	HB-MW-04	Acetone	Laboratory Control Sample	135 / 131		high	
M89656	1139119	-5	HB-MW-04	Isopropylbenzne	Laboratory Control Sample	135 / 134		high	
M89656	1139119UF	-6	HB-MW-04	NO QC Issues					
M89656	1139120	-7	FB-MW-01	Acetone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139120	-7	FB-MW-01	2-Butanone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139120	-7	FB-MW-01	1,2,3-Trichlorobenzene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139120	-7	FB-MW-01	Naphthalene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139120	-7	FB-MW-01	Acetone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139120	-7	FB-MW-01	2-Butanone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139120	-7	FB-MW-01	2-Butanone	Laboratory Control Sample	131		high	
M89656	1139120	-7	FB-MW-01	2-hexanone	Laboratory Control Sample	141 / 132		high	
M89656	1139120	-7	FB-MW-01	Acetone	Laboratory Control Sample	135 / 131		high	
M89656	1139120	-7	FB-MW-01	Isopropylbenzne	Laboratory Control Sample	135 / 134		high	
M89656	1139120UF	-8	FB-MW-01	NO QC Issues					
M89656	1139121	-9	HB-MW-07	Acetone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139121	-9	HB-MW-07	2-Butanone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139121	-9	HB-MW-07	1,2,3-Trichlorobenzene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139121	-9	HB-MW-07	Naphthalene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139121	-9	HB-MW-07	Acetone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139121	-9	HB-MW-07	2-Butanone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139121	-9	HB-MW-07	2-Butanone	Laboratory Control Sample	131		high	
M89656	1139121	-9	HB-MW-07	2-hexanone	Laboratory Control Sample	141 / 132		high	
M89656	1139121	-9	HB-MW-07	Acetone	Laboratory Control Sample	135 / 131		high	
M89656	1139121	-9	HB-MW-07	Isopropylbenzne	Laboratory Control Sample	135 / 134		high	
M89656	1139121UF	-10	HB-MW-07	NO QC Issues					
M89656	1139122	-11	HB-MW-05	Acetone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139122	-11	HB-MW-05	2-Butanone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139122	-11	HB-MW-05	1,2,3-Trichlorobenzene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139122	-11	HB-MW-05	Naphthalene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139122	-11	HB-MW-05	Acetone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139122	-11	HB-MW-05	2-Butanone	Continuing Calibration	>30% Diff		non-directional	

Laboratory: Accutest Laboratories
Project: F&H Groundwater Monitoring 2010
Commission # 88UT045
SDG: M89656
Date Samples Collected 03.04.10
RCP Certification Form Inclu Yes
Laboratory Case Narrative Inc Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M89656	1139122	-11	HB-MW-05	2-Butanone	Laboratory Control Sample	131		high	
M89656	1139122	-11	HB-MW-05	2-hexanone	Laboratory Control Sample	141 / 132		high	
M89656	1139122	-11	HB-MW-05	Acetone	Laboratory Control Sample	135 / 131		high	
M89656	1139122	-11	HB-MW-05	Isopropylbenzne	Laboratory Control Sample	135 / 134		high	
M89656	1139122UF	-12	HB-MW-05	NO QC Issues					
M89656	1139123	-13	FB-MW-01	Acetone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139123	-13	FB-MW-01	2-Butanone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139123	-13	FB-MW-01	1,2,3-Trichlorobenzene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139123	-13	FB-MW-01	Naphthalene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139123	-13	FB-MW-01	Acetone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139123	-13	FB-MW-01	2-Butanone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139123	-13	FB-MW-01	2-Butanone	Laboratory Control Sample	131		high	
M89656	1139123	-13	FB-MW-01	2-hexanone	Laboratory Control Sample	141 / 132		high	
M89656	1139123	-13	FB-MW-01	Acetone	Laboratory Control Sample	135 / 131		high	
M89656	1139123	-13	FB-MW-01	Isopropylbenzne	Laboratory Control Sample	135 / 134		high	
M89656	1139123UF	-14	FB-MW-01	NO QC Issues					
M89656	1139124	-15	BKT	Acetone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139124	-15	BKT	2-Butanone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139124	-15	BKT	1,2,3-Trichlorobenzene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139124	-15	BKT	Naphthalene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139124	-15	BKT	Acetone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139124	-15	BKT	2-Butanone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139124	-15	BKT	2-Butanone	Laboratory Control Sample	131		high	
M89656	1139124	-15	BKT	2-hexanone	Laboratory Control Sample	141 / 132		high	
M89656	1139124	-15	BKT	Acetone	Laboratory Control Sample	135 / 131		high	
M89656	1139124	-15	BKT	Isopropylbenzne	Laboratory Control Sample	135 / 134		high	
M89656	1139125	16	BKE	Acetone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139125	16	BKE	2-Butanone	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139125	16	BKE	1,2,3-Trichlorobenzene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139125	16	BKE	Naphthalene	Initial Calibration Verification	-		non-directional	Quadratic Regression
M89656	1139125	16	BKE	Acetone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139125	16	BKE	2-Butanone	Continuing Calibration	>30% Diff		non-directional	
M89656	1139125	16	BKE	2-Butanone	Laboratory Control Sample	131		high	
M89656	1139125	16	BKE	2-hexanone	Laboratory Control Sample	141 / 132		high	

Laboratory: Accutest Laboratories
Project: F&H Groundwater Monitoring 2010
Commission # 88UT045
SDG: M89656
Date Samples Collected 03.04.10
RCP Certification Form Includ Yes
Laboratory Case Narrative Inc Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M89656	1139125	16	BKE	Acetone	Laboratory Control Sample	135 / 131		high	
M89656	1139125	16	BKE	Isopropylbenzne	Laboratory Control Sample	135 / 134		high	
M89656	1139125UF	17	BKE	NO QC Issues					

CT DEP Reasonable Confidence Protocol - Data Quality Assessment Worksheet

Laboratory: Accutest Laboratories
Project: F&H Groundwater Monitoring 2010
Commission # 88UT045
SDG: M92105
Date Samples Collected 06.09.10
RCP Certification Form Include Yes
Laboratory Case Narrative Incl Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M92105	1145336	-1	HB-MW-07	Acetone	Initial Calibration Verification	>35% Diff		non-directional	
M92105	1145336	-1	HB-MW-07	Naphthalene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145336	-1	HB-MW-07	1,2,3-Trichlorobenzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145336	-1	HB-MW-07	Trans-1,4-dichloro-2-butene	Continuing Calibration Check	>30% Diff		non-directional	
M92105	1145336	-1	HB-MW-07	Acrylontrile	Laboratory Control Sample	458 / 456		high	
M92105	1145336	-1	HB-MW-07	Trans-1,4-dichloro-2-butene	Laboratory Control Sample	64 / 66		low	
M92105	1145336	-1	HB-MW-07	1,2,3-Trichlorobenzene	Laboratory Control Sample	134		high	
M92105	1145336	-1	HB-MW-07	Tetrahydrofuran	Laboratory Control Sample	66		low	
M92105	1145336	-1	HB-MW-07	2,2-Dichloropropane	Laboratory Control Sample	68		low	
M92105	1145336	-1	HB-MW-07	Acetone	Matrix Spike / Matrix Spike Duplicate	59 / 58		low	
M92105	1145336	-1	HB-MW-07	1,2,3-Trichlorobenzene	Matrix Spike / Matrix Spike Duplicate	141		high	
M92105	1145336	-1	HB-MW-07	Trans-1,4-dichloro-2-butene	Matrix Spike / Matrix Spike Duplicate	59 / 62		low	
M92105	1145336	-1	HB-MW-07	Acrylontrile	Matrix Spike / Matrix Spike Duplicate	464 / 456		high	
M92105	1145336	-1	HB-MW-07	ETPH	Surrogate	25 / 32		low	
M92105	1145336UF	-2	HB-MW-07	No QC Issues					
M92105	1145337	-3	FB-MW-01	Acetone	Initial Calibration Verification	>35% Diff		non-directional	
M92105	1145337	-3	FB-MW-01	Naphthalene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145337	-3	FB-MW-01	1,2,3-Trichlorobenzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145337	-3	FB-MW-01	Trans-1,4-dichloro-2-butene	Continuing Calibration Check	>30% Diff		non-directional	
M92105	1145337	-3	FB-MW-01	Acrylontrile	Laboratory Control Sample	458 / 456		high	
M92105	1145337	-3	FB-MW-01	Trans-1,4-dichloro-2-butene	Laboratory Control Sample	64 / 66		low	
M92105	1145337	-3	FB-MW-01	1,2,3-Trichlorobenzene	Laboratory Control Sample	134		high	
M92105	1145337	-3	FB-MW-01	Tetrahydrofuran	Laboratory Control Sample	66		low	
M92105	1145337	-3	FB-MW-01	2,2-Dichloropropane	Laboratory Control Sample	68		low	
M92105	11545337UF	-4	FB-MW-01	No QC Issues					
M92105	1145338	-5	HB-MW-06	Acetone	Initial Calibration Verification	>35% Diff		non-directional	
M92105	1145338	-5	HB-MW-06	Naphthalene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145338	-5	HB-MW-06	1,2,3-Trichlorobenzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145338	-5	HB-MW-06	Trans-1,4-dichloro-2-butene	Continuing Calibration Check	>30% Diff		non-directional	
M92105	1145338	-5	HB-MW-06	Acrylontrile	Laboratory Control Sample	458 / 456		high	

CT DEP Reasonable Confidence Protocol - Data Quality Assessment Worksheet

Laboratory: Accutest Laboratories
Project: F&H Groundwater Monitoring 2010
Commission # 88UT045
SDG: M92105
Date Samples Collected 06.09.10
RCP Certification Form Include Yes
Laboratory Case Narrative Incl Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M92105	1145338	-5	HB-MW-06	Trans-1,4-dichloro-2-butene	Laboratory Control Sample	64 / 66		low	
M92105	1145338	-5	HB-MW-06	1,2,3-Trichlorobenzene	Laboratory Control Sample	134		high	
M92105	1145338	-5	HB-MW-06	Tetrahydrofuran	Laboratory Control Sample	66		low	
M92105	1145338	-5	HB-MW-06	2,2-Dichloropropane	Laboratory Control Sample	68		low	
M92105	1145338UF	-6	HB-MW-06	No QC Issues					
M92105	1145339	-7	HB-MW-05	Acetone	Initial Calibration Verification	>35% Diff		non-directional	
M92105	1145339	-7	HB-MW-05	Naphthalene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145339	-7	HB-MW-05	1,2,3-Trichlorobenzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145339	-7	HB-MW-05	Trans-1,4-dichloro-2-butene	Continuing Calibration Check	>30% Diff		non-directional	
M92105	1145339	-7	HB-MW-05	Acrylontrile	Laboratory Control Sample	458 / 456		high	
M92105	1145339	-7	HB-MW-05	Trans-1,4-dichloro-2-butene	Laboratory Control Sample	64 / 66		low	
M92105	1145339	-7	HB-MW-05	1,2,3-Trichlorobenzene	Laboratory Control Sample	134		high	
M92105	1145339	-7	HB-MW-05	Tetrahydrofuran	Laboratory Control Sample	66		low	
M92105	1145339	-7	HB-MW-05	2,2-Dichloropropane	Laboratory Control Sample	68		low	
M92105	1145339UF	-8	HB-MW-05	No QC Issues					
M92105	1145340	-9	FB-MW-02	Acetone	Initial Calibration Verification	>35% Diff		non-directional	
M92105	1145340	-9	FB-MW-02	Naphthalene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145340	-9	FB-MW-02	1,2,3-Trichlorobenzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145340	-9	FB-MW-02	Trans-1,4-dichloro-2-butene	Continuing Calibration Check	>30% Diff		non-directional	
M92105	1145340	-9	FB-MW-02	Acrylontrile	Laboratory Control Sample	458 / 456		high	
M92105	1145340	-9	FB-MW-02	Trans-1,4-dichloro-2-butene	Laboratory Control Sample	64 / 66		low	
M92105	1145340	-9	FB-MW-02	1,2,3-Trichlorobenzene	Laboratory Control Sample	134		high	
M92105	1145340	-9	FB-MW-02	Tetrahydrofuran	Laboratory Control Sample	66		low	
M92105	1145340	-9	FB-MW-02	2,2-Dichloropropane	Laboratory Control Sample	68		low	
M92105	1145340UF	-10	FB-MW-02	No QC Issues					
M92105	1145341	-11	HB-MW-04	Acetone	Initial Calibration Verification	>35% Diff		non-directional	
M92105	1145341	-11	HB-MW-04	Naphthalene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145341	-11	HB-MW-04	1,2,3-Trichlorobenzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145341	-11	HB-MW-04	Trans-1,4-dichloro-2-butene	Continuing Calibration Check	>30% Diff		non-directional	
M92105	1145341	-11	HB-MW-04	Acrylontrile	Laboratory Control Sample	458 / 456		high	

CT DEP Reasonable Confidence Protocol - Data Quality Assessment Worksheet

Laboratory: Accutest Laboratories
Project: F&H Groundwater Monitoring 2010
Commission # 88UT045
SDG: M92105
Date Samples Collected 06.09.10
RCP Certification Form Include Yes
Laboratory Case Narrative Incl Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M92105	1145341	-11	HB-MW-04	Trans-1,4-dichloro-2-butene	Laboratory Control Sample	64 / 66		low	
M92105	1145341	-11	HB-MW-04	1,2,3-Trichlorobenzene	Laboratory Control Sample	134		high	
M92105	1145341	-11	HB-MW-04	Tetrahydrofuran	Laboratory Control Sample	66		low	
M92105	1145341	-11	HB-MW-04	2,2-Dichloropropane	Laboratory Control Sample	68		low	
M92105	1145341UF	-12	HB-MW-04	No QC Issues					
M92105	1145342	-13	HB-MW-06	Acetone	Initial Calibration Verification	>35% Diff		non-directional	
M92105	1145342	-13	HB-MW-06	Naphthalene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145342	-13	HB-MW-06	1,2,3-Trichlorobenzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145342	-13	HB-MW-06	Trans-1,4-dichloro-2-butene	Continuing Calibration Check	>30% Diff		non-directional	
M92105	1145342	-13	HB-MW-06	Acrylontrile	Laboratory Control Sample	458 / 456		high	
M92105	1145342	-13	HB-MW-06	Trans-1,4-dichloro-2-butene	Laboratory Control Sample	64 / 66		low	
M92105	1145342	-13	HB-MW-06	1,2,3-Trichlorobenzene	Laboratory Control Sample	134		high	
M92105	1145342	-13	HB-MW-06	Tetrahydrofuran	Laboratory Control Sample	66		low	
M92105	1145342	-13	HB-MW-06	2,2-Dichloropropane	Laboratory Control Sample	68		low	
M92105	1145342UF	-14	HB-MW-06	No QC Issues					
M92105	1145343	-15	BKT	Acetone	Initial Calibration Verification	>35% Diff		non-directional	
M92105	1145343	-15	BKT	Naphthalene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145343	-15	BKT	1,2,3-Trichlorobenzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145343	-15	BKT	Trans-1,4-dichloro-2-butene	Continuing Calibration Check	>30% Diff		non-directional	
M92105	1145343	-15	BKT	Acrylontrile	Laboratory Control Sample	458 / 456		high	
M92105	1145343	-15	BKT	Trans-1,4-dichloro-2-butene	Laboratory Control Sample	64 / 66		low	
M92105	1145343	-15	BKT	1,2,3-Trichlorobenzene	Laboratory Control Sample	134		high	
M92105	1145343	-15	BKT	Tetrahydrofuran	Laboratory Control Sample	66		low	
M92105	1145343	-15	BKT	2,2-Dichloropropane	Laboratory Control Sample	68		low	
M92105	1145344	16	BKE	Acetone	Initial Calibration Verification	>35% Diff		non-directional	
M92105	1145344	16	BKE	Naphthalene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145344	16	BKE	1,2,3-Trichlorobenzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M92105	1145344	16	BKE	Trans-1,4-dichloro-2-butene	Continuing Calibration Check	>30% Diff		non-directional	
M92105	1145344	16	BKE	Acrylontrile	Laboratory Control Sample	458 / 456		high	
M92105	1145344	16	BKE	Trans-1,4-dichloro-2-butene	Laboratory Control Sample	64 / 66		low	

CT DEP Reasonable Confidence Protocol - Data Quality Assessment Worksheet

Laboratory: Accutest Laboratories
Project: F&H Groundwater Monitoring 2010
Commission # 88UT045
SDG: M92105
Date Samples Collected 06.09.10
RCP Certification Form Include Yes
Laboratory Case Narrative Incl Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M92105	1145344	16	BKE	1,2,3-Trichlorobenzene	Laboratory Control Sample	134		high	
M92105	1145344	16	BKE	Tetrahydrofuran	Laboratory Control Sample	66		low	
M92105	1145344	16	BKE	2,2-Dichloropropane	Laboratory Control Sample	68		low	
M92105	1145344UF	17	BKE	No QC Issues					

CT DEP Reasonable Confidence Protocol - Data Quality Assessment Worksheet

Laboratory: Accutest Laboratories
Project: F&H Groundwater Monitoring 2010
Commission # 88UT045
SDG: M94152
Date Samples Collected 09.09.10
RCP Certification Form Includ Yes
Laboratory Case Narrative Inc Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M94152	1152112	-1	HB-MW-04	Bromoform	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94152	1152112	-1	HB-MW-04	Trans-1,4-dichloro-2-butene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94152	1152112	-1	HB-MW-04	Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff		non-directional	
M94152	1152112	-1	HB-MW-04	1,2,3-Trichlorobenzene	Continuing Calibration	>30% Diff		non-directional	
M94152	1152112	-1	HB-MW-04	2-Hexanone	Laboratory Control Sample	68		low	
M94152	1152112	-1	HB-MW-04	Naphthalene	Laboratory Control Sample	69 / 68		low	
M94152	1152112	-1	HB-MW-04	Acrylonitrile	Laboratory Control Sample	456 / 500		high	
M94152	1152112UF	-2	HB-MW-04	No QC Issues					
M94152	1152113	-3	HB-MW-06	Bromoform	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94152	1152113	-3	HB-MW-06	Trans-1,4-dichloro-2-butene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94152	1152113	-3	HB-MW-06	Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff		non-directional	
M94152	1152113	-3	HB-MW-06	1,2,3-Trichlorobenzene	Continuing Calibration	>30% Diff		non-directional	
M94152	1152113	-3	HB-MW-06	2-Hexanone	Laboratory Control Sample	68		low	
M94152	1152113	-3	HB-MW-06	Naphthalene	Laboratory Control Sample	69 / 68		low	
M94152	1152113	-3	HB-MW-06	Acrylonitrile	Laboratory Control Sample	456 / 500		high	
M94152	1152113UF	-4	HB-MW-06	No QC Issues					
M94152	1152114	-5	HB-MW-05	Bromoform	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94152	1152114	-5	HB-MW-05	Trans-1,4-dichloro-2-butene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94152	1152114	-5	HB-MW-05	Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff		non-directional	
M94152	1152114	-5	HB-MW-05	1,2,3-Trichlorobenzene	Continuing Calibration	>30% Diff		non-directional	
M94152	1152114	-5	HB-MW-05	2-Hexanone	Laboratory Control Sample	68		low	
M94152	1152114	-5	HB-MW-05	Naphthalene	Laboratory Control Sample	69 / 68		low	
M94152	1152114	-5	HB-MW-05	Acrylonitrile	Laboratory Control Sample	456 / 500		high	
M94152	1152114UF	-6	HB-MW-05	No QC Issues					
M94152	1152121	-7	HB-MW-06	Bromoform	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94152	1152121	-7	HB-MW-06	Trans-1,4-dichloro-2-butene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94152	1152121	-7	HB-MW-06	Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff		non-directional	
M94152	1152121	-7	HB-MW-06	1,2,3-Trichlorobenzene	Continuing Calibration	>30% Diff		non-directional	

CT DEP Reasonable Confidence Protocol - Data Quality Assessment Worksheet

Laboratory: Accutest Laboratories
Project: F&H Groundwater Monitoring 2010
Commission # 88UT045
SDG: M94152
Date Samples Collected 09.09.10
RCP Certification Form Includ Yes
Laboratory Case Narrative Inc Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M94152	1152121	-7	HB-MW-06	2-Hexanone	Laboratory Control Sample	68		low	
M94152	1152121	-7	HB-MW-06	Naphthalene	Laboratory Control Sample	69 / 68		low	
M94152	1152121	-7	HB-MW-06	Acrylonitrile	Laboratory Control Sample	456 / 500		high	
M94152	1152121UF	-8	HB-MW-06	No QC Issues					
M94152	1152115	-9	HB-MW-07	Bromoform	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94152	1152115	-9	HB-MW-07	Trans-1,4-dichloro-2-butene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94152	1152115	-9	HB-MW-07	Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff		non-directional	
M94152	1152115	-9	HB-MW-07	1,2,3-Trichlorobenzene	Continuing Calibration	>30% Diff		non-directional	
M94152	1152115	-9	HB-MW-07	2-Hexanone	Laboratory Control Sample	68		low	
M94152	1152115	-9	HB-MW-07	Naphthalene	Laboratory Control Sample	69 / 68		low	
M94152	1152115	-9	HB-MW-07	Acrylonitrile	Laboratory Control Sample	456 / 500		high	
M94152	1152115UF	-10	HB-MW-07	No QC Issues					

CT DEP Reasonable Confidence Protocol - Data Quality Assessment Worksheet

Laboratory: **Accutest Laboratories** G:\Projects\Pratt & Whitney\EAST HARTFORD FACILITY\88UT045 F&H GWM 2010\2010 Annual
Project: **F&H Groundwater Monitoring 2010**
Commission # **88UT045**
SDG: **M94153**
Date Samples Collected **09.09.10**
RCP Certification Form Inclu **Yes**
Laboratory Case Narrative Ir **Yes**

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M94153	1152116	-1	FB-MW-02	Benzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94153	1152116			Carbon Disulfide	Laboratory Control Sample	133		high	
M94153	1152116UF	-2	FB-MW-02	No QC Issues					
M94153	1152117	-3	FB-MW-01	Benzene	Initial Calibration Standard	-		non-directional	Quadratic Regression
M94153	1152117			Carbon Disulfide	Laboratory Control Sample	133		high	
M94153	1152117UF	-4	FB-MW-01	No QC Issues					

CT DEP Reasonable Confidence Protocol - Data Quality Assessment Worksheet

Laboratory: **Accutest Laboratories** G:\Projects\Pratt & Whitney\EAST HARTFORD FACILITY\88UT045 F&H GWM 2010\2010 Annual R
Project: **F&H Groundwater Monitoring 2010**
Commission # **88UT045**
SDG: **M96492**
Date Samples Collected **12.09.10**
RCP Certification Form Included: **Yes**
Laboratory Case Narrative Included: **Yes**

Note 1: **Bias High: reported result may be lower, RLs are accepted as reported.**
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M96492	1159172	1	HB-MW-07	No QC Issues					
M96492	1159172UF	2	HB-MW-07	No QC Issues					
M96492	1159173	3	HB-MW-05	No QC Issues					
M96492	1159173UF	4	HB-MW-05	No QC Issues					
M96492	1159174	5	HB-MW-04	No QC Issues					
M96492	1159174UF	6	HB-MW-04	No QC Issues					
M96492	1159175	7	FB-MW-01	No QC Issues					
M96492	1159175UF	8	FB-MW-01	No QC Issues					
M96492	1159176	9	HB-MW-06	No QC Issues					
M96492	1159176UF	10	HB-MW-06	No QC Issues					
M96492	1159177	11	FB-MW-02	No QC Issues					
M96492	1159177UF	12	FB-MW-02	No QC Issues					
M96492	1159178	13	Performance	No QC Issues					
M96492	1159178UF	14	Performance	No QC Issues					
M96492	1159181	15	BKT	No QC Issues					
M96492	1159180	16	BKE	Acetone	Initial Calibration Verification	>30% Diff		non-directional	
M96492	1159180	16	BKE	2-Butanone	Initial Calibration Verification	>30% Diff		non-directional	
M96492	1159180	16	BKE	2,2-Dichloropropane	Initial Calibration Standard	-		non-directional	Quadratic Regression
M96492	1159180	16	BKE	1,2,4-Trichlorobenzene	Continuing Calibration	>30% Diff		non-directional	
M96492	1159180	16	BKE	Hexachlorobutadiene	Continuing Calibration	>30% Diff		non-directional	
M96492	1159180	16	BKE	Acrylonitrile	Laboratory Control Sample	356 / 318		high	
M96492	1159180	16	BKE	Tetrahydrofuran	Laboratory Control Sample	64		low	
M96492	1159180	16	BKE	Chloroethane	Laboratory Control Sample	66		low	
M96492	1159180	16	BKE	1,2,4-Trichlorobenzene	Laboratory Control Sample	132		high	
M96492	1159180	16	BKE	Hexachlorobutadiene	Laboratory Control Sample	134		high	
M96492	1159180UF	17	BKE	No QC Issues					
M96492	1159179	18	HB-MW-06	Acetone	Initial Calibration Verification	>30% Diff		non-directional	

CT DEP Reasonable Confidence Protocol - Data Quality Assessment Worksheet

Laboratory: **Accutest Laboratories** G:\Projects\Pratt & Whitney\EAST HARTFORD FACILITY\88UT045 F&H GWM 2010\2010 Annual R
Project: **F&H Groundwater Monitoring 2010**
Commission # **88UT045**
SDG: **M96492**
Date Samples Collected **12.09.10**
RCP Certification Form Included: **Yes**
Laboratory Case Narrative Included: **Yes**

Note 1: **Bias High: reported result may be lower, RLs are accepted as reported.**
Bias Low: reported result may be higher, RLs may be higher

SDG	SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
M96492	1159179	18	HB-MW-06	2-Butanone	Initial Calibration Verification	>30% Diff		non-directional	
M96492	1159179	18	HB-MW-06	2,2-Dichloropropane	Initial Calibration Standard	-		non-directional	Quadratic Regression
M96492	1159179	18	HB-MW-06	1,2,4-Trichlorobenzene	Continuing Calibration	>30% Diff		non-directional	
M96492	1159179	18	HB-MW-06	Hexachlorobutadiene	Continuing Calibration	>30% Diff		non-directional	
M96492	1159179	18	HB-MW-06	Acrylonitrile	Laboratory Control Sample	356 / 318		high	
M96492	1159179	18	HB-MW-06	Tetrahydrofuran	Laboratory Control Sample	64		low	
M96492	1159179	18	HB-MW-06	Chloroethane	Laboratory Control Sample	66		low	
M96492	1159179	18	HB-MW-06	1,2,4-Trichlorobenzene	Laboratory Control Sample	132		high	
M96492	1159179	18	HB-MW-06	Hexachlorobutadiene	Laboratory Control Sample	134		high	
M96492	1159179UF	19	HB-MW-06	No QC Issues					
M96492	1159792	20	Performance	No QC Issues					

RESULTS OF PERFORMANCE SAMPLE EVALUATION

P&W East Hartford, East Hartford, Connecticut

Loureiro Engineering Associates, Inc.

Location Identifier: Performance
Sample Identifier 1159178 12/09/2010 13:05 Performance Evaluation, Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1,2-Tetrachloroethane	75.9		5.0		ug/L	1	ACTM	M96492-13	69.5	85.5	53.0	Pass
1,1,1-Trichloroethane	40.6		1.0		ug/L	1	ACTM	M96492-13	45.1	55.0	32.2	Pass
1,1,2,2-Tetrachloroethane	ND<1.0	U	1.0	1.0	ug/L	1	ACTM	M96492-13				
1,1,2-Trichloroethane	ND<1.0	U	1.0	1.0	ug/L	1	ACTM	M96492-13				
1,1,2-Trichlorotrifluoroethane	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
1,1-Dichloroethane	ND<1.0	U	1.0	1.0	ug/L	1	ACTM	M96492-13				
1,1-Dichloroethylene	ND<1.0	U	1.0	1.0	ug/L	1	ACTM	M96492-13				
1,1-Dichloropropene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
1,2,3-Trichlorobenzene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
1,2,3-Trichloropropane	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
1,2,4-Trichlorobenzene	46.3		5.0		ug/L	1	ACTM	M96492-13	49.8	61.8	27.7	Pass
1,2,4-Trimethylbenzene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
1,2-Dibromo-3-Chloropropane	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
1,2-Dichloroethane	117		1.0		ug/L	1	ACTM	M96492-13	140	175	109	Pass
1,2-Dichloropropane	84.3		2.0		ug/L	1	ACTM	M96492-13	115	140	87.9	FAIL
1,3,5-Trimethylbenzene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
1,3-Dichloropropane	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
2-Hexanone	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
4-Isopropyltoluene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
Acetone	75.6		5.0		ug/L	1	ACTM	M96492-13	165	228	71.1	Pass
Acrylonitrile	ND<25	U	25	25	ug/L	1	ACTM	M96492-13				
Arochlor 1016	ND<0.25	U	0.25	0.25	ug/L	1	ACTM	M96492-13				
Arochlor 1221	ND<0.25	U	0.25	0.25	ug/L	1	ACTM	M96492-13				
Arochlor 1232	ND<0.25	U	0.25	0.25	ug/L	1	ACTM	M96492-13				
Arochlor 1242	ND<0.25	U	0.25	0.25	ug/L	1	ACTM	M96492-13				
Arochlor 1248	0.80		0.25		ug/L	1	ACTM	M96492-13	1.31	1.80	0.677	Pass
Arochlor 1254	ND<0.25	U	0.25	0.25	ug/L	1	ACTM	M96492-13				
Arochlor 1260	ND<0.25	U	0.25	0.25	ug/L	1	ACTM	M96492-13				
Arochlor 1262	ND<0.25	U	0.25	0.25	ug/L	1	ACTM	M96492-13				
Arochlor 1268	ND<0.25	U	0.25	0.25	ug/L	1	ACTM	M96492-13				
Arsenic (unfiltered)	0.0239		0.0040	0.001	mg/L	1	ACTM	M96492-14	0.025	0.0285	0.0215	Pass
Barium (unfiltered)	0.936		0.05	0.00042	mg/L	1	ACTM	M96492-14	0.944	1.000	0.867	Pass
Benzene	28.4		0.50		ug/L	1	ACTM	M96492-13	31.8	38.2	24.4	Pass
Bromobenzene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
Bromodichloromethane	15.0		1.0		ug/L	1	ACTM	M96492-13	16.0	20.5	12.7	Pass

RESULTS OF PERFORMANCE SAMPLE EVALUATION

P&W East Hartford, East Hartford, Connecticut

Loureiro Engineering Associates, Inc.

Bromoform	17.6		1.0		ug/L	1	ACTM	M96492-13	20.1	25.9	14.6	Pass
Bromomethane	ND<2.0	U	2.0	2.0	ug/L	1	ACTM	M96492-13				
Butyl Benzene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
Cadmium (unfiltered)	0.0136		0.0040	0.00011	mg/L	1	ACTM	M96492-14	0.0131	0.0144	0.0116	Pass
Carbon Disulfide	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
Carbon Tetrachloride	21.5		1.0		ug/L	1	ACTM	M96492-13	26.5	33.1	17.2	Pass
Chlorobenzene	66.6		1.0		ug/L	1	ACTM	M96492-13	68.9	82.7	54.0	Pass
Chlorodibromomethane	103		1.0		ug/L	1	ACTM	M96492-13	95.0	118	72.9	Pass
Chloroethane	ND<2.0	U	2.0	2.0	ug/L	1	ACTM	M96492-13				
Chloroform	53.3		1.0		ug/L	1	ACTM	M96492-13	57.4	71.2	44.1	Pass
Chloromethane	ND<2.0	U	2.0	2.0	ug/L	1	ACTM	M96492-13				
Chromium, Total (unfiltered)	0.13		0.01	0.00047	mg/L	1	ACTM	M96492-14	0.129	0.140	0.116	Pass
Copper (unfiltered)	0.521		0.025	0.00086	mg/L	1	ACTM	M96492-14	0.531	0.572	0.487	Pass
Dichlorodifluoromethane	ND<2.0	U	2.0	2.0	ug/L	1	ACTM	M96492-13				
Ethylbenzene	43.9		1.0		ug/L	1	ACTM	M96492-13	46.1	56.2	34.2	Pass
Ethylene Dibromide	ND<2.0	U	2.0	2.0	ug/L	1	ACTM	M96492-13				
Hexachlorobutadiene	105		5.0		ug/L	1	ACTM	M96492-13	97.0	134	24.6	Pass
Isopropylbenzene (Cumene)	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
Lead (unfiltered)	0.0217		0.0050	0.0015	mg/L	1	ACTM	M96492-14	0.0222	0.0254	0.0190	Pass
Mercury (unfiltered)	0.0114		0.0008	(0.000086	mg/L	4	ACTM	M96492-14				FALSE POSITIVE
Methyl Ethyl ketone	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
Methyl Isobutyl ketone	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
Methyl tert-Butyl ether	36.4		1.0		ug/L	1	ACTM	M96492-13	42.4	54.7	33.5	Pass
Methylene Chloride	55.8		2.0		ug/L	1	ACTM	M96492-13	66.3	84.2	46.3	Pass
Methylene Dibromide	35.3		5.0		ug/L	1	ACTM	M96492-13	41.9	52.0	33.4	Pass
Naphthalene	61.7		5.0		ug/L	1	ACTM	M96492-13	63.0	77.5	37.9	Pass
Nickel (unfiltered)	0.346		0.04	0.00021	mg/L	1	ACTM	M96492-14	0.342	0.368	0.313	Pass
Propylbenzene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
Selenium (unfiltered)	0.0774		0.01	0.0011	mg/L	1	ACTM	M96492-14	0.0790	0.0877	0.0698	Pass
Silver (unfiltered)	0.235		0.0050	0.0006	mg/L	1	ACTM	M96492-14	0.217	0.238	0.195	Pass
Styrene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
Tetrachloroethylene	79.0		1.0		ug/L	1	ACTM	M96492-13	91.8	110	59.8	Pass
Tetrahydrofuran	ND<10	U	10	10	ug/L	1	ACTM	M96492-13				
Toluene	62.1		1.0		ug/L	1	ACTM	M96492-13	93.2	112	71.4	FAIL
Trichloroethylene	30.5		1.0		ug/L	1	ACTM	M96492-13	33.3	40.3	24.0	Pass
Trichlorofluoromethane	71.7		1.0		ug/L	1	ACTM	M96492-13	81.6	114	47.5	Pass
Vinyl Chloride	ND<1.0	U	1.0	1.0	ug/L	1	ACTM	M96492-13				
Xylenes,m- & p-	ND<1.0	U	1.0	1.0	ug/L	1	ACTM	M96492-13				
Zinc (unfiltered)	0.64		0.02	0.00024	mg/L	1	ACTM	M96492-14	0.622	0.681	0.562	Pass
cis-1,2-Dichloroethylene	23.5		1.0		ug/L	1	ACTM	M96492-13	26.5	32.6	20.5	Pass

RESULTS OF PERFORMANCE SAMPLE EVALUATION

P&W East Hartford, East Hartford, Connecticut

Loureiro Engineering Associates, Inc.

cis-1,3-Dichloropropene	ND<0.50	U	0.50	0.50	ug/L	1	ACTM	M96492-13				
m-Dichlorobenzene	26.4		1.0		ug/L	1	ACTM	M96492-13	26.7	32.0	19.8	Pass
o-Chlorotoluene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
o-Dichlorobenzene	40.2		1.0		ug/L	1	ACTM	M96492-13	39.2	47.8	30.0	Pass
o-Xylene	ND<1.0	U	1.0	1.0	ug/L	1	ACTM	M96492-13				
p-Chlorotoluene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
p-Dichlorobenzene	83.3		1.0		ug/L	1	ACTM	M96492-13	83.2	102	62.9	Pass
sec-Butylbenzene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
sec-Dichloropropane	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
tert-Butylbenzene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				
trans-1,2-Dichloroethylene	ND<1.0	U	1.0	1.0	ug/L	1	ACTM	M96492-13				
trans-1,3-Dichloropropene	ND<0.50	U	0.50	0.50	ug/L	1	ACTM	M96492-13				
trans-1,4-Dichlorobutene	ND<5.0	U	5.0	5.0	ug/L	1	ACTM	M96492-13				

Location Identifier: Performance

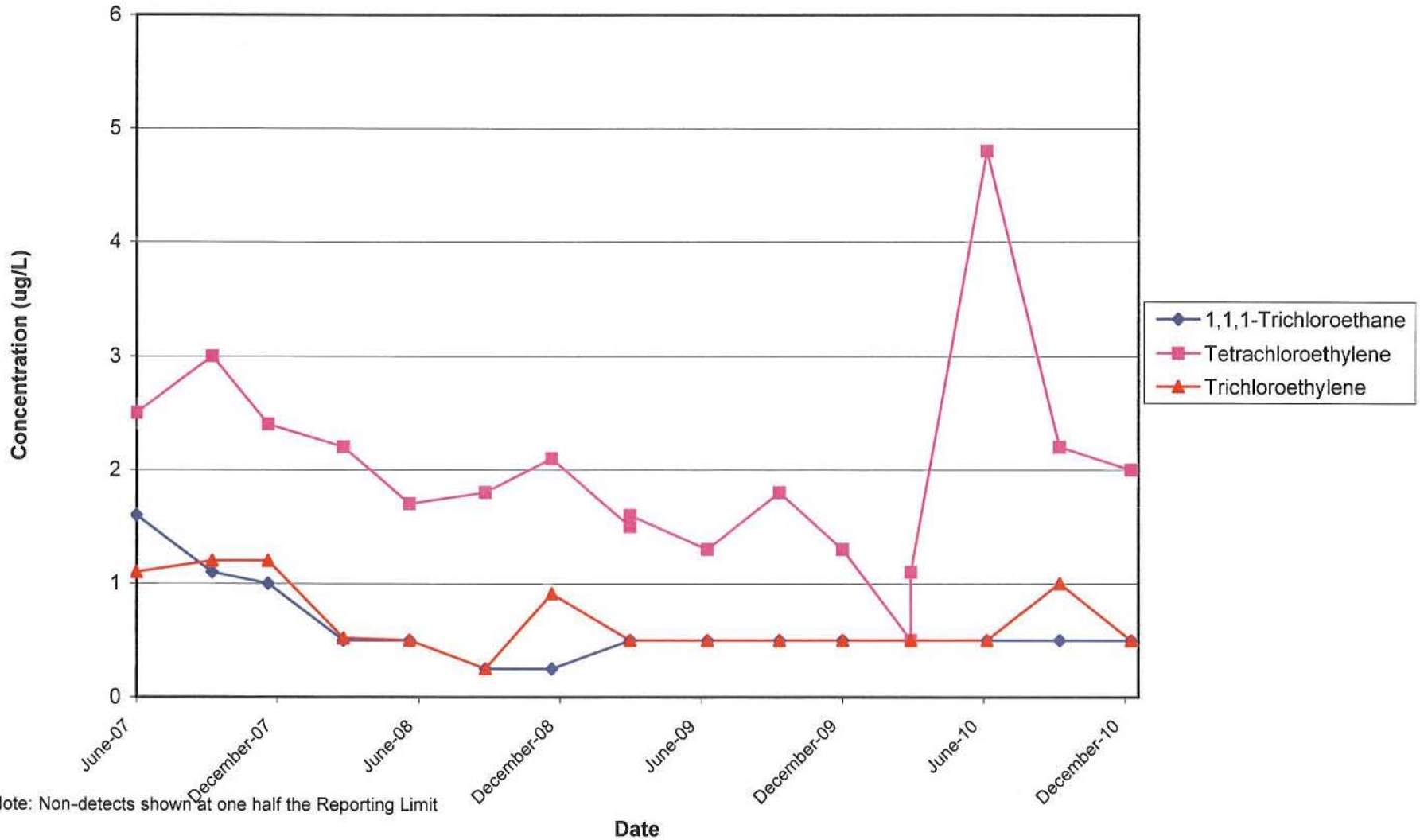
Sample Identifier 1159792 12/09/2010 14:10 Performance Evaluation, Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons (CT ETPH)	1.03		0.080		mg/L	1	ACTM	M96492-20	1.730	2.090	.525	Pass

Appendix D

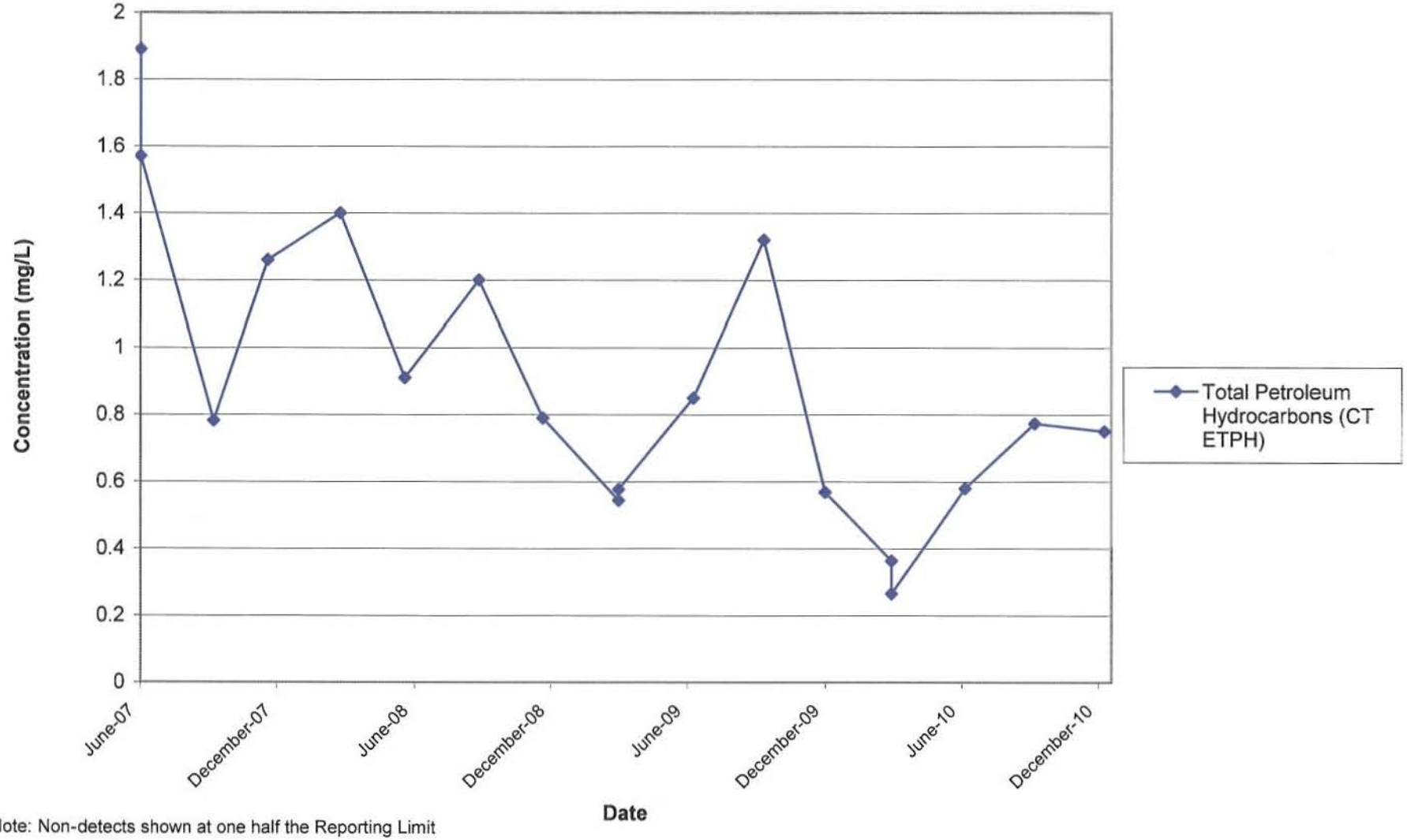
Select Constituent Concentration Graphs

FB-MW-01 - Select Volatile Organic Compounds
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



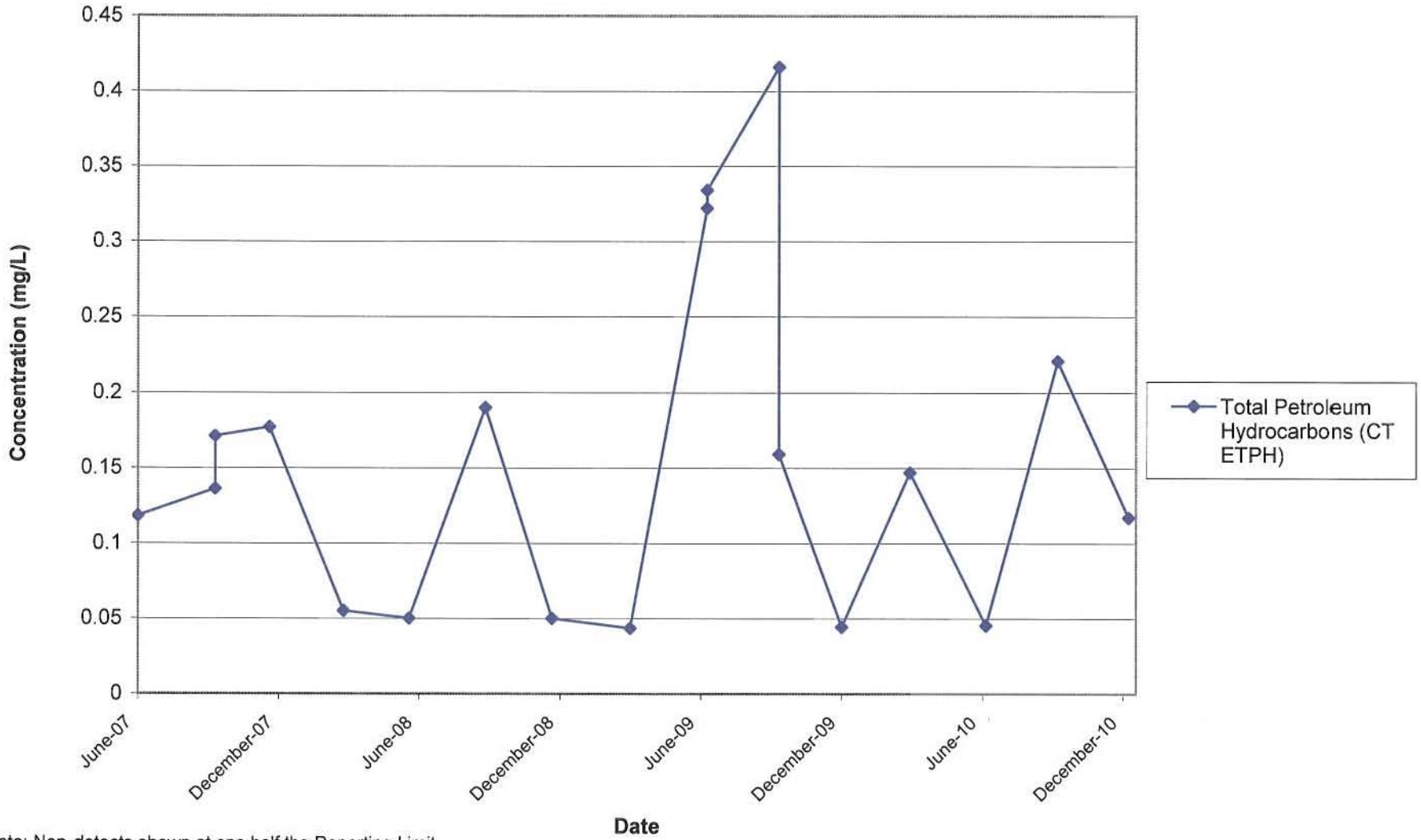
Note: Non-detects shown at one half the Reporting Limit

FB-MW-01 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



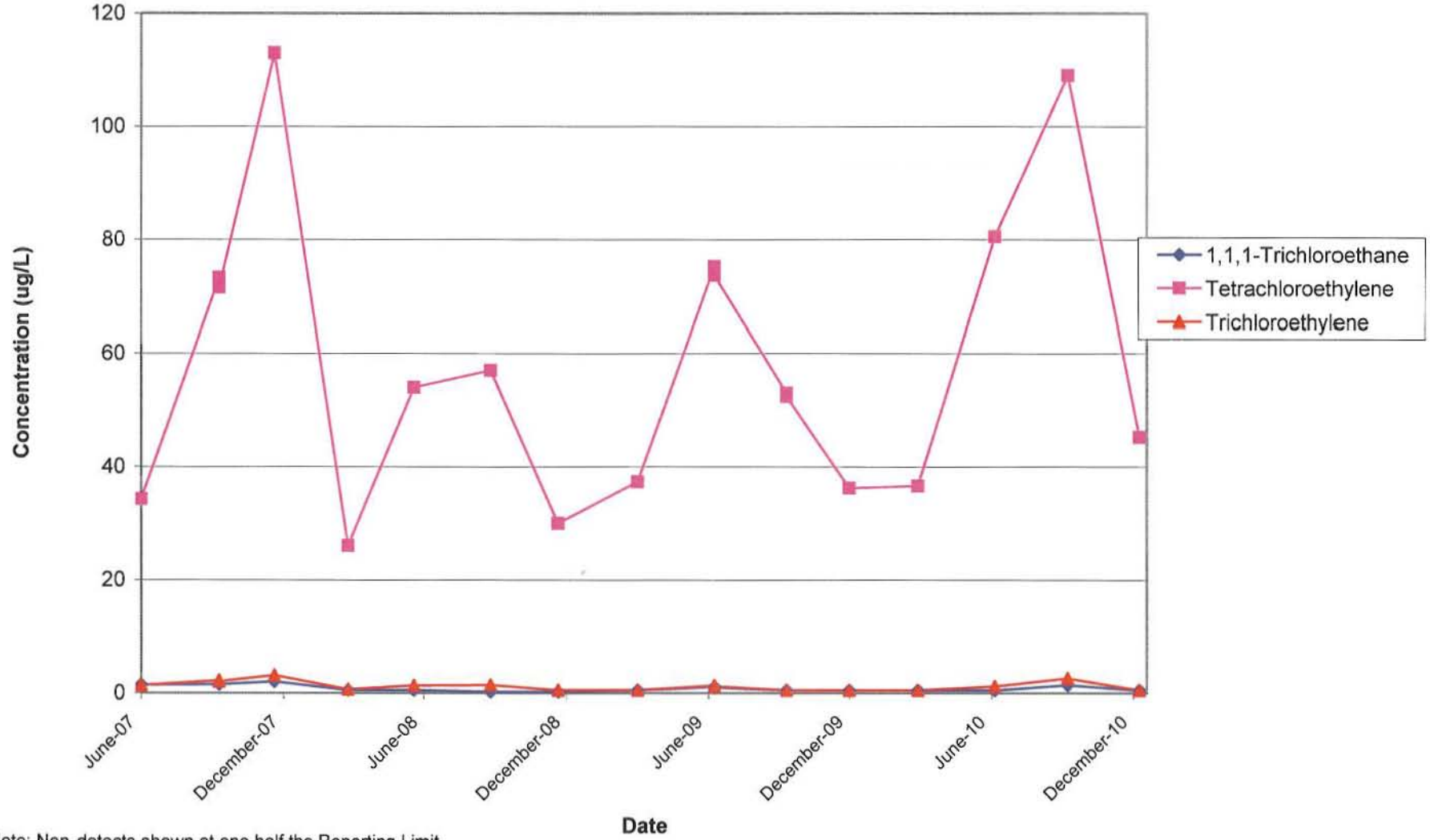
Note: Non-detects shown at one half the Reporting Limit

FB-MW-02 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



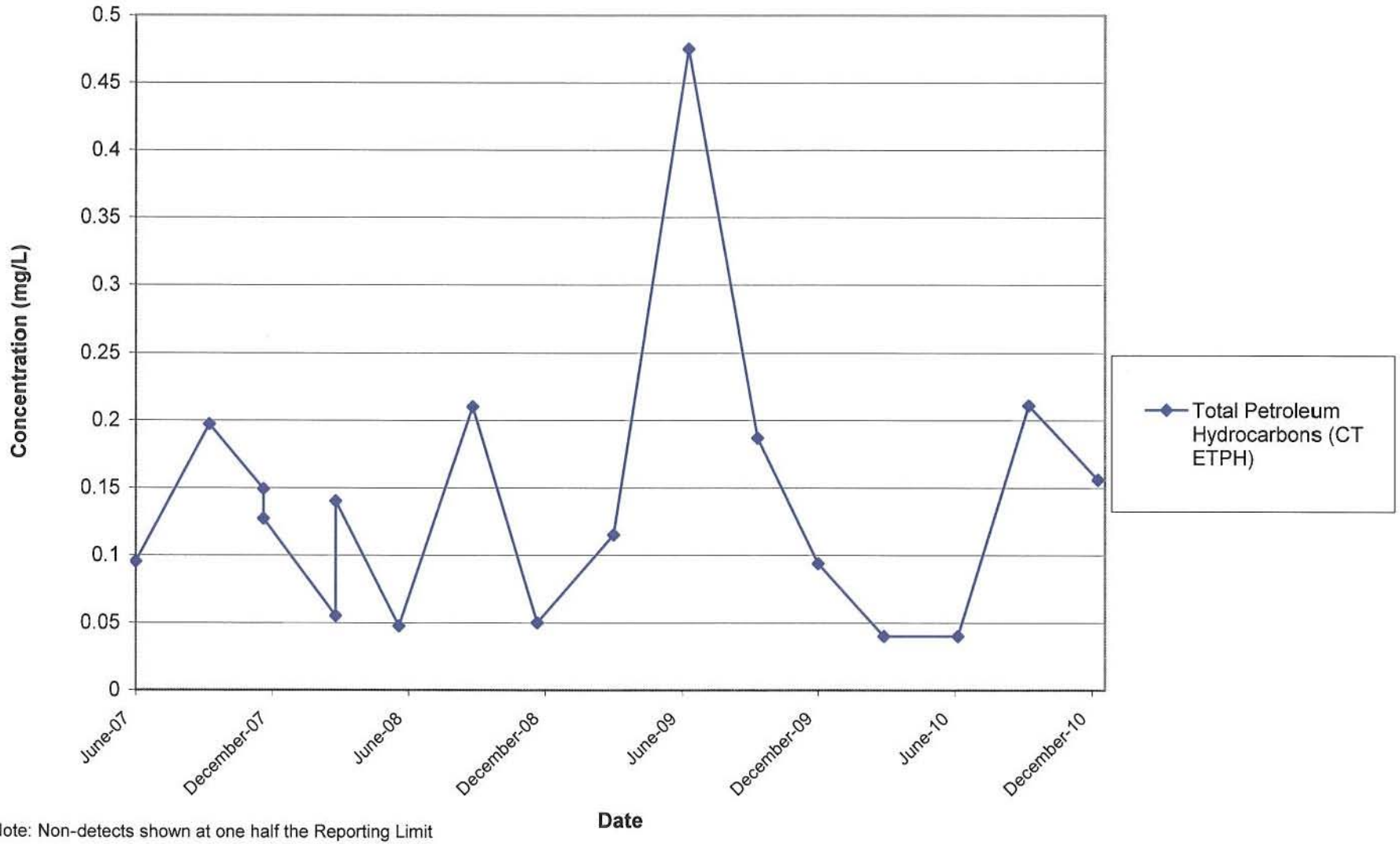
Note: Non-detects shown at one half the Reporting Limit

FB-MW-02 - Select Volatile Organic Compounds
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



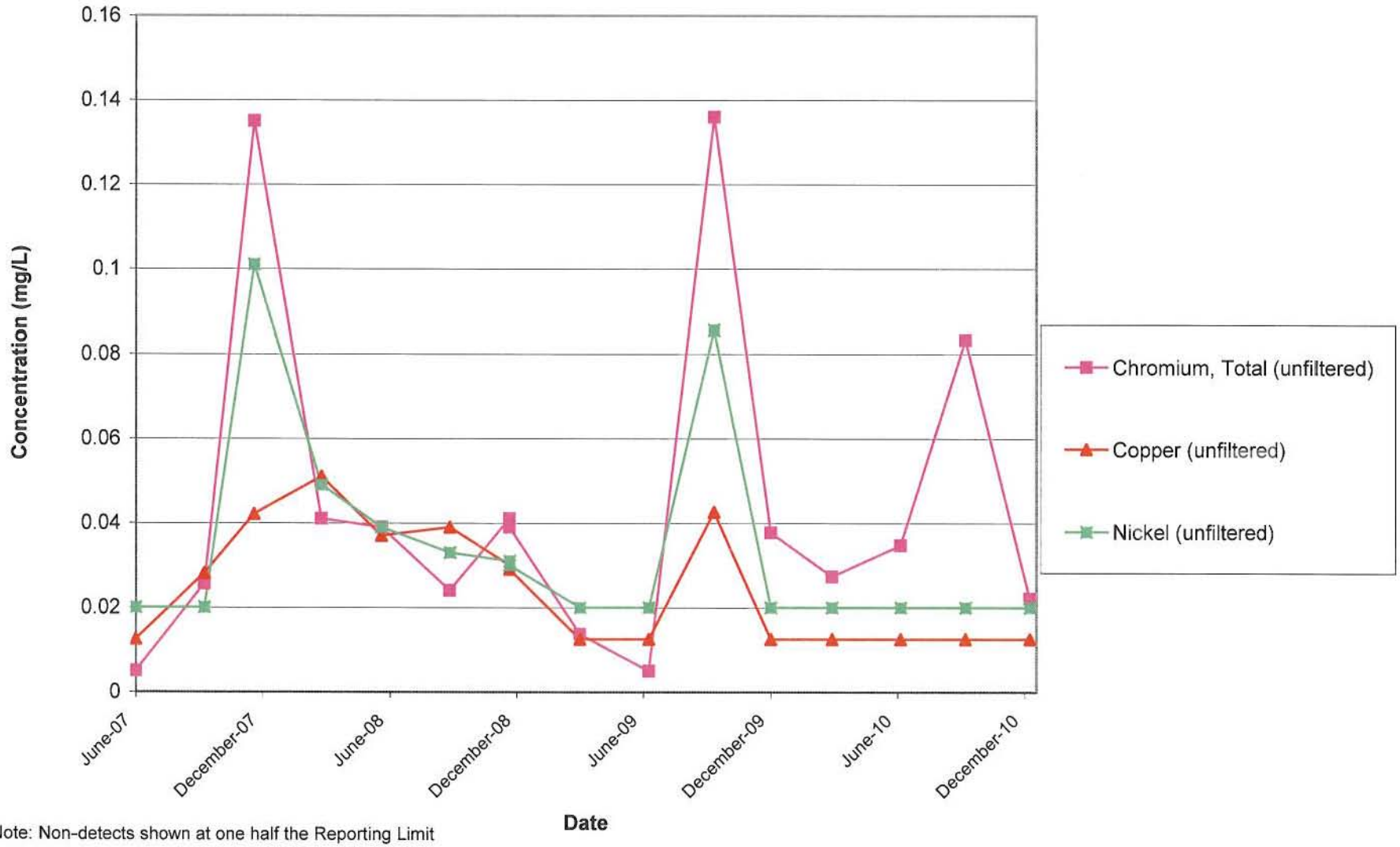
Note: Non-detects shown at one half the Reporting Limit

HB-MW-04 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



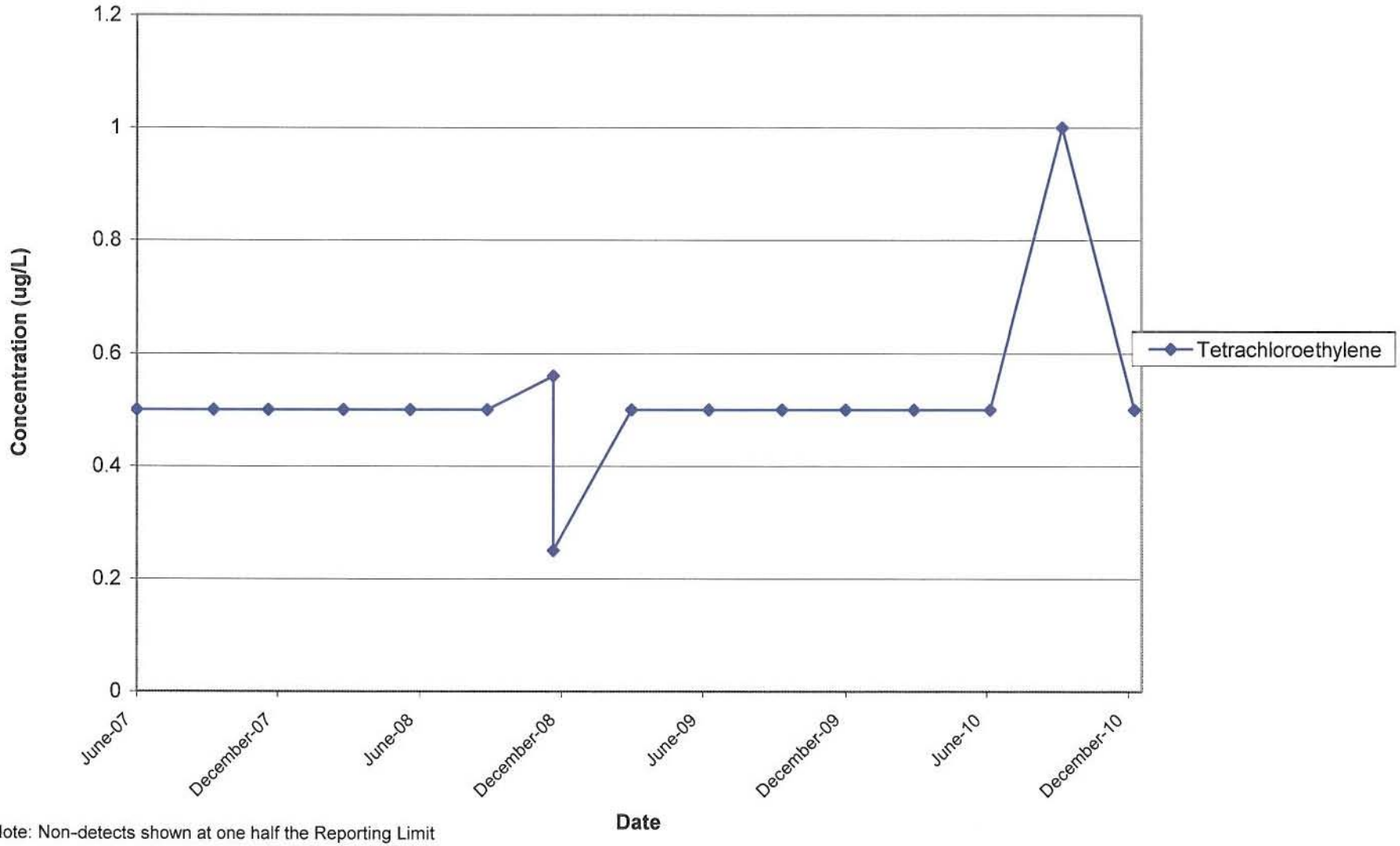
Note: Non-detects shown at one half the Reporting Limit

HB-MW-05 - Select Metals
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



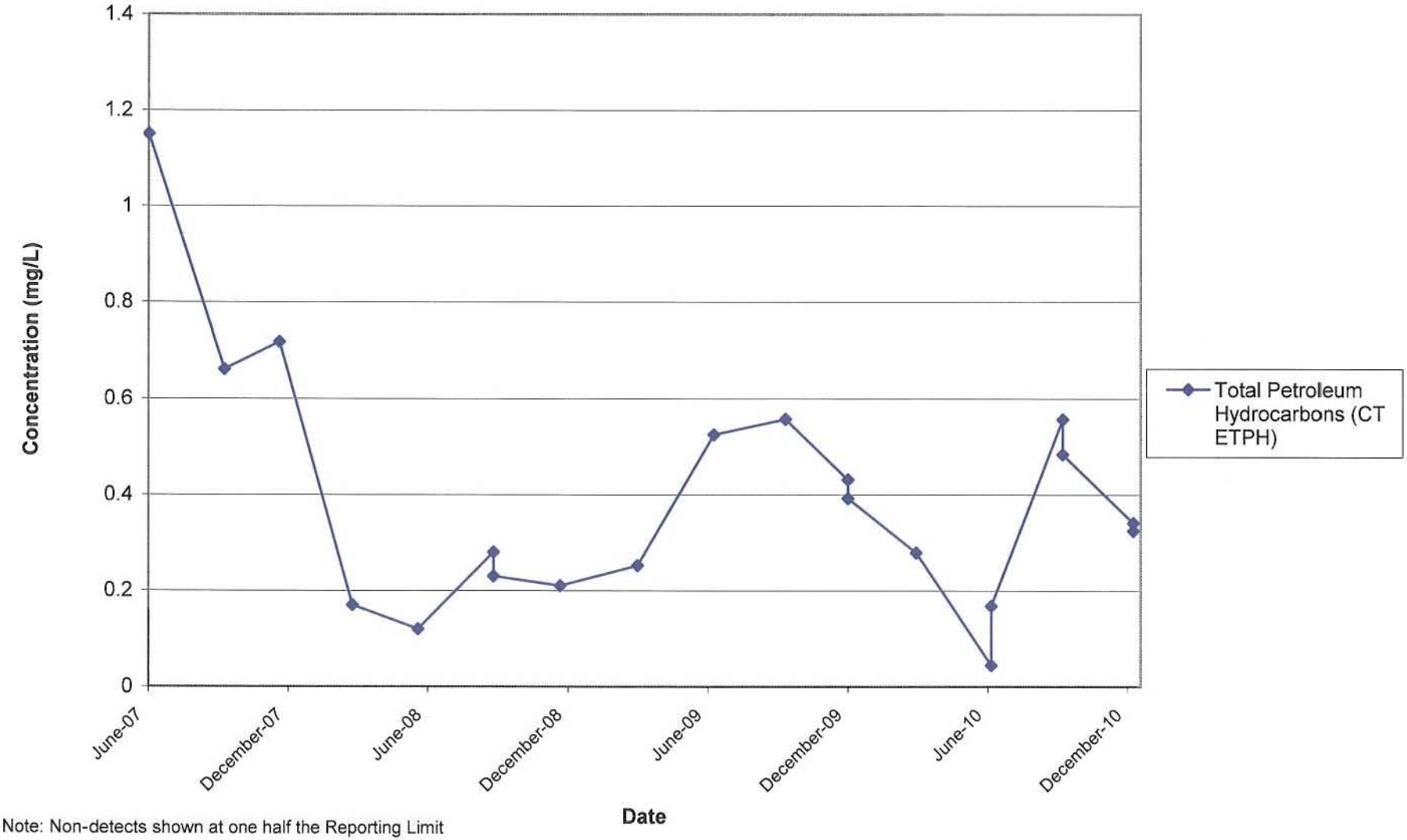
Note: Non-detects shown at one half the Reporting Limit

HB-MW-05 - Tetrachloroethylene
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



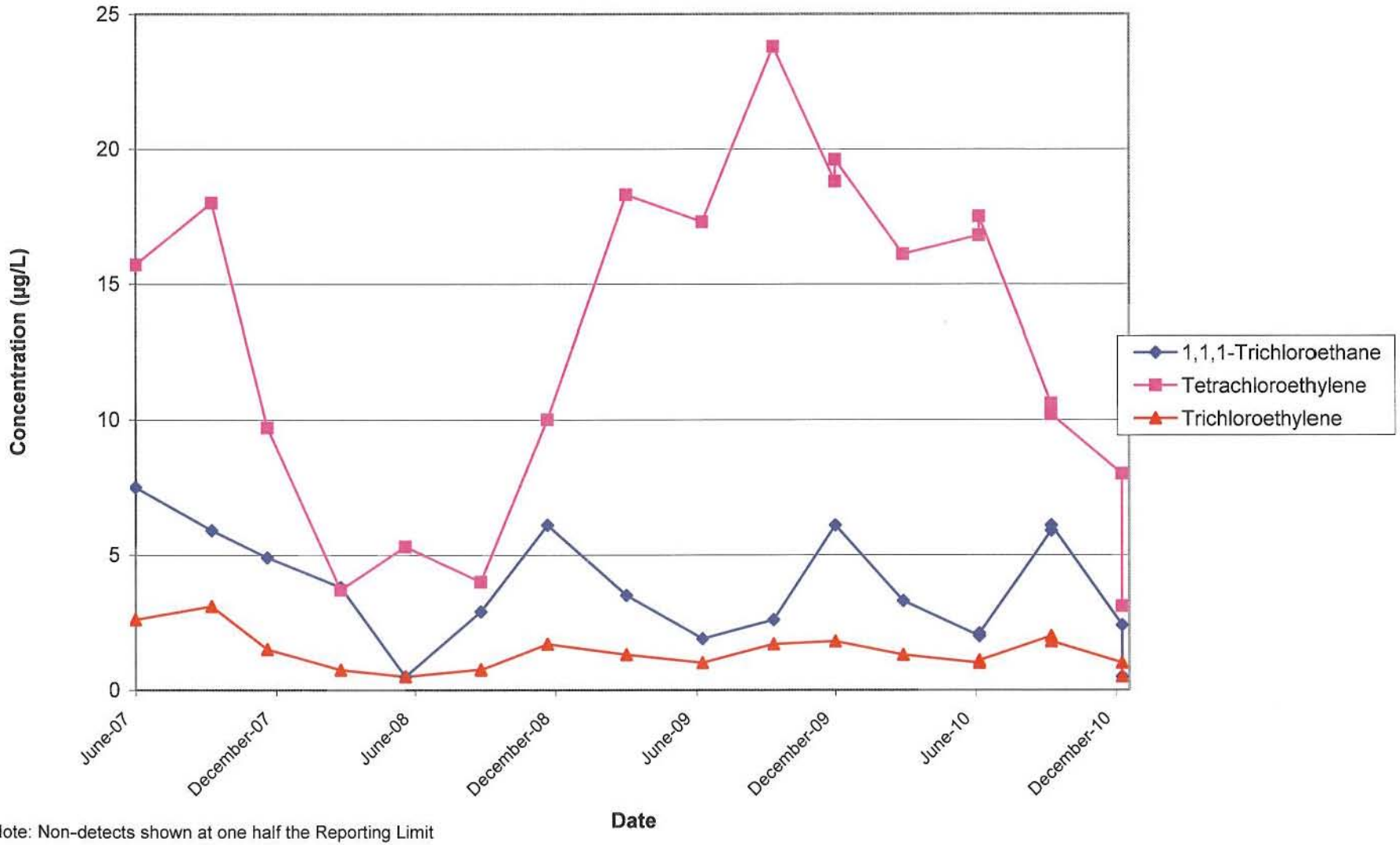
Note: Non-detects shown at one half the Reporting Limit

HB-MW-06 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



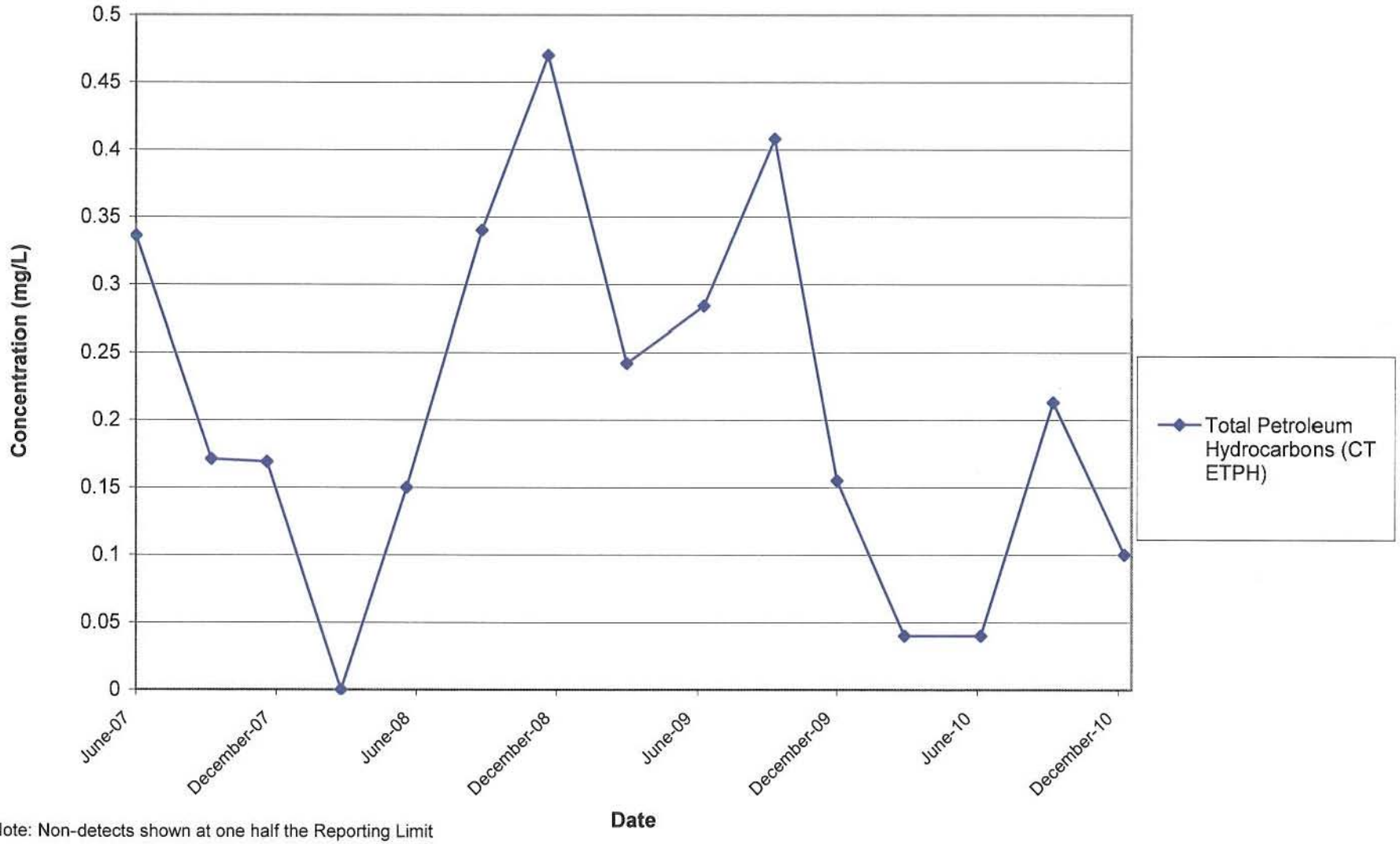
Note: Non-detects shown at one half the Reporting Limit

HB-MW-06 - Select Volatile Organic Compounds
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



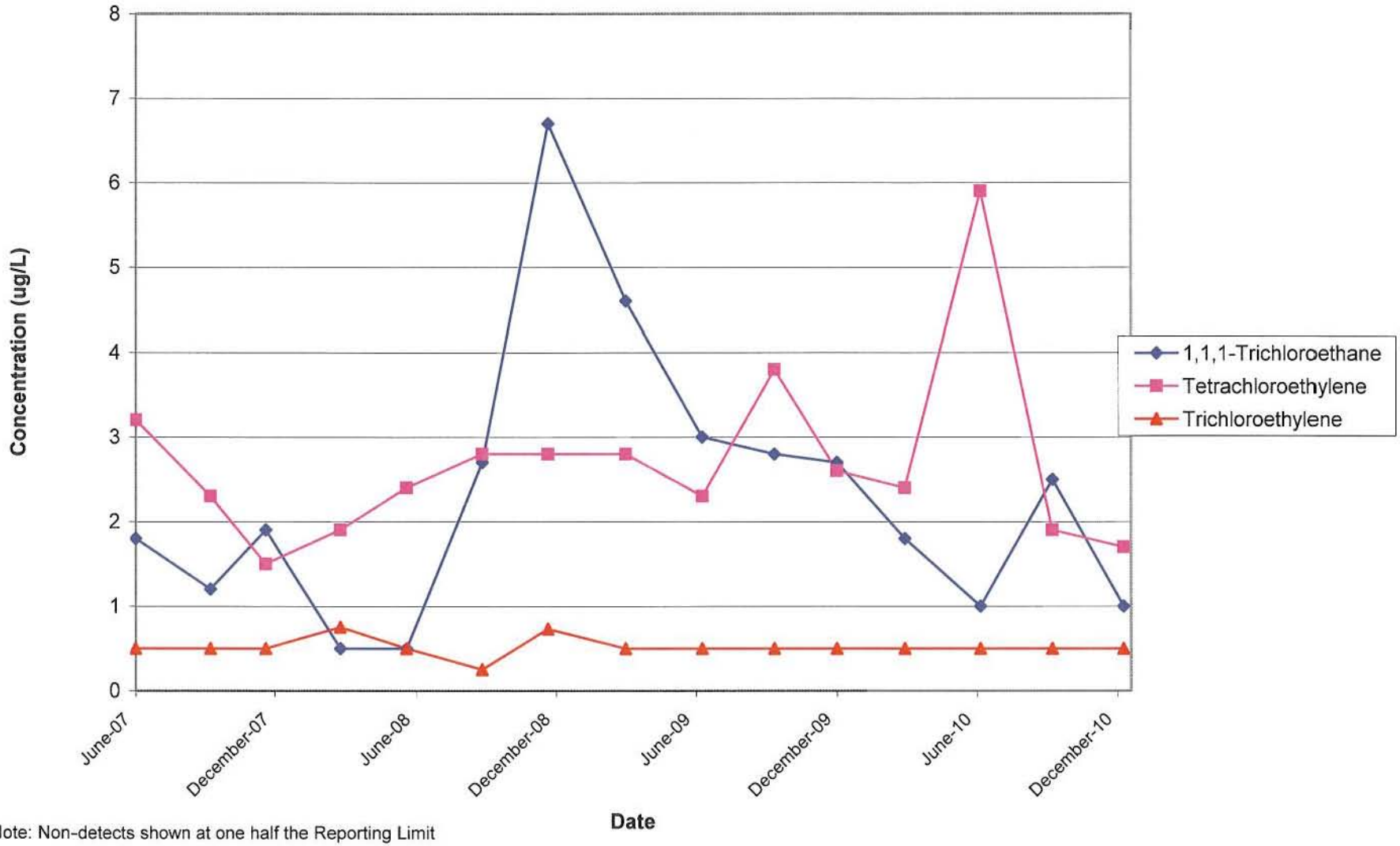
Note: Non-detects shown at one half the Reporting Limit

HB-MW-07 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



Note: Non-detects shown at one half the Reporting Limit

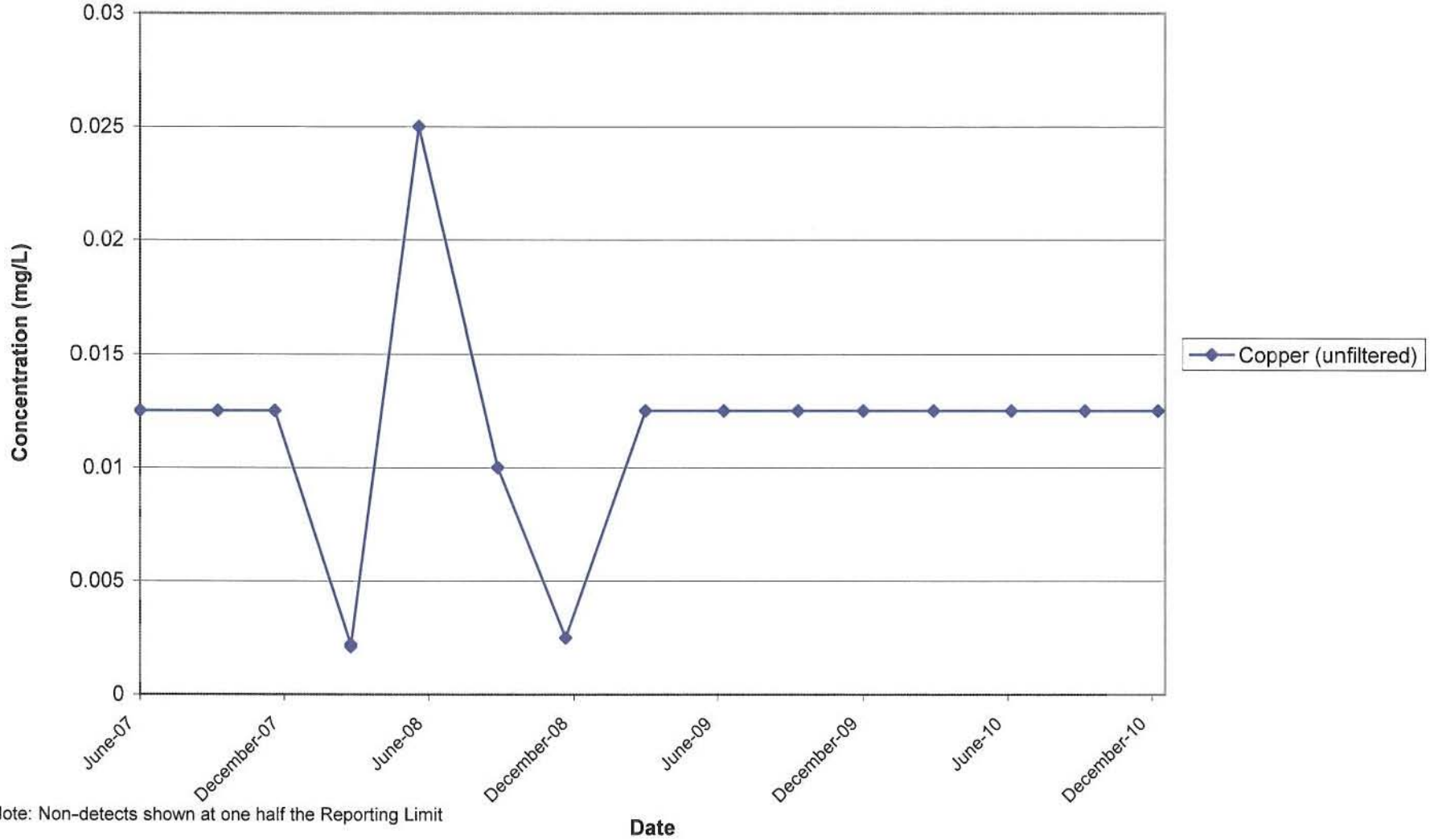
HB-MW-07 - Select Volatile Organic Compounds
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



Note: Non-detects shown at one half the Reporting Limit

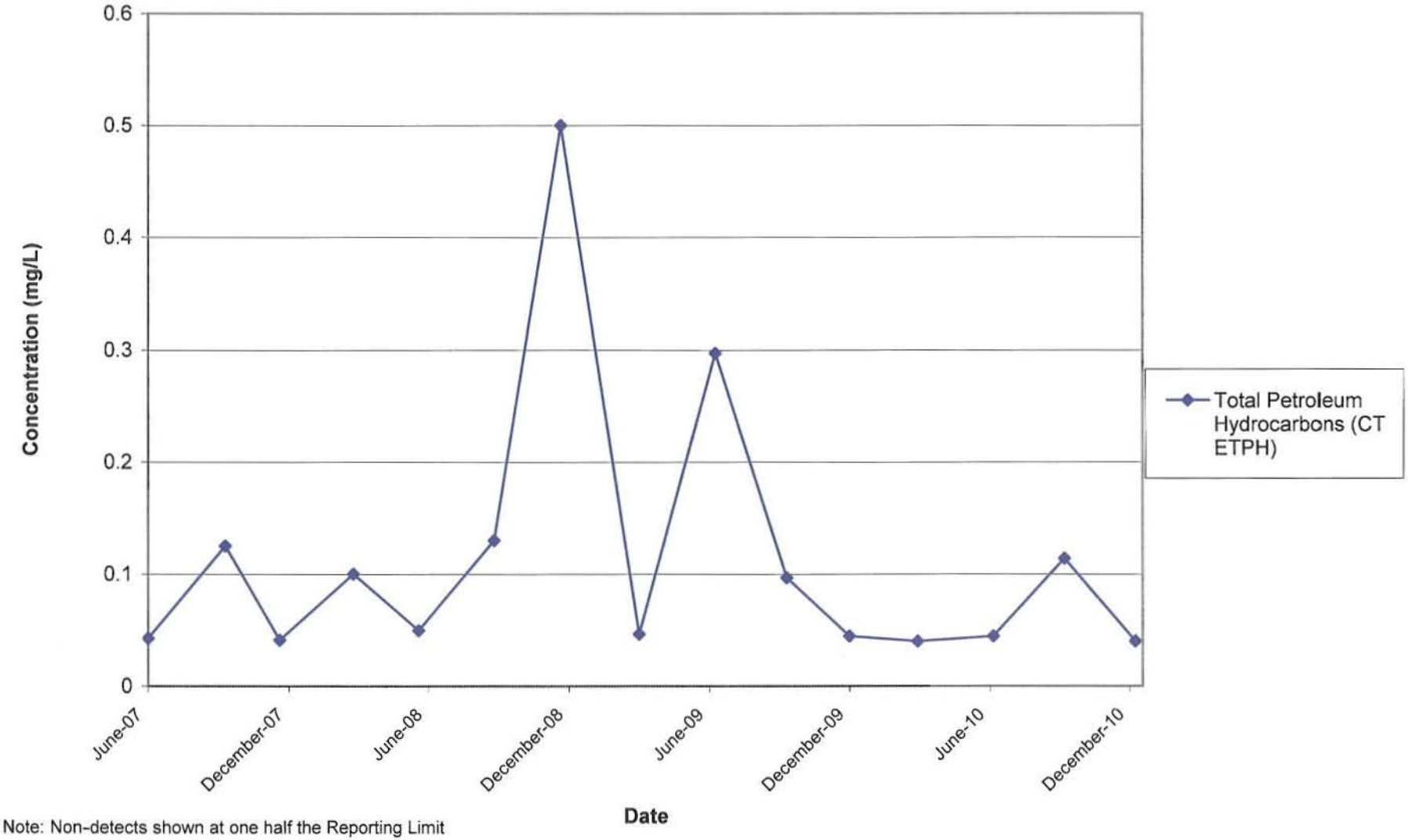
HB-MW-04 - Copper

Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



Note: Non-detects shown at one half the Reporting Limit

HB-MW-05 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2010 Annual Groundwater Monitoring Report



Note: Non-detects shown at one half the Reporting Limit

Appendix E

Post Remediation Maintenance Monitoring Forms

United Technologies/Pratt & Whitney
2010 Post-Remediation Maintenance and Monitoring Program
F&H Buildings

Weather Conditions: Cloudy
Inspection Date: 9/9/10
Inspection Time: 1430

Inspector: Keith Volkert
Reviewed By: Robin McKinney

INSPECTION POINT	DESCRIPTION	GOOD	FAIR	POOR
1) Signs of erosion over engineered control	Check for gullies.	✓		
2) Signs of settling over engineered control	Look for ponding and for settling of pavement of more than 0.5 inches over a 5 square foot area.	✓		
3) Signs of ponding over engineered control	Look for areas of more than 5 square feet of standing water.	✓		
4) Signs of pavement damage over engineered control and pavement used to render soil inaccessible	Look for areas of spider cracking, spalling and loss of binder.	~~✓~~	✓	
5) Permanent Survey Markers	Look for damaged or missing markers.	✓		
6) Monitoring well network	Check concrete collar protective casing, locks, legible well identification.	✓		
	1.Condition of lock	✓		
	2.Visible ID of wells			✓
	3.Ponding or infiltration of surface water	✓		
	4.Condition of concrete collar	✓		
	5.Condition of steel casing	✓		

Report all deficiencies to the designated representative of United Technologies Corporation/Pratt & Whitney
List all deficiencies, the corrective measures taken, and the date corrective measures were completed:

1) Multiple Cracks running North to South with little growth No soil exposure - in paved

Corrective Action: area west of engineered control.

2) Continue to check pavement, and consider repair if cracks worsen and expose underlying soil.

Corrective Action:

3)

Corrective Action:

4)

Corrective Action:

United Technologies/Pratt & Whitney
2010 Post-Remediation Maintenance and Monitoring Program
F&H Buildings

Weather Conditions: COLD/WINDY
Inspection Date: 12.9.2010
Inspection Time: 1530

Inspector: H. GRIMM
Reviewed By: Robin McKinney

INSPECTION POINT	DESCRIPTION	GOOD	FAIR	POOR
1) Signs of erosion over engineered control	Check for gullies. ~~LOTS~~		✓	
2) Signs of settling over engineered control	Look for ponding and for settling of pavement of more than 0.5 inches over a 5 square foot area.	✓		
3) Signs of ponding over engineered control	Look for areas of more than 5 square feet of standing water.	✓		
4) Signs of pavement damage over engineered control and pavement used to render soil inaccessible	Look for areas of spider cracking, spalling and loss of binder.		✓	
5) Permanent Survey Markers	Look for damaged or missing markers.			
6) Monitoring well network	Check concrete collar protective casing, locks, legible well identification.			
	1.Condition of lock			
	2.Visible ID of wells			✓ - easily found w/mapping + cones
	3.Ponding or infiltration of surface water	✓		
	4.Condition of concrete collar	✓		
	5.Condition of steel casing	✓		

Report all deficiencies to the designated representative of United Technologies Corporation/Pratt & Whitney
List all deficiencies, the corrective measures taken, and the date corrective measures were completed:

1) Many areas have small cracks with grass growing in between in engineering control area.

Corrective Action:

2)

Corrective Action:

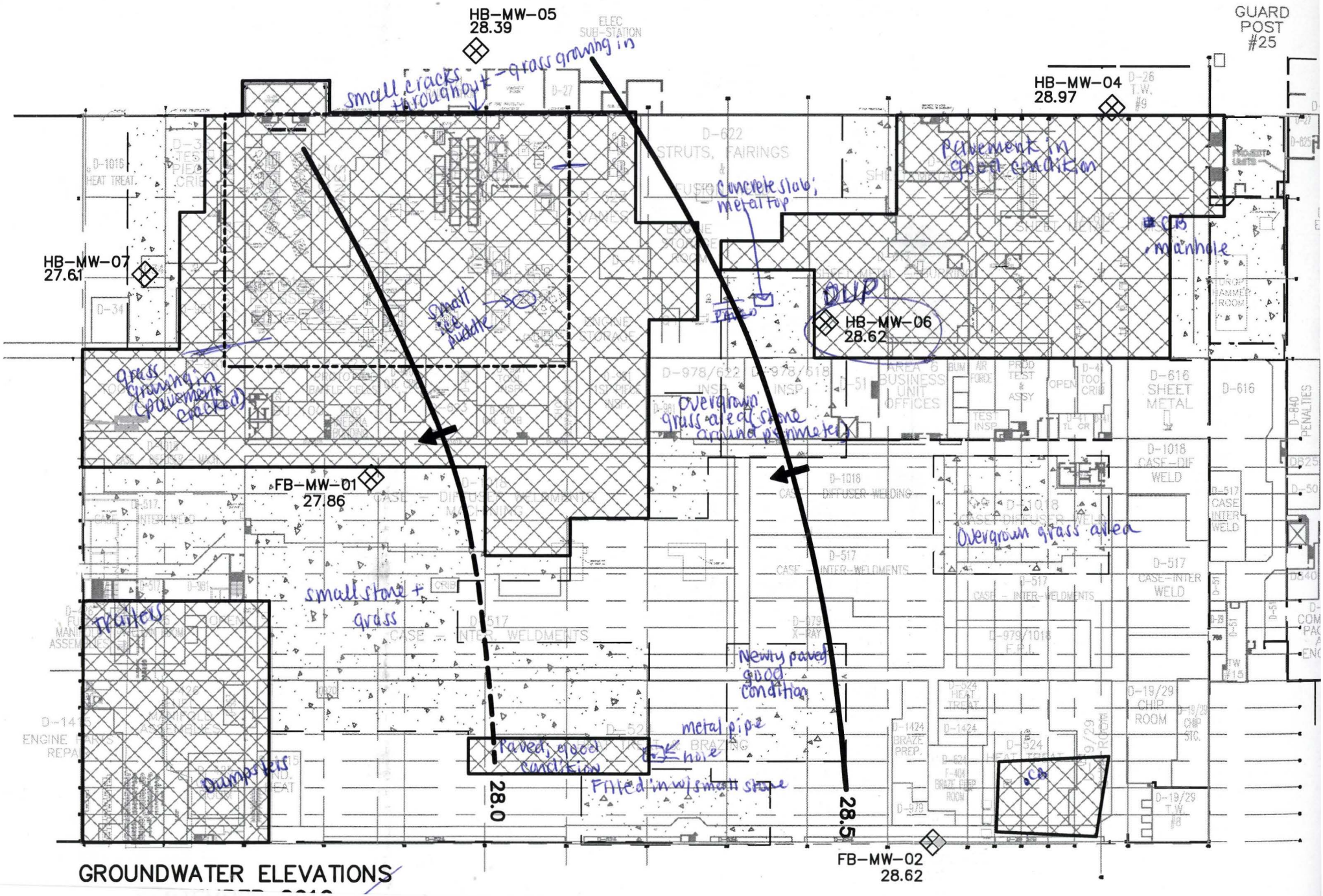
3)

Corrective Action:

4)

Corrective Action:

Cap Inspection Observations - Dec. 9, 2010



GROUNDWATER ELEVATIONS