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# **GROUNDWATER MONITORING REPORT**

## **DairiConcepts Site**

W888 Chili Road, Chili,  
Clark County, Wisconsin

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AET Project No. 03-05510  
WDNR BRRTS No. 03-10-545212  
PECFA No. 54420-9999-88

### **Date:**

August 8, 2018

### **Prepared for:**

Dairy Farmers of America  
1405 N. 98<sup>th</sup> Street  
Kansas City, KS 66111

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· FORENSICS

August 8, 2018

Dairy Farmers of America  
1405 N. 98<sup>th</sup> Street  
Kansas City, KS 66111

Attn: Steve Moore & Stacy Doing  
smoore@dfamilk.com sdoing@dfamilk.com

RE: Groundwater Monitoring Report  
DairiConcepts Site, W888 Chili Road, Chili, Clark County, Wisconsin.  
WDNR BRRTS No. 03-10-545212. PECFA No. 54420-9999-88.  
AET Project No. 03-05510.

American Engineering Testing, Inc. has completed Groundwater Monitoring services at the above-referenced property in Chili, Wisconsin. These services were performed in accordance with our approved proposal dated March 28, 2016. On your behalf, we are also forwarding the report to the Wisconsin Department of Natural Resources (WDNR) at this time for review.

We appreciate the opportunity to serve you on this project. If you have any questions regarding the information presented in this report, or if we can be of additional service, please contact me.

Sincerely,  
**American Engineering Testing, Inc.**

A handwritten signature in blue ink that reads 'mike neal'.

Michael K. Neal, Professional Hydrologist  
Geomorphologist

Phone: (715) 861-5045, Cellular Phone (715) 894-6455  
E-mail: mneal@amengtest.com



cc: Gena Keenan, WDNR, 1300 W. Clairemont Avenue, Eau Claire, WI 54701

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**AET PROJECT NO. 03-05510**

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**GROUNDWATER MONITORING REPORT  
DAIRICONCEPTS SITE  
CHILI, WISCONSIN**

**AET PROJECT NO. 03-05510**

**EXECUTIVE SUMMARY**

American Engineering Testing, Inc. (AET) was authorized by Dairy Farmers of America (DFA) to conduct Soil Remediation and Groundwater Monitoring activities for the DairyConcepts plant property located at W888 Chili Road, Chili, Clark County, Wisconsin (the Site). The Wisconsin Department of Natural Resources (WDNR) has directed DFA, the property owner, to investigate and remediate the Site. The responsible party letter was issued on April 4, 2006 after soil and groundwater contamination was encountered at the Site.

The results of our initial site investigation indicated that petroleum impacts to soil were present on the Site in the area of a previous petroleum underground storage tank (UST) system. Petroleum-contaminated soils that exceed the WDNR NR 720 soil to groundwater residual contaminant levels (RCLs) were present in the former tank bed. Soil contamination previously extended from five feet below ground surface (bgs) to the groundwater table (12-15 feet bgs) in an area approximately 110 feet east/west by 30 feet north/south.

AET observed the removal of approximately 1,203 tons of contaminated soil from the area of monitoring well MW-4 and the former tank bed. Excavation soil sampling in the source area indicates that most of the soil contaminated at levels above NR 720 soil to groundwater RCLs has been removed. The presence of an underground fiber optic cable near MW-3A prevented expansion of the excavation to the west. Soil contamination from approximately four to at least 15 feet bgs remains in the area of MW-3A and likely extends beneath the pavement of Chili Road and County Highway Y. In our opinion, remaining soil contamination at the Site is associated with the impacted groundwater smear zone.

Groundwater monitoring shows that petroleum constituents are present at concentrations exceeding NR 140 enforcement standards (ESs) in the source area, in the adjacent road right-of-ways, and in off-site properties in an area approximately 230 feet northwest-southeast and 140 feet wide. The extent of impact is defined by the lack of contamination in groundwater monitoring wells CMW-1, MW-6A, MW-7A, MW-W, MW-E, MW-6, MW-1A, PZ-7, and MW-7. Petroleum constituent concentrations in the source wells are generally increasing or unstable over time. Free product is present in monitoring wells MW-3A and MW-10.

Based on these results, AET will continue to monitor the groundwater to evaluate the effects of soil remediation and the feasibility of natural attenuation as a remedial measure to attain Site closure.

## **1.0 INTRODUCTION**

Dairy Farmers of America (DFA) authorized American Engineering Testing, Inc. (AET) to conduct soil remediation and groundwater monitoring activities on their plant property located at W888 Chili Road, Chili, Clark County, Wisconsin (the Site). **Figure 1** shows the Site location, and **Figure 2** shows the current Site layout.

**Appendix A** contains a list of the acronyms and abbreviations used in this report.

### **1.1 Purpose**

We have completed the scope of services for this project as required by the Wisconsin Department of Natural Resources (WDNR). AET's services have been performed in accordance with generally accepted practices of the profession undertaken in similar studies at the same time and in the same geographical area, and for the following purposes:

- To collect four quarterly rounds of groundwater samples to evaluate the effect of soil remediation on groundwater quality, the stability of the groundwater contamination plume, and the feasibility of using natural attenuation as a closure option for the remaining residual contamination; and
- To evaluate the need for further site remediation and/or continued groundwater monitoring.

## **2.0 BACKGROUND**

### **2.1 Site Description and Features**

The address for the Site is W888 Chili Road, and it is located in the southwest quarter of the southwest quarter of Section 23, Township 25 North, Range 1 East, in unincorporated Chili, Town of Fremont, Clark County, Wisconsin. The Site is a 1.06-acre lot located on the east side of County Highway Y, north of Chili Road. The Site operated as a dairy and cheese factory until the 1980s. Currently, the Site is occupied by the DairiConcepts plant, which produces dry cheese products. The town of Chili is served by potable well water supply and municipal sewer system. The former petroleum underground storage tank (UST) system was used to fuel dairy fleet vehicles and was removed in the 1980s.

At present, neighboring property uses include County Highway Y and commercial property to the west, residential property to the north, Chili Road and residential properties to the south, and municipal property (tennis courts and baseball field) to the east.

## **2.2 Physical Setting**

The Site is located in the Central Plain Physiographic Province of central Wisconsin. Fluvial and glacial processes have been an important geologic agent in determining the surface geology and physiography of the Site, and it is situated on alluvial and glacial deposits.

Soils encountered at the Site are primarily silts and clays from the surface to approximately 12 feet below ground surface (bgs). Bedrock was encountered in all of the soil borings, and the excavation completed at the Site, at approximately 12 feet bgs. Regionally, bedrock consists of Cambrian period sandstones with some dolomites and shales. Bedrock encountered beneath the Site consists of sandstone.

Depth to groundwater during the last four rounds of monitoring ranges from 3.52 to 13.41 feet bgs in the monitoring wells. Topography at the Site is relatively level. Groundwater elevation data collected from the monitoring wells suggests that the water table is relatively flat, and that groundwater flow is controlled by the pumping of water from a potable supply well in the vicinity of the Site.

## **2.3 Previous Environmental Reports**

Earth Tech completed a site investigation for the WDNR in response to petroleum detection in a residential potable well located at the former Krueger residence, W887 Chili Road (currently the DairiConcepts office) in the town of Chili. The results of the investigation were included in their reports of Project No. 82060 dated November 15, 2005 and March 2006. Refer to these reports for background and supplemental information. The site investigation was completed to gather sufficient subsurface information to assess permanent potable water supply well replacement options for the contaminated Krueger residential well and to confirm the source or sources of contamination that may have contributed to contamination of the residential well. The site investigation was completed from January 2004 to April 2006. The site investigation reports revealed the following:

- Subsurface materials consist of low-permeability sandy, silty clay from ground surface to approximately 10 to 16 feet bgs. Fractured sandstone bedrock of varying permeability underlies the clay to approximately 40 to 50 feet bgs. Granite bedrock underlies the sandstone.
- Soil and groundwater sampling confirmed three potential sources of petroleum contamination, including the former USTs located near the southwest corner of the DairiConcepts plant property, reported USTs in the area directly west of the Wolfe property garage, and the former UST located at the Chili Service garage.

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- Wisconsin Administrative Code (WAC) NR 140 enforcement standard (ES) exceedances for benzene, 1,2-dichloroethane (DCA), naphthalene, toluene, and trimethylbenzenes (TMBs) were detected in groundwater samples collected from monitoring wells within and directly downgradient of the identified sources.
- In July 2005, free product was observed in monitoring well MW-4 adjacent to the southwest corner of the DairiConcepts plant property.
- Measured groundwater elevations indicated that the water table in the vicinity of the investigation area is nearly flat, thus generating negligible hydraulic gradient to drive groundwater flow laterally. A possible east or southeast flow trend was inferred from the measured groundwater elevations; however, groundwater flow direction determination was inconclusive. A downward vertical gradient was observed between wells MW-7 and PZ-7.
- Private potable well pumping likely has a significant effect on horizontal and vertical groundwater movement within the investigation area. Hydraulic stress, due to water withdrawal within the groundwater cone of depression generated by pumping, would tend to influence groundwater (and contaminant) flow in the vicinity of the potable wells, especially in the absence of significant natural flow.
- Soil gas survey and continued groundwater sampling confirmed contamination from the three previously identified potential sources of petroleum contamination: the former USTs located near the southwest corner of the DairiConcepts property, reported USTs in the area directly west of the Wolfe property garage, and the former UST located at the Chili Service garage.
- Based on the soil gas survey and groundwater sampling analytical results, any potable well replacement on the former Krueger residential property drawing water from the sandstone aquifer will be at risk of future impacts from past petroleum releases in the area. However, a potable well installed on the southeastern portion of that property and drawing from the underlying fractured granite bedrock would appear to have less risk of future petroleum impacts due to the increased distance of the well from the former UST locations and potential limitations on further downward vertical migration of petroleum contamination through the sandstone aquifer presented by the apparent hydraulic characteristics of the sandstone aquifer and the presence of clay at the sandstone/granite bedrock interface, which may form a semi-pervious barrier between the sandstone and the fractured granite bedrock.
- Based on Earth Tech's investigation, there was an indication that a release of petroleum to the environment had occurred from three separate UST systems. The WDNR issued

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Responsible Party letters to DairiConcepts, Mr. Arnold Wolfe, and Chili Service Garage directing them to investigate and remediate their sites on April 4, 2006.

Tetra Tech completed a remedial investigation of the Site, and the results of the investigation are included in their reports of Project No. 1156332427 dated June 11, 2004 and February 11, 2009. Refer to these reports for background and supplemental information. The remedial investigation was completed to determine the degree and extent of soil contamination associated with the former UST system at the Site and to evaluate the potential for groundwater contamination. The remedial investigation reports revealed the following:

- The site investigation began in April 2006 and included the installation of ten soil borings and five groundwater monitoring wells. Five monitoring wells previously installed by Earth Tech were also used in the remedial investigation.
- Petroleum-contaminated soil is present on the Site in the area of the previous petroleum UST system and concentrations exceed the WDNR NR 720 generic residual contaminant levels (RCLs). Soil contamination extends from five feet bgs to the groundwater table (12-15 feet bgs) in an area approximately 110 feet east/west by 30 feet north/south. Soil contamination has affected groundwater quality in monitoring wells MW-3A and MW-4, located near the southwest corner of the Site.
- Active free product removal was conducted in wells MW-3A and MW-4. Product thickness ranging from 5 to 23 inches was observed during removal activities.
- Four quarterly rounds of groundwater sampling confirmed that petroleum-contaminated groundwater is present on the Site in the area of the previous petroleum UST system. Groundwater contamination extends off site to the west in the County Highway Y road right of way. Groundwater contamination exceeding the NR 140 ES is present within the sandstone bedrock and extends in a plume approximately 250 feet west-east by 100 feet wide surrounding monitoring wells MW-3A, MW-4, MW-4A, and MW-5A.
- A replacement potable well was installed at the former Krueger residence southeast of the Site. The well was constructed in the granite aquifer at a depth of 250 feet bgs.

AET completed additional remedial investigation activities on the Site, and the results of the additional investigation are included in our reports of Project No. 03-05510 dated July 11, 2013 and August 25, 2015. Refer to these reports for background and supplemental information. Continued remedial investigation was completed to determine the extent of groundwater contamination associated with the UST system and to evaluate the potential for groundwater remediation by natural attenuation. The remedial investigation reports revealed the following:



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- Two additional groundwater monitoring wells, MW-6A and MW-7A were installed on the adjacent property to define the extent of groundwater contamination to the west. Five quarterly rounds of groundwater samples were collected from May 2010 to July 2015.
- Free product was not observed in wells MW-3A or MW-4.
- Groundwater contamination exceeding the NR 140 ES is present within the sandstone bedrock and extends in a plume approximately 250 feet west-east by 100 feet wide surrounding monitoring wells MW-3A, MW-4, MW-4A, and MW-5A. MW-6A and MW-7A define the western extent of the contaminant impacts.
- The WDNR requested soil excavation in the source area and continued groundwater monitoring to bring the Site to closure.

AET completed a soil remediation and groundwater monitoring report on the Site, and the results are included in our report of Project No. 03-05510 dated September 9, 2016. Refer to that report for background and supplemental information. The purpose of the remedial action was to remove petroleum-contaminated soil in the source area to reduce the potential for continued groundwater impact from the contamination associated with the former UST system. The soil remediation and groundwater monitoring report revealed the following:

- In June 2016, approximately 1,203 tons of contaminated soil were removed from the former tank bed area, resulting in the removal of most of the soil contaminated at levels above NR 720 soil to groundwater and non-industrial direct contact RCLs.
- Residual soil contamination exists from approximately four feet bgs to the groundwater table (10-15 feet bgs) in an area approximately 30 feet east/west by 45 feet north/south and likely extends beneath the County Highway Y and Chili Road pavement. Except in the limited area around monitoring well MW-3A, remaining soil contamination at the Site is associated with the impacted groundwater smear zone.
- Groundwater monitoring shows that petroleum constituents are present on and off site in the area that includes the previous petroleum UST system. Groundwater contamination extends in a plume approximately 400 feet by 150 feet surrounding monitoring wells MW-2A, MW-3A, MW-4R, MW-4A, MW-5A, MW-5, MW-W, and MW-10.
- Based on these results, AET recommended continued groundwater monitoring on a quarterly basis to determine a stable or decreasing contaminant plume.

AET completed a groundwater monitoring report on the Site, and the results are included in our report of Project No. 03-05510 dated June 30, 2017. Refer to that report for background and

supplemental information. The purpose of the remedial action was to evaluate the effect of soil remediation on groundwater quality and to determine stability of the groundwater contamination plume and the feasibility of using natural attenuation as a closure option for the remaining residual contamination. The groundwater monitoring report revealed the following:

- Groundwater monitoring shows that petroleum constituents are present at concentrations exceeding NR 140 ESs in the source area and in the adjacent road right-of-ways in an area approximately 220 feet northwest-southeast and 125 feet wide. The extent of impact is defined by the lack of contamination in groundwater monitoring wells CMW-1, MW-4A, MW-7A, MW-W, MW-E, MW-6, MW-1A, MW-3, PZ-7, and MW-7. Petroleum constituent concentrations in the source wells are generally decreasing or stable over time, with the exception of methyl-tert-butyl ether (MTBE). No free product is present in any of the wells.
- Based on these results, AET recommended continued groundwater monitoring on a quarterly basis to evaluate the effects of soil remediation, to determine a stable or decreasing contaminant plume, and the feasibility of natural attenuation as a remedial measure to attain Site closure.

### **3.0 GROUNDWATER MONITORING ACTIVITIES**

#### **3.1 Scope of Services**

The scope of this remedial action was initially defined in an approved AET proposal agreement with DFA on March 28, 2016. The implemented scope of services included the following:

- Obtain approval of costs from the WDNR PECFA program for reimbursable expenses to complete the required remedial activities.
- Prepare and administer a site-specific safety plan.
- Collect three of eight quarterly rounds of groundwater samples from 18 groundwater monitoring wells (MW-1A, MW-2A, MW-3, MW-3A, MW-4A, MW-4R, MW-5, MW-5A, MW-6, MW-6A, MW-7, MW-7A, PZ-7, MW-9, MW-10, MW-E, MW-W, & CMW-1). Analyze each sample for petroleum volatile organic compounds (PVOCs), 1,2-DCA, and naphthalene using EPA Method SW8260B. During each sampling event, collect groundwater elevation measurements from all wells.
- Prepare a groundwater monitoring report to document groundwater sampling results. The report will include groundwater flow maps, updated tables, and updated concentration graphs.

### **3.2 Environmental Sampling Methods**

AET conducted groundwater sampling using the methods described on the Environmental Sampling Methods pages in **Appendix B**.

AET collected four rounds of groundwater samples from seven groundwater monitoring wells and two rounds of groundwater samples from 10 groundwater wells by purging each well and collecting a sample using a disposable bailer. Bailer samples were emptied into the appropriately preserved containers, and all samples were packed in a cooler and shipped with the chain of custody record. AET also collected one round of groundwater samples from four potable wells.

AET submitted groundwater samples to Test America laboratory for chemical analyses. Groundwater samples were analyzed for PVOCs, 1,2-DCA, and/or naphthalene and 1,2-dibromoethane (EDB) by their respective EPA GC methods. Samples were collected in accordance with AET's Quality Assurance/Quality Control (QA/QC) guidelines.

### **3.3 Reference Standards**

For this report, we compare the analytical results to the baseline environmental regulatory standards in use by the WDNR. The reference standards are included in the results tables for comparison with assessment results. The media-specific standards are described below.

The following reference standards apply to potential contaminant exposures in groundwater:

- WAC NR 140 - Groundwater Quality Standards.

## **4.0 PROJECT RESULTS**

### **4.1 Field Observations**

Quarterly groundwater samples were collected on September 8 and December 4, 2017, and April 30 and July 9, 2018. Depth to groundwater was measured prior to purging and sampling each well. Depth to groundwater ranged from 3.52 to 13.41 feet bgs in the monitoring wells. Groundwater elevation data is summarized in **Table 1**.

Active free product removal was conducted on two groundwater monitoring wells (MW-3A & MW-10). Product removal was completed during each groundwater sampling event and on June 5, 2018. Product thickness ranged from 0.5 to 1.0 inches (MW-3A) and 3 to 15 inches (MW-10). An absorbent sock was left in each well between sampling events. Drums of product and water were picked up by Advanced Tank Service Inc., Eau Claire, WI in August & December 2017 and

May 2018. Currently one 55-gallon drum of water and product remains on-site. Free product removal is summarized in **Table 3**.

## **4.2 Laboratory Analysis**

**Appendix C** includes the laboratory analytical reports and chains-of-custody for this remedial action. Groundwater sample analytical results are summarized in **Table 2**.

### ***4.2.1 Groundwater Analytical Results***

The WDNR has established groundwater preventive action limits (PALs) and ESs for selected compounds that are listed in WAC NR 140. If a contaminant concentration exceeds the PAL, the WDNR may require monitoring or additional investigation. If the concentration exceeds the ES, the WDNR may require monitoring or remediation.

The latest round of groundwater samples was collected on July 9, 2018 and contaminant concentrations exceeding ESs were detected in monitoring wells MW-3A, MW-4R, MW-4A, MW-5A, and MW-10.

Benzene concentrations above the ES of five parts per billion (ppb) were detected in monitoring wells MW-3A (2,100 ppb), MW-4R (300 ppb), MW-4A (110 ppb), MW-5A (48 ppb), and MW-10 (340 ppb). An EDB concentration above the ES of 0.05 ppb was detected in monitoring well MW-3A at 37 ppb. Ethylbenzene concentrations above the ES of 700 ppb were detected in monitoring wells MW-3A (1,500 ppb), MW-4R (1,100 ppb), and MW-10 (1,000 ppb). Naphthalene concentrations above the ES of 100 ppb were detected in monitoring wells MW-3A (110 ppb), MW-5A (140 ppb), and MW-10 (1,100 ppb). Toluene concentrations above the ES of 800 ppb were detected in monitoring wells MW-3A (9,500 ppb) and MW-10 (1,200 ppb). Total TMB concentrations above the ES of 480 ppb were detected in monitoring wells MW-3A (2,350 ppb), MW-4R (2,320 ppb), MW-5A (910 ppb), and MW-10 (1,820 ppb). Total xylene concentrations above the ES of 2,000 ppb were detected in monitoring wells MW-3A (7,900 ppb), MW-4R (3,700 ppb), and MW-10 (3,000 ppb).

Several PVOCs, 1,2-DCA, or naphthalene were detected in monitoring wells MW-1A, MW-4A, MW-4R, MW-5A, and MW-7 at concentrations above their respective PALs.

Groundwater analytical results and groundwater elevation data are summarized in **Tables 1 and 2**, and depicted in **Figures 3, 4, 5, and 6**.

## **5.0 DISCUSSION AND OPINIONS**

### **5.1 Soil Contamination Conditions**

From previous investigations, petroleum-contaminated soil that exceeds the WDNR NR 720 soil to groundwater RCLs remains in the Chili Road and County Highway Y road right-of-ways in the area of monitoring well MW-3A. Remaining soil contamination extends from approximately four feet bgs to the groundwater table (10-15 feet bgs) in an area approximately 30 feet east/west by 45 feet north/south and likely extends beneath the County Highway Y and Chili Road pavement.

Petroleum-contaminated also soil remains on the Site in the area of the previous petroleum UST system. Post remedial soil samples that exceed the WDNR NR 720 soil to groundwater RCLs were collected below the groundwater table and within the sandstone bedrock. Except in the limited area around monitoring well MW-3A, remaining soil contamination at the Site appears to be associated with the impacted groundwater smear zone.

### **5.2 Groundwater Contamination Conditions**

Petroleum-contaminated groundwater is present on the Site in the area that includes the previous petroleum UST system, the adjacent road right-of-way, and off-site properties to the west. Groundwater contamination extends in a plume approximately 230 feet by 140 feet surrounding monitoring wells MW-3A, MW-4A, MW-4R, MW-5A, and MW-10.

Measured groundwater elevations from July 2018 indicated that the water table is nearly flat with a minimal hydraulic gradient. A possible east or west flow trend away from the Site was inferred during this round of sampling. A downward vertical gradient was observed between wells MW-7/PZ-7 and MW-E/MW-W. The extent of groundwater contamination and elevation data are depicted on **Figures 3, 4, 5, and 6**.

We've reviewed the stability of the groundwater plume at MW-3A, MW-4A, MW-4R, MW-5A, and MW-10 using line graphs showing the concentration trends over time for various petroleum constituents. The line graphs were used to assess trends of the groundwater quality in these wells and the relationship to fluctuations of the water table. Petroleum constituent concentrations in the source wells show great variability over time. Concentrations in well MW-3A are generally decreasing, however during two of the last four rounds of sampling free product has been present. Concentrations of benzene and naphthalene in well MW-4A and MW-5A are increasing. Free product has also begun to accumulate in monitoring well MW-10. This increase in benzene and naphthalene concentrations, and the occurrence of free product, appears to be associated with the increase and then subsequent decrease of the water table after July 2017. The source of the higher

concentrations and free product may be from the lower part of the smear zone where free product is present. **Appendix D** includes concentration verses time graphs to illustrate these trends.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

Soil sampling results obtained during the source removal has indicated that most of the soil contaminated at levels above NR 720 soil to groundwater RCLs has been removed. Soil contamination from approximately four to at least 15 feet bgs remains in the area of MW-3A and likely extends beneath the pavement of Chili Road and County Highway Y. In our opinion, remaining soil contamination at the Site is associated with the impacted groundwater smear zone.

Groundwater monitoring shows that petroleum constituents remain on and off the Site at concentrations exceeding the NR 140 ES. Based on the sampling results, AET will continue to monitor the groundwater on a quarterly basis to evaluate the effects of soil remediation and whether a downward trend in groundwater contaminant concentrations has been established to indicate the feasibility of natural attenuation as a remedial measure to attain Site closure. The groundwater monitoring data will be reviewed to assess the potential effect of the smear zone on contaminant concentrations from fluctuations in the water table.

## **7.0 REPORT CLOSURE**

### **7.1 Standard of Care**

This remediation has been conducted under the supervision of an Environmental Professional and for the objectives described in the Purpose section of this report. AET's findings, opinions, conclusions, and recommendations are based on the Scope of Services defined in this report.

AET has endeavored to perform services for this project in a manner consistent with the level of skill and care ordinarily exercised by other members of the profession currently practicing in this area, under similar budgetary and time constraints. No warranty, express or implied, is made.

This report is based on our current understanding of the project and conditions at the Site. If conditions differing from our original understanding or findings are identified, AET should be consulted to determine if there are material impacts on our conclusions or recommendations.

**Groundwater Monitoring Report**

DairiConcepts Site, Chili, WI

August 8, 2018

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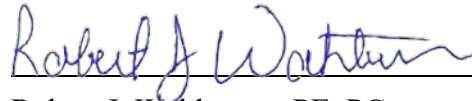
Report Prepared By:



Michael K. Neal

Professional Hydrologist/Geomorphologist

Report Reviewed By:



Robert J. Wahlstrom, PE, PG

Principal Engineer/Geologist

“I, Michael K. Neal, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.”

# Tables

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**TABLE 1 (page 1 of 6)**  
**GROUNDWATER ELEVATIONS**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

Well Number	Date	Well Depth	TOC Elevation	Depth to Water	Water Table Elevation
MW-1A	August 9, 2006	20.00	1234.83	13.60	1221.23
	April 12, 2007		1235.38	12.90	1221.93
	November 16, 2007		10.50	1224.33	
	October 17, 2008		14.10	1220.73	
	May 20, 2010		11.90	1222.93	
	November 29, 2012		14.00	1220.83	
	April 30, 2013		9.95	1224.88	
	April 27, 2015		9.45	1225.38	
	July 7, 2015		9.65	1225.18	
	July 11, 2016		10.07	1225.31	
	October 17, 2016		7.59	1227.79	
	March 22, 2017		8.71	1226.67	
	June 1, 2017		7.94	1227.44	
	September 8, 2017		10.94	1224.44	
	December 4, 2017		11.09	1224.29	
April 30, 2018	9.73	1225.65			
July 9, 2018	10.69	1224.69			
MW-2A	August 9, 2006	20.00	1235.38	14.10	1221.28
	April 12, 2007			14.00	1221.38
	November 16, 2007			11.00	1224.38
	October 17, 2008			14.55	1220.83
	May 20, 2010			12.35	1223.03
	November 29, 2012			14.40	1220.98
	April 30, 2013			10.40	1224.98
	April 27, 2015			9.65	1225.73
	July 7, 2015			9.85	1225.53
	July 11, 2016			10.36	1225.02
	October 17, 2016			7.99	1227.39
	March 22, 2017			8.98	1226.40
	May 24, 2017			8.51	1226.87
MW-3	January 21, 2005	21.10	1233.54	12.99	1220.55
	January 27, 2005			13.29	1220.25
	June 21, 2005			10.04	1223.50
	July 21, 2005			11.40	1222.14
	January 23, 2006			12.95	1220.59
	August 9, 2006			12.45	1221.09
	April 12, 2007			11.65	1221.89
	November 16, 2007			9.10	1224.44
	October 17, 2008			12.80	1220.74
	May 20, 2010			10.50	1223.04
	November 29, 2012			12.55	1220.99
	April 30, 2013			8.40	1225.14
	April 27, 2015			7.80	1225.74
	July 7, 2015			8.00	1225.54
	July 11, 2016			8.54	1225.00
	October 17, 2016			6.08	1227.46
	March 22, 2017			7.15	1226.39
	June 1, 2017			6.35	1227.19
	September 8, 2017			9.35	1224.19
	December 4, 2017			9.50	1224.04
April 30, 2018	8.11	1225.43			
July 9, 2018	9.09	1224.45			

**TABLE 1 (page 2 of 6)**  
**GROUNDWATER ELEVATIONS**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

Well Number	Date	Well Depth	TOC Elevation	Depth to Water	Water Table Elevation
MW-3A	August 9, 2006	20.00	1235.89	13.60	1222.29
	April 12, 2007			13.70	1222.19
	November 16, 2007			10.75	1225.14
	October 17, 2008			14.50	1221.39
	May 20, 2010			11.70	1224.19
	November 29, 2012			14.20	1221.69
	April 30, 2013			10.10	1225.79
	April 27, 2015			8.70	1227.19
	July 7, 2015			8.70	1227.19
	July 11, 2016			8.55	1227.34
	October 17, 2016			7.23	1228.66
	March 22, 2017			7.82	1228.07
	June 1, 2017			7.50	1228.39
	September 8, 2017			9.65	1226.24
	December 4, 2017			10.95	1224.94
July 9, 2018	10.59	1225.30			
MW-4	January 21, 2005	21.20	1235.80	15.15	1220.65
	January 27, 2005			15.50	1220.30
	June 21, 2005			12.26	1223.54
	April 12, 2007			13.90	1221.90
	November 16, 2007			11.30	1224.50
	October 17, 2008			14.70	1221.10
	May 20, 2010			12.20	1223.60
	November 29, 2012			14.60	1221.20
	April 30, 2013			9.50	1226.30
	April 27, 2015			8.35	1227.45
	July 7, 2015			9.65	1226.15
MW-4R	July 11, 2016	20.00	1236.65	11.06	1225.59
	October 17, 2016		1236.83	9.09	1227.74
	March 22, 2017		10.01	1226.82	
	June 1, 2017		9.23	1227.60	
	September 8, 2017		12.23	1224.60	
	December 4, 2017		12.46	1224.37	
	April 30, 2018		11.17	1225.66	
	July 9, 2018		11.92	1224.91	
MW-4A	November 16, 2007	18.00	1235.58	10.75	1224.83
	October 17, 2008			13.35	1222.23
	May 20, 2010			12.20	1223.38
	November 29, 2012			14.40	1221.18
	April 30, 2013			10.70	1224.88
	April 27, 2015			9.60	1225.98
	July 7, 2015			9.65	1225.93
	July 11, 2016			10.15	1225.43
	October 17, 2016			7.68	1227.90
	March 22, 2017			8.78	1226.80
	June 1, 2017			7.83	1227.75
	September 8, 2017			11.15	1224.43
	December 4, 2017			11.43	1224.15
	April 30, 2018			10.15	1225.43
July 9, 2018	10.83	1224.75			

**TABLE 1 (page 3 of 6)**  
**GROUNDWATER ELEVATIONS**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

Well Number	Date	Well Depth	TOC Elevation	Depth to Water	Water Table Elevation
MW-5	April 29, 2005	21.70	1238.67	15.81	1222.86
	June 21, 2005			14.97	1223.70
	July 21, 2005			16.26	1222.41
	January 23, 2006			17.90	1220.77
	July 7, 2015			11.50	1227.17
	July 11, 2016			11.78	1226.89
	October 17, 2016			9.96	1228.71
	March 22, 2017			10.35	1228.32
	June 1, 2017			10.18	1228.49
	September 8, 2017			12.57	1226.10
	December 4, 2017			13.45	1225.22
	April 30, 2018			11.36	1227.31
	July 9, 2018			12.21	1226.46
MW-5A	November 16, 2007	18.00	1236.41	10.85	1225.56
	October 17, 2008			14.40	1222.01
	May 20, 2010			11.60	1224.81
	November 29, 2012			13.50	1222.91
	April 30, 2013			10.10	1226.31
	April 27, 2015			9.20	1227.21
	July 7, 2015			8.80	1227.61
	July 11, 2016			8.95	1227.46
	October 17, 2016			7.60	1228.81
	March 22, 2017			8.71	1227.70
	June 1, 2017			7.65	1228.76
	September 8, 2017			10.01	1226.40
	December 4, 2017			10.93	1225.48
	April 30, 2018			9.90	1226.51
July 9, 2018	9.98	1226.43			
MW-6	April 29, 2005	21.10	1236.90	14.72	1222.18
	June 21, 2005			13.32	1223.58
	July 21, 2005			14.60	1222.30
	January 23, 2006			16.30	1220.60
	November 29, 2012			15.80	1221.10
	April 30, 2013			11.80	1225.10
	April 27, 2015			11.00	1225.90
	July 7, 2015			11.20	1225.70
	July 11, 2016			11.70	1225.20
	October 17, 2016			9.24	1227.66
	March 22, 2017			10.29	1226.61
	June 1, 2017			9.52	1227.38
	September 8, 2017			12.51	1224.39
	December 4, 2017			13.41	1223.49
	April 30, 2018			11.35	1225.55
July 9, 2018	12.20	1224.70			
MW-6A	July 7, 2015	15.00	1236.27	9.50	1226.77
	July 11, 2016			9.83	1226.44
	October 17, 2016			7.55	1228.72
	March 22, 2017			8.63	1227.64
	June 1, 2017			9.52	1226.75
	September 8, 2017			10.86	1225.41
	December 4, 2017			11.14	1225.13
	April 30, 2018			10.56	1225.71
July 9, 2018	10.42	1225.85			

**TABLE 1 (page 4 of 6)**  
**GROUNDWATER ELEVATIONS**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

Well Number	Date	Well Depth	TOC Elevation	Depth to Water	Water Table Elevation
MW-7	April 29, 2005	19.80	1233.49	9.51	1223.98
	June 21, 2005			9.75	1223.74
	July 21, 2005			11.17	1222.32
	January 23, 2006			12.69	1220.80
	August 9, 2006			12.20	1221.29
	April 12, 2007			11.40	1222.09
	November 16, 2007			8.95	1224.54
	October 17, 2008			12.50	1220.99
	May 20, 2010			10.00	1223.49
	November 29, 2012			12.10	1221.39
	April 30, 2013			8.00	1225.49
	April 27, 2015			7.20	1226.29
	July 7, 2015			7.65	1225.84
	July 11, 2016			8.09	1225.40
	October 17, 2016			5.76	1227.73
	March 22, 2017			6.71	1226.78
	June 1, 2017			5.89	1227.60
	September 8, 2017			8.96	1224.53
	December 4, 2017			9.15	1224.34
	April 30, 2018			7.66	1225.83
July 9, 2018	8.61	1224.88			
MW-7A	July 7, 2015	15.00	1234.37	8.40	1225.97
	July 11, 2016			8.62	1225.75
	October 17, 2016			6.11	1228.26
	March 22, 2017			7.11	1227.26
	June 1, 2017			6.18	1228.19
	September 8, 2017			9.18	1225.19
	December 4, 2017			9.46	1224.91
	April 30, 2018			8.19	1226.18
	July 9, 2018			8.89	1225.48
PZ-7	April 29, 2005	46.30	1233.59	15.60	1217.99
	June 21, 2005			13.54	1220.05
	July 21, 2005			13.81	1219.78
	January 23, 2006			15.98	1217.61
	August 9, 2006			14.96	1218.63
	April 12, 2007			13.25	1220.34
	November 16, 2007			11.65	1221.94
	October 17, 2008			15.10	1218.49
	May 20, 2010			12.75	1220.84
	November 29, 2012			14.45	1219.14
	April 30, 2013			10.45	1223.14
	April 27, 2015			9.50	1224.09
	July 7, 2015			10.25	1223.34
	July 11, 2016			11.02	1222.57
	October 17, 2016			8.68	1224.91
	March 22, 2017			9.49	1224.10
	June 1, 2017			6.89	1226.70
	September 8, 2017			11.54	1222.05
	December 4, 2017			11.65	1221.94
	April 30, 2018			10.94	1222.65
July 9, 2018	11.44	1222.15			

**TABLE 1 (page 5 of 6)**  
**GROUNDWATER ELEVATIONS**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

Well Number	Date	Well Depth	TOC Elevation	Depth to Water	Water Table Elevation
MW-9	April 29, 2005	16.10	1231.65	8.32	1223.33
	June 21, 2005			7.49	1224.16
	July 21, 2005			9.14	1222.51
	January 23, 2006			10.52	1221.13
	August 9, 2006			10.00	1221.65
	April 12, 2007			8.80	1222.85
	November 16, 2007			6.75	1224.90
	October 17, 2008			10.50	1221.15
	May 20, 2010			7.90	1223.75
	November 29, 2012			10.00	1221.65
	April 30, 2013			5.40	1226.25
	April 27, 2015			5.00	1226.65
	July 7, 2015			5.55	1226.10
	July 11, 2016			5.95	1225.70
	October 17, 2016			4.05	1227.60
	March 22, 2017			4.43	1227.22
	June 1, 2017			3.52	1228.13
	September 8, 2017			6.73	1224.92
December 4, 2017	6.88	1224.77			
April 30, 2018	5.16	1226.49			
July 9, 2018	6.49	1225.16			
MW-10	July 11, 2016	20.00	1240.87	15.30	1225.57
	October 17, 2016			12.99	1227.88
	March 22, 2017			13.95	1226.92
	June 1, 2017			13.18	1227.69
	September 8, 2017			16.10	1224.77
	December 4, 2017			16.21	1224.66
	July 9, 2018			15.87	1225.00
CMW-1	April 5, 2007	18.00	1234.64	12.57	1222.07
	July 3, 2007			11.96	1222.68
	November 1, 2007			8.38	1226.26
	January 17, 2008			10.63	1224.01
	December 19, 2008			13.72	1220.92
	May 21, 2010			10.88	1223.76
	November 29, 2012			13.10	1221.54
	April 30, 2013			9.15	1225.49
	April 27, 2015			8.30	1226.34
	July 7, 2015			8.30	1226.34
	July 11, 2016			8.70	1225.94
	October 17, 2016			6.38	1228.26
	March 22, 2017			7.47	1227.17
	June 1, 2017			6.43	1228.21
	September 8, 2017			9.69	1224.95
December 4, 2017	9.97	1224.67			
April 30, 2018	8.80	1225.84			
July 9, 2018	9.39	1225.25			

**TABLE 1 (page 6 of 6)**  
**GROUNDWATER ELEVATIONS**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

Well Number	Date	Well Depth	TOC Elevation	Depth to Water	Water Table Elevation
Street MW-East	July 7, 2015	33.00	1237.41	11.80	1225.61
	July 11, 2016			12.33	1225.08
	October 17, 2016			9.90	1227.51
	March 22, 2017			10.91	1226.50
	June 1, 2017			10.16	1227.25
	September 8, 2017			13.19	1224.22
	December 4, 2017			14.09	1223.32
	April 30, 2018			11.96	1225.45
	July 9, 2018			12.95	1224.46
Street MW-West	July 7, 2015	20.00	1237.55	9.55	1228.00
	July 11, 2016			9.90	1227.65
	October 17, 2016			8.57	1228.98
	March 22, 2017			9.45	1228.10
	June 1, 2017			8.70	1228.85
	September 8, 2017			10.78	1226.77
	December 4, 2017			11.69	1225.86
	April 30, 2018			10.60	1226.95
	July 9, 2018			10.41	1227.14
Quonset Hut Well	July 7, 2015	21.50	1240.83	12.75	1228.08
	July 11, 2016			12.96	1227.87
	October 17, 2016			12.00	1228.83
	March 22, 2017			12.10	1228.73
	June 1, 2017			11.49	1229.34
	September 8, 2017			13.60	1227.23
	December 4, 2017			14.43	1226.40
	April 30, 2018			13.53	1227.30
	July 9, 2018			13.27	1227.56

TABLE 2 (page 1 of 16)

ANALYTICAL RESULTS - GROUNDWATER

DAIRICONCEPTS SITE, CHILI, WISCONSIN

MW-1A																		NR 140 Remedial Action Limits	
Date	8/9/06	4/12/07	11/16/07	10/17/08	5/20/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	10/17/16	3/22/17	6/1/17	9/8/17	12/4/17	4/30/18	7/9/18		
Elevation (ft)	1221.23	1221.93	1224.33	1220.73	1222.93	1220.83	1224.88	1225.38	1225.18	1225.31	1227.79	1228.07	1227.44	1224.44	1224.29	1225.65	1224.69		
ANALYTE																		ES	PAL
VOCs/PVOCs (ppb)																			
Benzene	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.074	< 0.2	< 0.074	< 0.15	<b>1.9</b>	<b>4.2</b>	<b>3.5</b>	<b>6</b>	< 0.15	<b>2.5</b>	<b>3.7</b>	5	0.5
1,2-DCA	<b>1.12</b>	<b>0.8</b>	<b>0.7</b>	< 0.3	<b>0.81</b>	<b>1.4</b>	<b>1.8</b>	<b>2.4</b>	<b>1.1</b>	<b>1.3</b>	<b>1.8</b>	<b>3.5</b>	<b>1.5</b>	< 0.39	< 0.39	<b>3.3</b>	<b>1.8</b>	5	0.5
EDB	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.39	< 0.39	0.05	0.005
Ethylbenzene	< 0.1	< 0.5	< 0.5	< 0.5	0.28	< 0.19	< 0.13	< 0.19	< 0.13	< 0.18	< 0.19	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	700	140
MTBE	< 0.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.12	< 0.24	< 0.17	< 0.24	< 0.39	< 0.17	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	60	12
Naphthalene	< 1	< 0.25	< 0.25	< 0.25	< 1	< 0.21	< 0.16	< 0.21	< 0.16	< 0.34	< 0.21	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	100	10
Toluene	0.53	< 0.2	< 0.2	< 0.2	< 4	0.36	< 0.11	< 0.17	< 0.11	< 0.15	< 0.17	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	0.38	800	160
1,2,4- & 1,3,5-TMB	0.26	< 0.2	< 0.2	< 0.2	0.21	< 0.18	< 0.18	< 0.17	< 0.18	< 0.36	< 0.17	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	480	96
Total Xylenes	0.1	< 0.5	< 0.5	< 0.5	< 4	0.5	< 0.068	< 0.38	< 0.068	< 0.22	< 0.58	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	2,000	400

--- = not analyzed or no standard

DCA = dichloroethane

EDB = 1,2-dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

Well Depth (feet): 20

**Bold italic** numbers indicate concentrations above the ES outlined in NR 140.10.

TOC Elevation (feet): 1235.38

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Date Installed: 8-Aug-06

Screen Length (feet): 10

TABLE 2 (page 2 of 16)

ANALYTICAL RESULTS - GROUNDWATER

DAIRICONCEPTS SITE, CHILI, WISCONSIN

MW-2A													NR 140 Remedial Action Limits	
Date	8/9/06	4/12/07	11/16/07	10/17/08	5/10/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	10/17/16	3/22/17		
Elevation (ft)	1221.28	1221.38	1224.38	1220.83	1223.03	1220.98	1224.98	1225.73	1225.53	1225.02	1227.39	1226.40		
<u>ANALYTE</u>														
VOCs/PVOCs (ppb)														
Benzene	<b>632</b>	< 0.2	<b>3.8</b>	<b>113</b>	<b>2.1</b>	<b>49</b>	<b>5</b>	<b>6.3</b>	<b>8.7</b>	<b>8.9</b>	< 0.36	< 0.15	5	0.5
1,2-DCA	<b>85.2</b>	<b>0.74</b>	<b>2.2</b>	< 3	<b>0.92</b>	<b>5.4</b>	< 0.28	< 0.2	< 0.28	< 0.39	---	< 0.39	5	0.5
1,2-Dichloropropane	<b>1.82</b>	< 0.5	< 0.5	< 3	---	---	---	---	---	---	---	---	5	0.5
Ethylbenzene	26.3	< 0.5	< 0.5	11.4	< 0.2	0.23	< 0.13	< 0.19	< 0.13	< 0.18	< 0.37	< 0.18	700	140
Isopropylbenzene	5.29	< 0.2	< 0.2	1.5	---	---	---	---	---	---	---	---	---	---
MTBE	< 1	< 0.5	< 0.5	< 5	< 0.5	< 0.12	< 0.24	< 0.17	< 0.24	< 0.39	< 0.24	< 0.39	60	12
Naphthalene	< 10	< 0.25	< 0.25	< 10	< 1	0.82	< 0.16	< 0.21	< 0.16	< 0.34	< 2.4	< 0.34	100	10
Toluene	24.2	< 0.2	0.52	11	< 0.4	0.69	< 0.11	< 0.17	< 0.11	< 0.15	< 0.33	< 0.15	800	160
1,2,4- & 1,3,5-TMB	3.29	< 0.25	< 0.25	4.8	< 0.2	< 0.17	< 0.18	< 0.17	< 0.18	< 0.36	< 0.3	< 0.36	480	96
Total Xylenes	20.35	< 0.5	< 0.5	23	< 0.4	1.2	< 0.068	< 0.38	< 0.068	< 0.22	< 0.58	< 0.22	2,000	400

--- = not analyzed or no standard DCA = dichloroethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

Well Depth (feet): 20

***Bold italic*** numbers indicate concentrations above the ES outlined in NR 140.10.

TOC Elevation (feet): 1235.38

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Date Installed: 9-Aug-06

MW-2A was damaged and abandoned following street resurfacing activities on May 24, 2017.



TABLE 2 (page 3 of 16)

ANALYTICAL RESULTS - GROUNDWATER

DAIRICONCEPTS SITE, CHILI, WISCONSIN

MW-3																	NR 140 Remedial Action Limits		
Date	1/27/05	6/21/05	7/21/05	1/23/06	8/8/06	4/12/07	11/16/07	10/17/08	5/10/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	3/22/17	9/8/17			4/30/18
Elevation (ft)	1220.55	1223.50	1222.14	1220.59	1221.09	1221.89	1224.44	1220.74	1223.04	1220.99	1225.14	1225.74	1225.54	1225.00	1226.39	1224.19	1225.43		
ANALYTE																		ES	PAL
VOCs/PVOCs (ppb)																			
Benzene	< 0.3	< 0.3	< 0.3	< 0.3	< 0.15	< 0.15	< 0.2	< 0.2	< 0.2	< 0.2	< 0.074	< 0.2	< 0.074	< 0.15	< 0.15	< 0.15	< 0.15	5	0.5
1,2-DCA	< 0.3	< 0.3	< 0.3	< 0.3	< 0.15	< 0.15	< 0.2	< 0.2	< 0.3	< 0.2	< 0.28	< 0.2	< 0.28	< 0.39	< 0.39	< 0.39	< 0.39	5	0.5
EDB	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.39	0.05	0.005
Ethylbenzene	< 0.3	< 0.3	< 0.3	< 0.3	< 0.1	< 0.1	< 0.2	< 0.2	< 0.3	< 0.19	< 0.13	< 0.19	< 0.13	< 0.18	< 0.18	< 0.18	< 0.18	700	140
MTBE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.1	< 0.1	< 0.5	< 0.5	< 0.5	< 0.12	< 0.24	< 0.17	< 0.24	< 0.39	< 0.39	< 0.39	< 0.39	60	12
Naphthalene	< 0.3	< 0.3	< 0.3	< 0.3	< 1	< 1	< 0.25	< 0.25	< 1	< 0.21	< 0.16	< 0.21	< 0.16	< 0.34	< 0.34	< 0.34	< 0.34	100	10
Toluene	< 0.3	< 0.3	< 0.3	< 0.3	< 0.4	< 0.4	< 0.2	< 0.2	< 0.4	0.24	< 0.11	< 0.17	< 0.11	< 0.15	< 0.15	< 0.15	< 0.15	800	160
1,2,4- & 1,3,5-TMB	< 0.3	< 0.3	< 0.3	< 0.3	< 0.5	< 0.5	< 0.2	< 0.2	< 0.2	< 0.17	< 0.18	< 0.17	< 0.18	< 0.36	< 0.36	< 0.36	< 0.36	480	96
Total Xylenes	< 0.3	< 0.3	< 0.3	< 0.3	< 0.4	< 0.4	< 0.5	< 0.5	< 0.4	< 0.18	< 0.068	< 0.38	< 0.068	< 0.22	< 0.22	< 0.22	< 0.22	2,000	400

--- = not analyzed or no standard

DCA = dichloroethane

EDB = 1,2-dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

Well Depth (feet): 21.1

**Bold italic** numbers indicate concentrations above the ES outlined in NR 140.10.

TOC Elevation (feet): 1233.54

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Date Installed: 19-Jan-05

Screen Length (feet): 15

TABLE 2 (page 4 of 16)  
ANALYTICAL RESULTS - GROUNDWATER  
DAIRICONCEPTS SITE, CHILI, WISCONSIN

MW-3A																		NR 140 Remedial Action Limits	
Date	8/9/06	4/12/07	11/16/07	10/17/08	5/20/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	10/17/16	3/22/17	6/1/17	9/8/17	12/4/17	4/30/18	7/9/18		
Elevation (ft)	1222.29	1222.19	1225.14	1221.39	1224.19	1221.69	1225.79	1227.19	1227.19	1227.34	1228.66	1228.07	1228.39	1226.24	1224.94	---	1225.30		
<b>ANALYTE</b>																		<i>ES</i>	<i>PAL</i>
<b>VOCs/PVOCs (ppb)</b>																			
Benzene	<b>11,100</b>	<b>12,000</b>	<b>8,400</b>	<b>5,230</b>	<b>3,220</b>	<b>1,600</b>	<b>2,500</b>	<b>3,600</b>	<b>8,300</b>	<b>4,000</b>	<b>3,000</b>	<b>2,900</b>	<b>3,200</b>	<b>2,200</b>	<b>1,700</b>	<b>2,900</b>	<b>2,100</b>	5	0.5
Bromomethane	< 50	< 50	<b>160</b>	< 500	---	---	---	---	---	---	---	---	---	---	---	---	---	10	1
n-Butylbenzene	34	740	740	1,830	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
sec-Butylbenzene	7.2	160	160	< 150	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chloromethane	< 50	< 50	<b>170</b>	< 200	---	---	---	---	---	---	---	---	---	---	---	---	---	3	0.3
2-Chlorotoluene	82	< 120	< 250	< 150	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-DCA	< 50	< 50	< 250	< 150	<b>121</b>	< 0.2	< 28	<b>150</b>	< 140	< 7.8	< 20	< 7.8	< 3.9	< 7.8	< 7.8	< 7.8	< 2	5	0.5
EDB	---	<b>300</b>	<b>160</b>	< 150	---	---	---	---	---	---	---	<b>56</b>	<b>45</b>	< 7.7	---	< 7.7	<b>37</b>	0.05	0.005
Ethylbenzene	<b>1,260</b>	<b>4,400</b>	<b>1,900</b>	<b>2,990</b>	<b>1,470</b>	<b>610</b>	<b>1,100</b>	<b>1,600</b>	<b>21,000</b>	<b>1,600</b>	<b>1,500</b>	<b>1,200</b>	<b>1,600</b>	<b>1,700</b>	<b>3,600</b>	<b>2,600</b>	<b>1,500</b>	700	140
Isopropylbenzene	49.1	380	100	286	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
p-Isopropyltoluene	20	160	< 100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MTBE	< 1	< 120	< 250	< 250	< 50	< 0.12	< 24	< 8.5	< 120	< 7.9	< 17	< 7.9	< 3.9	< 7.9	< 7.9	< 7.9	< 2	60	12
Naphthalene	<b>218</b>	<b>1,500</b>	<b>320</b>	<b>807</b>	<b>897</b>	<b>150</b>	<b>840</b>	<b>280</b>	<b>6,000</b>	<b>530</b>	<b>400</b>	<b>260</b>	<b>450</b>	<b>340</b>	<b>1,700</b>	<b>750</b>	<b>110</b>	100	10
Propylbenzene	100	1,200	< 250	< 50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
sec-Butylbenzene	7.18	< 120	< 250	< 150	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	<b>14,800</b>	<b>30,000</b>	<b>18,000</b>	<b>14,300</b>	<b>6,480</b>	<b>4,900</b>	<b>7,000</b>	<b>13,000</b>	<b>68,000</b>	<b>16,000</b>	<b>11,000</b>	<b>11,000</b>	<b>12,000</b>	<b>15,000</b>	<b>11,000</b>	<b>18,000</b>	<b>9,500</b>	800	160
1,2,4- & 1,3,5-TMB	<b>944</b>	<b>9,800</b>	<b>1,940</b>	<b>6,250</b>	<b>4,820</b>	<b>1,300</b>	<b>14,000</b>	<b>2,070</b>	<b>56,000</b>	<b>2,470</b>	<b>1,670</b>	<b>1,790</b>	<b>2,430</b>	<b>1,840</b>	<b>10,900</b>	<b>4,600</b>	<b>2,350</b>	480	96
Total Xylenes	<b>5,720</b>	<b>22,000</b>	<b>9,300</b>	<b>15,800</b>	<b>8,320</b>	<b>4,600</b>	<b>13,000</b>	<b>8,000</b>	<b>110,000</b>	<b>11,000</b>	<b>8,100</b>	<b>6,300</b>	<b>8,100</b>	<b>8,700</b>	<b>17,000</b>	<b>16,000</b>	<b>7,900</b>	2,000	400

--- = not analyzed or no standard

DCA = dichloroethane

EDB = 1,2-dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

Well Depth (feet): 20

**Bold italic** numbers indicate concentrations above the ES outlined in NR 140.10.

TOC Elevation (feet): 1235.89

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Date Installed: 9-Aug-06

Screen Length (feet): 10

**TABLE 2 (page 5 of 16)**  
**ANALYTICAL RESULTS - GROUNDWATER**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

MW-4/4R																		NR 140 Remedial Action Limits		
Date	1/27/05	6/21/05	4/16/07	11/16/07	10/17/08	5/20/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	10/17/16	3/22/17	6/1/17	9/8/17	12/4/17	4/30/18			7/9/18
Elevation (ft)	1220.30	1223.54	1221.90	1224.50	1221.10	1223.60	1221.20	1226.30	1227.45	1226.15	1225.59	1227.74	1226.82	1227.60	1224.60	1224.37	1225.66	1224.91		
ANALYTE																		ES	PAL	
VOCs/PVOCs (ppb)																				
Benzene	<b>1,660</b>	<b>164</b>	<b>110</b>	<b>1,900</b>	<b>1,780</b>	<b>1,430</b>	<b>190</b>	<b>64</b>	<b>300</b>	<b>2,400</b>	<b>1,900</b>	<b>700</b>	<b>740</b>	<b>780</b>	<b>660</b>	<b>450</b>	<b>350</b>	<b>300</b>	5	0.5
n-Butylbenzene	< 0.3	34.1	36	100	< 40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
sec- Butylbenzene	< 10	< 10	10	23	< 30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-DCA	< 0.3	< 10	< 10	< 20	< 30	< 30	<b>8.4</b>	< 5.6	< 10	< 56	<b>89</b>	< 10	< 2	< 0.78	< 2	22	< 0.78	---	5	0.5
EDB	< 8	< 8	< 8	<b>23</b>	< 30	---	---	---	---	---	---	---	< 1.9	< 0.77	---	---	< 0.77	---	0.05	0.005
Ethylbenzene	<b>355</b>	79.2	<b>770</b>	<b>1,000</b>	<b>1,310</b>	<b>1,220</b>	140	<b>210</b>	<b>210</b>	<b>4,200</b>	<b>1,800</b>	<b>1,000</b>	<b>1,100</b>	<b>1,400</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,100</b>	700	140
Isopropylbenzene	< 10	11.6	60	91	78	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
p-Isopropyltoluene	< 10	< 10	10	28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MTBE	< 20	< 20	< 20	< 20	< 50	< 50	< 0.12	< 4.8	< 8.5	< 48	< 3.9	< 8.5	< 2	< 0.79	< 2	< 3.9	< 0.79	< 0.79	60	12
Naphthalene	< 30	<b>30</b>	<b>180</b>	<b>400</b>	<b>284</b>	<b>249</b>	<b>63</b>	< 3.2	<b>87</b>	<b>1,800</b>	<b>430</b>	<b>500</b>	<b>190</b>	<b>360</b>	<b>320</b>	<b>320</b>	<b>340</b>	<b>14</b>	100	10
n-Propylbenzene	< 10	16.7	150	240	< 10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	<b>1,890</b>	<b>269</b>	<b>750</b>	<b>3,600</b>	<b>2,560</b>	<b>4,430</b>	<b>220</b>	100	<b>260</b>	<b>2,900</b>	<b>6,200</b>	<b>2,600</b>	<b>2,400</b>	<b>2,300</b>	<b>2,200</b>	<b>1,700</b>	<b>1,300</b>	<b>740</b>	800	160
1,2,4- & 1,3,5-TMB	<b>277</b>	<b>150</b>	<b>1,220</b>	<b>1,960</b>	<b>1,587</b>	<b>1,287</b>	<b>750</b>	<b>1,820</b>	<b>590</b>	<b>16,300</b>	<b>2,180</b>	<b>1,550</b>	<b>1,290</b>	<b>1,770</b>	<b>1,620</b>	<b>1,680</b>	<b>1,850</b>	<b>2,320</b>	480	96
Total Xylenes	<b>1,195</b>	<b>437</b>	<b>3,200</b>	<b>4,500</b>	<b>4,970</b>	<b>5,140</b>	<b>540</b>	<b>800</b>	<b>850</b>	<b>14,000</b>	<b>7,200</b>	<b>3,900</b>	<b>4,000</b>	<b>4,800</b>	<b>4,800</b>	<b>4,300</b>	<b>4,600</b>	<b>3,700</b>	2,000	400

--- = not analyzed or no standard      DCA = dichloroethane      EDB = 1,2-Dibromoethane      MTBE = methyl-tert-butylether      TMB = trimethylbenzene

**Bold italic** numbers indicate concentrations above the ES outlined in NR 140.10.

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

MW-4 was abandoned during soil excavation activities on June 6, 2016 and replaced with MW-4R.

Well Depth (feet): 20  
 TOC Elevation (feet): 1236.83  
 Date Installed: 16-Jun-16  
 Screen Length (feet): 15

TABLE 2 (page 6 of 16)

ANALYTICAL RESULTS - GROUNDWATER

DAIRICONCEPTS SITE, CHILI, WISCONSIN

MW-4A																NR 140 Remedial Action Limits	
Date	11/16/07	10/17/08	5/20/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	10/17/16	3/22/17	6/1/17	9/8/17	12/4/17	4/30/18	7/9/18		
Elevation (ft)	1224.83	1222.23	1223.38	1221.18	1224.88	1225.98	1225.93	1225.43	1227.90	1226.80	1227.75	1224.43	1224.15	1225.43	1224.75		
ANALYTE																	
VOCs/PVOCs (ppb)																	
Benzene	<b>1,600</b>	<b>1,850</b>	<b>1,840</b>	<b>1,000</b>	<b>600</b>	<b>24</b>	<b>28</b>	<b>28</b>	<b>36</b>	<b>13</b>	< 0.36	<b>66</b>	<b>180</b>	<b>21</b>	<b>110</b>	5	0.5
cis-1,2-Dichloroethylene	< 10	<b>37.2</b>	---	---	---	---	---	---	---	---	---	---	---	---	---	70	7
1,2-DCA	< 10	< 50	< 30	< 0.2	< 1.4	< 0.2	< 0.28	< 0.28	---	< 0.39	< 0.28	< 2	< 0.39	< 0.78	---	5	0.5
EDB	< 8	<b>60.7</b>	---	---	---	---	---	---	---	< 0.39	---	---	---	< 0.77	---	0.05	0.005
Ethylbenzene	<b>200</b>	<b>610</b>	<b>492</b>	<b>290</b>	<b>180</b>	77	28	22	53	34	34	74	66	16	57	700	140
Isopropylbenzene	21	29.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MTBE	< 20	< 50	< 50	< 0.12	< 1.2	< 0.17	< 0.24	< 0.39	<b>58</b>	< 0.39	< 0.24	< 2	< 0.39	< 0.79	< 0.39	60	12
Naphthalene	<b>72</b>	<b>144</b>	<b>111</b>	<b>140</b>	<b>26</b>	8.7	10	8.2	<b>32</b>	5.9	<b>44</b>	<b>20</b>	<b>12</b>	2.5	<b>19</b>	100	10
n-Propylbenzene	34	< 10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	160	<b>441</b>	<b>332</b>	75	84	31	6.6	4.5	12	6.4	8.6	8.9	5.9	6.9	9.1	800	160
1,2,4- & 1,3,5-TMB	<b>200</b>	<b>437</b>	<b>491</b>	<b>347</b>	<b>181</b>	<b>175</b>	81	21.8	65	54	67	54	26	19	65	480	96
Total Xylenes	300	<b>781</b>	<b>897</b>	380	320	110	46	34	71	42	39	88	57	30	82	2,000	400

--- = not analyzed or no standard DCA = dichloroethane EDB = 1,2-Dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

Well Depth (feet): 18

**Bold italic** numbers indicate concentrations above the ES outlined in NR 140.10.

TOC Elevation (feet): 1235.58

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Date Installed: 12-Nov-07

Screen Length (feet): 10

**TABLE 2 (page 7 of 16)**  
**ANALYTICAL RESULTS - GROUNDWATER**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

	MW-5								MW-6A					MW-7A					NR 140 Remedial Action Limits	
Date	6/21/05	7/21/05	1/23/06	7/7/15	7/11/16	3/22/17	9/8/17	4/30/18	7/7/15	7/11/16	3/22/17	9/8/17	4/30/18	7/7/15	7/11/16	3/22/17	9/8/17	4/30/18		
Elevation (ft)	1223.70	1222.41	1220.77	1227.17	1226.89	1228.32	1226.10	1227.31	1226.77	1226.44	1227.64	1225.41	1225.71	1225.97	1225.75	1227.26	1225.19	1226.18		
ANALYTE																			ES	PAL
VOCs/PVOCs (ppb)																				
Benzene	<b>186</b>	<b>202</b>	<b>262</b>	<b>2.1</b>	<b>5.4</b>	<b>3.5</b>	<b>7.9</b>	<b>2.8</b>	< 0.074	< 0.15	< 0.15	< 0.15	< 0.15	< 0.074	< 0.15	< 0.15	Sample Broke	< 0.15	5	0.5
n-Butylbenzene	9.26	12.2	18.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
sec- Butylbenzene	2.69	3.87	5.78	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-DCA	<b>11.2</b>	<b>11.6</b>	<b>14.5</b>	< 0.28	< 0.39	< 0.39	< 0.39	< 0.39	< 0.28	< 0.39	< 0.39	< 0.39	< 0.39	< 0.28	< 0.39	< 0.39	---	< 0.39	5	0.5
EDB	---	---	---	---	---	---	---	< 0.39	---	---	---	---	< 0.39	---	---	---	---	< 0.39	0.05	0.005
Ethylbenzene	28.4	34.6	19.7	1.8	1.8	1.7	2.2	0.36	< 0.13	< 0.18	< 0.18	< 0.18	< 0.18	< 0.13	< 0.18	< 0.18	---	< 0.18	700	140
Isopropylbenzene	28.4	34.6	19.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MTBE	---	---	---	< 0.24	< 0.39	< 0.39	< 0.39	< 0.39	< 0.24	< 0.39	< 0.39	< 0.39	< 0.39	< 0.24	< 0.39	< 0.39	---	< 0.39	60	12
Naphthalene	<b>24.1</b>	<b>26.2</b>	<b>31.1</b>	2.9	9.7	2.4	8.3	1.4	< 0.16	< 0.34	< 0.34	< 0.34	< 0.34	< 0.16	< 0.34	< 0.34	---	< 0.34	100	10
n-Propylbenzene	7.06	9.91	9.48	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	5.78	8.59	8.94	< 0.11	0.43	0.26	< 0.15	0.42	< 0.11	< 0.15	< 0.15	< 0.15	< 0.15	< 0.11	< 0.15	< 0.15	---	0.66	800	160
1,2,4- & 1,3,5-TMB	45.24	61.6	91.3	17	31.73	15.44	29	0.72	< 0.18	< 0.36	< 0.36	< 0.36	< 0.36	< 0.18	< 0.36	< 0.36	---	0.56	480	96
Total Xylenes	73.2	98.8	117.2	20	33	17	26	1.7	< 0.068	< 0.22	< 0.22	< 0.22	< 0.22	< 0.068	< 0.22	< 0.22	---	0.6	2,000	400

--- = not analyzed or no standard

DCA = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

***Bold italic*** numbers indicate concentrations above the ES outlined in NR 140.10.

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

TABLE 2 (page 8 of 16)

ANALYTICAL RESULTS - GROUNDWATER  
DAIRICONCEPTS SITE, CHILI, WISCONSIN

MW-5A																NR 140 Remedial Action Limits	
Date	11/16/07	10/17/08	5/20/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	10/17/16	3/22/17	6/1/17	9/8/17	12/4/17	4/30/18	7/9/18		
Elevation (ft)	1225.56	1222.01	1224.81	1222.91	1226.31	1227.21	1227.61	1227.46	1228.81	1227.70	1228.76	1226.40	1225.48	1226.51	1226.43		
<b>ANALYTE</b>																	
<b>VOCs/PVOCs (ppb)</b>																	
Benzene	< 200	<b>143</b>	<b>393</b>	<b>77</b>	<b>63</b>	<b>53</b>	<b>42</b>	<b>30</b>	<b>6</b>	<b>51</b>	<b>16</b>	<b>32</b>	<b>46</b>	<b>5.6</b>	<b>48</b>	5	0.5
n-Butylbenzene	4,500	< 40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
sec- Butylbenzene	600	< 30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-DCA	< 200	< 30	< 300	< 0.2	< 0.56	< 10	< 1.4	< 7.8	< 1	< 2	< 7.8	<b>3.6</b>	< 0.78	< 0.39	---	5	0.5
EDB	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.39	---	0.05	0.005
Ethylbenzene	<b>1,200</b>	<b>809</b>	<b>3,800</b>	<b>710</b>	<b>620</b>	<b>520</b>	<b>510</b>	<b>220</b>	55	<b>470</b>	<b>150</b>	<b>290</b>	<b>470</b>	140	<b>460</b>	700	140
Isopropylbenzene	500	78	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
p-Isopropyltoluene	550	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MTBE	< 500	< 50	< 500	< 0.12	< 0.48	< 8.5	< 1.2	< 7.9	< 0.85	< 2	<b>300</b>	< 0.39	< 0.79	< 0.39	< 0.39	60	12
Naphthalene	<b>4,200</b>	<b>203</b>	<b>2,640</b>	<b>190</b>	<b>200</b>	<b>160</b>	<b>150</b>	<b>180</b>	<b>38</b>	<b>110</b>	<b>96</b>	<b>92</b>	<b>200</b>	<b>65</b>	<b>140</b>	100	10
n-Propylbenzene	2,400	< 10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Toluene	<b>1,400</b>	<b>1,300</b>	<b>5,590</b>	<b>1,100</b>	<b>800</b>	<b>280</b>	<b>220</b>	72	12	120	42	49	84	11	46	800	160
1,2,4- & 1,3,5-TMB	<b>30,500</b>	<b>1,767</b>	<b>16,470</b>	<b>1,840</b>	<b>1,130</b>	<b>1,900</b>	<b>2,020</b>	<b>1,400</b>	<b>332</b>	<b>1,390</b>	<b>283</b>	<b>620</b>	<b>940</b>	<b>560</b>	<b>910</b>	480	96
Total Xylenes	<b>4,900</b>	<b>2,902</b>	<b>15,530</b>	<b>2,900</b>	<b>1,900</b>	<b>1,800</b>	<b>1,900</b>	<b>960</b>	180	330	<b>440</b>	<b>760</b>	<b>920</b>	320	<b>890</b>	2,000	400

--- = not analyzed or no standard DCA = dichloroethane

EDB = 1,2-Dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

**Bold italic** numbers indicate concentrations above the ES outlined in NR 140.10.

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Well Depth (feet): 18

TOC Elevation (feet): 1236.41

Date Installed: 12-Nov-07

Screen Length (feet): 10

**TABLE 2 (page 9 of 16)**  
**ANALYTICAL RESULTS - GROUNDWATER**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

MW-6												NR 140 Remedial Action Limits	
Date	6/21/05	7/21/05	1/23/06	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	3/22/17	9/8/17	4/30/18		
Elevation (ft)	1223.58	1222.30	1220.60	1221.10	1225.10	1225.90	1225.70	1225.20	1226.61	1224.39	1225.55		
<b>ANALYTE</b>													
VOCs/PVOCs (ppb)													
Benzene	< 0.31	< 0.31	< 0.31	< 0.2	< 0.074	< 0.2	< 0.074	< 0.15	< 0.15	< 0.15	< 0.15	5	0.5
1,2-DCA	< 0.4	< 0.4	< 0.4	<b>0.59</b>	< 0.28	< 0.2	< 0.28	< 0.39	< 0.39	<b>0.76</b>	< 0.39	5	0.5
EDB	---	---	---	---	---	---	---	---	---	---	< 0.39	0.05	0.005
Ethylbenzene	< 0.5	< 0.5	< 0.5	< 0.19	< 0.13	< 0.19	0.52	< 0.18	< 0.18	< 0.18	< 0.18	700	140
MTBE	< 0.5	< 0.5	< 0.5	< 0.12	< 0.24	< 0.17	< 0.24	< 0.39	< 0.39	< 0.39	< 0.39	60	12
Naphthalene	< 0.8	< 0.8	< 0.8	< 0.21	< 0.16	< 0.21	2.2	< 0.34	< 0.34	< 0.34	< 0.34	100	10
Toluene	< 0.3	< 0.3	< 0.3	0.22	< 0.11	< 0.17	0.98	< 0.15	< 0.15	< 0.15	< 0.15	800	160
1,2,4- & 1,3,5-TMB	< 0.71	< 0.71	< 0.71	< 0.17	< 0.18	< 0.17	5.7	< 0.36	< 0.36	< 0.36	< 0.36	480	96
Total Xylenes	< 0.92	< 0.92	< 0.92	< 0.18	< 0.068	< 0.38	2.9	< 0.22	< 0.22	< 0.22	< 0.22	2,000	400

--- = not analyzed or no standard

DCA = dichloroethane

EDB = 1,2-Dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

Well Depth (feet): 21.1

***Bold italic*** numbers indicate concentrations above the ES outlined in NR 140.10.

TOC Elevation (feet): 1236.90

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Date Installed: 20-Apr-05

Screen Length (feet): 10

TABLE 2 (page 10 of 16)

ANALYTICAL RESULTS - GROUNDWATER

DAIRICONCEPTS SITE, CHILI, WISCONSIN

MW-7																				NR 140 Remedial Action Limits		
Date	6/21/05	7/21/05	1/23/06	8/8/06	4/12/07	11/16/07	10/17/08	5/20/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	10/17/16	3/22/17	6/1/17	9/8/17	12/4/17	4/30/18			7/9/18
Elevation (ft)	1223.74	1222.32	1220.80	1221.29	1222.09	1224.54	1220.99	1223.49	1221.39	1225.49	1226.29	1225.84	1225.40	1227.73	1226.78	1227.60	1224.53	1224.34	1225.83	1224.88	ES	PAL
ANALYTE																				ES	PAL	
VOCs/PVOCs (ppb)																						
Benzene	1.99	1.51	< 0.2	0.31	0.4	<b>2.2</b>	< 0.2	1.99	< 0.2	<b>5.6</b>	<b>1.6</b>	<b>4.4</b>	<b>0.64</b>	< 0.36	<b>0.72</b>	<b>0.65</b>	Sample Broke	< 0.15	<b>4.8</b>	<b>4.4</b>	5	0.5
1,2-DCA	<b>0.66</b>	<b>0.98</b>	<b>1.14</b>	<b>1.81</b>	<b>0.77</b>	<b>0.66</b>	<b>1.52</b>	<b>0.64</b>	< 0.2	< 0.28	< 0.2	< 0.28	< 0.39	---	<b>0.95</b>	< 0.39	---	<b>0.73</b>	<b>1.7</b>	<b>1.6</b>	5	0.5
EDB	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.39	< 0.39	0.05	0.005
Ethylbenzene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.5	< 0.2	< 0.2	< 0.2	< 0.13	< 0.19	4	< 0.18	< 0.37	< 0.18	< 0.18	---	< 0.18	< 0.18	< 0.18	700	140
MTBE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.12	< 0.24	< 0.17	< 0.24	< 0.39	< 0.24	< 0.39	< 0.39	---	< 0.39	< 0.39	< 0.39	60	12
Naphthalene	< 1	< 1	< 1	< 1	< 0.25	< 0.25	< 1	< 1	< 0.21	< 0.16	< 0.21	8	< 0.34	< 2.4	< 0.34	< 0.34	---	0.58	< 0.34	< 0.34	100	10
Toluene	< 0.4	< 0.4	< 0.4	< 0.4	< 0.2	< 0.2	< 0.4	< 0.4	0.29	< 0.11	< 0.17	6.3	< 0.15	< 0.33	< 0.15	< 0.15	---	0.17	< 0.15	< 0.15	800	160
1,2,4- & 1,3,5-TMB	< 0.15	< 0.15	< 0.15	< 0.15	< 0.2	< 0.2	< 0.2	0.92	< 0.17	< 0.18	< 0.17	33.3	< 0.39	< 0.3	< 0.36	< 0.36	---	< 0.36	< 0.36	< 0.39	480	96
Total Xylenes	< 0.4	< 0.4	< 0.4	< 0.4	< 0.5	< 0.5	< 0.4	0.45	< 0.18	< 0.068	< 0.38	26	< 0.22	< 0.58	< 0.22	< 0.22	---	< 0.22	< 0.22	< 0.22	2,000	400

--- = not analyzed or no standard

DCA = dichloroethane

EDB = 1,2-Dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

Well Depth (feet): 19.8

**Bold italic** numbers indicate concentrations above the ES outlined in NR 140.10.

TOC Elevation (feet): 1233.49

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Date Installed: 21-Apr-05

Screen Length (feet): 10



TABLE 2 (page 11 of 16)

ANALYTICAL RESULTS - GROUNDWATER

DAIRICONCEPTS SITE, CHILI, WISCONSIN

PZ-7																	NR 140 Remedial Action Limits	
Date	6/21/05	7/21/05	1/23/06	8/8/06	4/12/07	11/16/07	10/17/08	5/20/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	3/22/17	9/8/17	4/30/18		
Elevation (ft)	1220.05	1219.78	1217.61	1218.64	1220.34	1221.94	1221.94	1220.84	1219.14	1223.14	1224.09	1223.34	1222.57	1224.10	1222.05	1222.65		
ANALYTE																	ES	PAL
VOCs/PVOCs (ppb)																		
Benzene	< 0.15	< 0.15	< 0.15	< 0.15	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.074	< 0.2	< 0.074	< 0.15	< 0.15	< 0.15	< 0.15	5	0.5
1,2-DCA	< 0.15	< 0.15	< 0.15	< 0.15	< 0.2	< 0.2	< 0.2	< 0.3	< 0.2	< 0.28	< 0.2	< 0.28	< 0.39	< 0.39	< 0.39	< 0.39	5	0.5
EDB	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.39	0.05	0.005
Ethylbenzene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.5	< 0.5	< 0.2	< 0.19	< 0.13	< 0.19	< 0.13	< 0.18	< 0.18	< 0.18	< 0.18	700	140
MTBE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.12	< 0.24	< 0.17	< 0.24	< 0.39	< 0.39	< 0.39	< 0.39	60	12
Naphthalene	< 1	< 1	< 1	< 1	< 0.25	< 0.25	< 0.25	< 1	< 0.21	< 0.16	2	< 0.16	< 0.34	< 0.34	< 0.34	< 0.34	100	10
Toluene	< 0.4	< 0.4	< 0.4	< 0.4	< 0.2	< 0.2	< 0.2	< 0.4	0.23	< 0.11	< 0.17	0.43	< 0.15	< 0.15	< 0.15	< 0.15	800	160
1,2,4- & 1,3,5-TMB	< 0.15	< 0.15	< 0.15	< 0.15	< 0.25	< 0.2	< 0.2	< 0.3	< 0.17	< 0.18	0.59	1.3	< 0.39	< 0.39	< 0.39	< 0.39	480	96
Total Xylenes	< 0.4	< 0.4	< 0.4	< 0.4	< 0.5	< 0.5	< 0.5	< 0.4	< 0.18	< 0.068	< 0.38	0.74	< 0.22	< 0.22	< 0.22	< 0.22	2,000	400

--- = not analyzed or no stan

DCA = dichloroethane

EDB = 1,2-Dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

Well Depth (feet): 46.3

**Bold italic** numbers indicate concentrations above the ES outlined in NR 140.10.

TOC Elevation (feet): 1233.59

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Date Installed: 21-Apr-05

Screen Length (feet): 5

TABLE 2 (page 12 of 16)

ANALYTICAL RESULTS - GROUNDWATER

DAIRICONCEPTS SITE, CHILI, WISCONSIN

MW-9																	NR 140 Remedial Action Limits	
Date	6/21/05	7/21/05	1/23/06	8/8/06	4/12/07	11/16/07	10/17/08	5/20/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	3/22/17	9/8/17	4/30/18		
Elevation (ft)	1224.16	1222.51	1221.13	1221.65	1222.85	1224.90	1221.15	1223.75	1221.65	1226.25	1226.65	1226.10	1225.70	1227.22	1224.92	1226.49		
<u>ANALYTE</u>																		
VOCs/PVOCs (ppb)																		
Benzene	< 0.15	< 0.15	< 0.15	< 0.15	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.074	< 0.2	< 0.074	< 0.15	< 0.15	< 0.15	< 0.15	5	0.5
1,2-DCA	< 0.15	< 0.15	< 0.15	< 0.15	< 0.2	< 0.2	< 0.2	< 0.3	< 0.2	< 0.28	< 0.2	< 0.28	< 0.39	< 0.39	< 0.39	< 0.39	5	0.5
EDB	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.39	0.05	0.005
Ethylbenzene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.5	< 0.5	< 0.2	< 0.19	< 0.13	< 0.19	< 0.13	< 0.18	< 0.18	< 0.18	< 0.18	700	140
MTBE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.12	< 0.24	< 0.17	< 0.24	< 0.39	< 0.39	< 0.39	< 0.39	60	12
Naphthalene	< 1	< 1	< 1	< 1	< 0.25	< 0.25	< 0.25	< 1	< 0.21	< 0.16	0.82	< 0.16	< 0.34	< 0.34	< 0.34	< 0.34	100	10
Toluene	< 0.4	< 0.4	< 0.4	< 0.4	< 0.2	< 0.2	< 0.2	< 0.2	0.22	< 0.11	< 0.17	< 0.11	< 0.15	< 0.15	< 0.15	< 0.15	800	160
1,2,4- & 1,3,5-TMB	< 0.25	< 0.25	< 0.25	0.26	< 0.25	< 0.2	< 0.2	< 0.3	< 0.17	< 0.18	< 0.17	0.87	< 0.39	< 0.39	< 0.39	< 0.39	480	96
Total Xylenes	< 0.4	< 0.4	< 0.4	< 0.4	< 0.5	< 0.5	< 0.5	< 0.4	< 0.18	< 0.068	< 0.38	< 0.068	< 0.22	< 0.22	< 0.22	0.5	2,000	400

--- = not analyzed or no standard

DCA = dichloroethane

EDB = 1,2-Dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

Well Depth (feet): 16.1

***Bold italic*** numbers indicate concentrations above the ES outlined in NR 140.10.

TOC Elevation (feet): 1231.65

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Date Installed: 21-Apr-05

Screen Length (feet): 10

TABLE 2 (page 13 of 16)

ANALYTICAL RESULTS - GROUNDWATER  
DAIRICONCEPTS SITE, CHILI, WISCONSIN

	MW-10								Street MW-East								Street MW-West								NR 140 Remedial Action Limits	
Date	7/11/16	10/17/16	3/22/17	6/1/17	9/8/17	12/4/17	4/30/18	7/9/18	7/7/15	7/11/16	10/17/16	3/22/17	6/1/17	9/8/17	4/30/18	7/7/15	7/11/16	10/17/16	3/22/17	6/1/17	9/8/17	4/30/18				
Elevation (ft)	1225.57	1227.88	1226.92	1227.69	1224.77	1224.66	---	1225.00	1225.61	1225.08	1227.51	1226.50	1227.25	1224.22	1225.45	1228.00	1227.65	1228.98	1228.10	1228.85	1226.77	1226.95				
ANALYTE																							ES	PAL		
VOCs/PVOCs (ppb)																										
Benzene	<b>49</b>	< 2	<b>54</b>	<b>87</b>	<b>64</b>	<b>210</b>	<b>100</b>	<b>340</b>	< 0.074	< 0.15	< 0.36	< 0.15	< 0.36	< 0.15	< 0.15	<b>2.3</b>	<b>5.6</b>	<b>0.89</b>	<b>1.3</b>	< 0.36	<b>5.2</b>	<b>2</b>	5	0.5		
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
sec- Butylbenzene	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
1,2-DCA	< 2	< 2	< 2	< 2	< 2	< 3.9	<b>21</b>	< 7.8	< 0.28	< 0.39	---	< 0.39	---	< 0.39	< 0.39	< 0.28	< 0.39	---	< 0.39	---	< 0.39	< 0.39	5	0.5		
EDB	---	---	---	---	---	---	< 7.7	< 7.7	---	---	---	---	---	---	< 0.39	---	---	---	---	---	---	< 0.39	0.05	0.005		
Ethylbenzene	<b>790</b>	<b>1,700</b>	<b>590</b>	<b>740</b>	<b>670</b>	<b>1,200</b>	<b>1,400</b>	<b>1,000</b>	1.3	< 0.18	< 0.37	< 0.18	< 0.37	< 0.18	< 0.18	< 0.13	1.8	< 0.37	< 0.18	< 0.37	< 0.18	< 0.18	700	140		
Isopropylbenzene	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
MTBE	< 2	< 1.7	< 2	<b>2,100</b>	< 2	< 3.9	< 7.9	< 7.9	< 0.24	< 0.39	< 0.24	< 0.39	< 0.24	< 0.39	< 0.39	< 0.24	< 0.39	< 0.24	< 0.39	0.69	< 0.39	< 0.39	60	12		
Naphthalene	<b>210</b>	<b>820</b>	<b>97</b>	<b>360</b>	<b>180</b>	<b>540</b>	<b>530</b>	<b>1,100</b>	1.8	< 0.34	< 2.4	< 0.34	< 2.4	< 0.34	1.2	< 0.16	< 0.34	< 2.4	< 0.34	< 2.4	< 0.34	< 0.34	100	10		
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Toluene	<b>300</b>	<b>440</b>	<b>420</b>	<b>890</b>	<b>730</b>	<b>1,000</b>	<b>1,000</b>	<b>1,200</b>	2.2	< 0.15	< 0.33	< 0.15	< 0.33	< 0.15	< 0.15	0.39	0.35	< 0.33	< 0.15	< 0.33	< 0.15	< 0.15	800	160		
1,2,4- & 1,3,5-TMB	<b>1,130</b>	<b>2,930</b>	<b>960</b>	<b>960</b>	<b>1,160</b>	<b>3,190</b>	<b>3,780</b>	<b>1,820</b>	7	< 0.36	< 0.3	< 0.36	< 0.3	< 0.36	< 0.36	0.66	2.54	< 0.3	< 0.36	< 0.3	< 0.36	< 0.36	480	96		
Total Xylenes	<b>1,900</b>	<b>1,500</b>	<b>1,300</b>	<b>1,900</b>	<b>2,300</b>	<b>3,600</b>	<b>4,500</b>	<b>3,000</b>	6.7	< 0.22	< 0.58	< 0.22	< 0.58	< 0.22	< 0.22	0.63	4.5	< 0.58	< 0.22	< 0.58	1.3	0.57	2,000	400		

--- = not analyzed or no standard

DCA = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

**Bold italic** numbers indicate concentrations above the ES outlined in NR 140.10.

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

**TABLE 2 (page 14 of 16)**  
**ANALYTICAL RESULTS - GROUNDWATER**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

CMW-1																	NR 140 Remedial Action Limits	
Date	4/5/07	7/3/07	11/1/07	1/17/08	12/19/08	5/21/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	10/17/16	3/22/17	6/1/17	9/8/17	4/30/18		
Depth to Water (ft)	1222.07	1222.68	1226.26	12.24.01	1220.92	1223.76	1221.54	1225.49	1226.34	1226.34	1225.94	1228.26	1227.17	1228.21	1224.95	1225.84		
<b>ANALYTE</b>																		
<b>VOCs/PVOCs (ppb)</b>																		
Benzene	0.41	0.40	<b>7.11</b>	<b>2.65</b>	<b>2.14</b>	< 0.2	0.24	0.28	< 0.2	< 0.074	< 0.15	< 0.36	< 0.15	< 0.36	< 0.15	< 0.15	5	0.5
1,2-DCA	<b>0.93</b>	---	---	---	---	---	< 0.2	< 0.28	< 0.2	< 0.28	< 0.39	---	< 0.39	---	< 0.39	< 0.39	5	0.5
EDB	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 0.39	0.05	0.005
Ethylbenzene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.19	< 0.13	< 0.19	< 0.13	< 0.18	< 0.37	< 0.18	< 0.37	< 0.18	< 0.18	700	140
MTBE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.12	< 0.24	< 0.17	< 0.24	< 0.39	< 0.24	< 0.39	< 0.24	< 0.39	< 0.39	60	12
Naphthalene	< 1	---	---	---	---	---	< 0.21	< 0.16	< 0.21	< 0.16	< 0.34	< 2.4	< 0.34	< 2.4	< 0.34	< 0.34	100	10
Toluene	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.17	< 0.11	< 0.17	0.36	< 0.15	< 0.33	< 0.15	< 0.33	< 0.15	< 0.15	800	160
1,2,4- & 1,3,5-TMB	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.17	< 0.18	< 0.17	0.83	< 0.39	< 0.3	< 0.39	< 0.3	< 0.39	< 0.36	480	96
Total Xylenes	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.18	< 0.068	< 0.38	0.59	< 0.22	< 0.58	< 0.22	< 0.58	< 0.22	< 0.22	2,000	400

--- = not analyzed or no standard

DCA = 1,2-Dichloroethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

**Bold italic** numbers indicate concentrations above the ES outlined in NR 140.10.

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

Well Depth (feet): 18

TOC Elevation (feet): 1234.64

Date Installed: 28-Feb-07

Screen Length (feet): 10

TABLE 2 (page 15 of 16)

ANALYTICAL RESULTS - GROUNDWATER

DAIRICONCEPTS SITE, CHILI, WISCONSIN

Date	PW-1							PW-5				Strey Well					NR 140 Remedial Action Limits	
	8/9/06	11/29/12	5/8/13	4/27/15	7/7/15	7/11/16	9/8/17	4/27/15	7/7/15	7/11/16	9/8/17	12/10/03	6/15/05	1/23/06	7/11/16	9/8/17	ES	PAL
<b>ANALYTE</b>																		
VOCs/PVOCs (ppb)																		
Benzene	< 0.15	< 0.2	< 0.074	< 0.2	< 0.13	< 0.13	< 0.13	< 0.2	< 0.13	< 0.13	< 0.13	<b>1.5</b>	0.347	0.322	< 0.13	< 0.13	5	0.5
1,2-DCA	< 0.1	< 0.2	< 0.28	< 0.2	< 0.14	< 0.14	< 0.14	< 0.2	< 0.14	< 0.14	< 0.14	< 0.15	0.15	0.185	< 0.14	< 0.14	5	0.5
Ethylbenzene	< 0.1	< 0.19	< 0.13	< 0.19	< 0.11	< 0.11	< 0.11	< 0.19	< 0.11	< 0.11	< 0.11	< 0.15	< 0.4	< 0.4	< 0.11	< 0.11	700	140
MTBE	< 0.4	< 0.12	< 0.24	< 0.17	< 0.12	< 0.12	< 0.12	< 0.17	< 0.12	< 0.12	< 0.12	< 0.15	< 0.4	< 0.4	< 0.15	< 0.15	60	12
Naphthalene	< 1	< 0.21	< 0.16	< 0.21	< 0.06	< 0.06	< 0.06	< 0.21	< 0.06	< 0.06	< 0.06	< 0.15	< 1	< 1	< 0.15	< 0.15	100	10
Toluene	< 0.4	< 0.17	< 0.11	< 0.17	< 0.1	< 0.1	< 0.1	< 0.17	< 0.1	< 0.1	< 0.1	< 0.15	< 0.4	< 0.4	< 0.1	< 0.1	800	160
1,2,4- & 1,3,5-TMB	< 0.4	0.48	< 0.18	< 0.17	1.65	< 0.13	0.59	< 0.17	< 0.09	< 0.09	< 0.13	< 0.3	< 0.3	< 0.3	< 0.13	< 0.13	480	96
Total Xylenes	< 1	< 0.18	< 0.068	< 0.38	< 0.2	< 0.2	< 0.12	< 0.38	< 0.2	< 0.2	< 0.12	< 0.3	< 0.5	< 0.5	< 0.12	< 0.12	2,000	400

--- = not analyzed or no standard

DCA = 1,2-Dichloroethane

MTBE = methyl-tert-butylethe

TMB = trimethylbenzene

***Bold italic*** numbers indicate concentrations above the ES outlined in NR 140.10.

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

PW-1 represents a sample collected from the on site potable well at the DairiConcepts facility (ID #IY805).

PW-5 represents a sample collected from the new (installed 9-25-13) on site potable well at the DairiConcepts facility (ID #XH461).

Strey Well represents a sample collected from the Strey Residence potable well, N5696 County Highway Y.

**TABLE 2 (page 16 of 16)**  
**ANALYTICAL RESULTS - GROUNDWATER**  
**DAIRICONCEPTS SITE, CHILI, WISCONSIN**

PW-4													NR 140 Remedial Action Limits	
Date	11/1/06	1/10/07	3/2/07	1/11/08	10/17/08	5/20/10	11/29/12	4/30/13	4/27/15	7/7/15	7/11/16	9/8/17		
ANALYTE														
VOCs/PVOCs (ppb)														
Benzene	<b>5.97</b>	<b>2.2</b>	< 0.15	<b>0.27</b>	< 0.2	< 0.2	< 0.2	< 0.074	< 0.2	< 0.13	< 0.13	< 0.13	5	0.5
Bromobenzene	0.1	< 0.1	< 0.1	< 0.2	< 0.2	---	---	---	---	< 0.13	< 0.13	< 0.13	---	---
Bromodichloromethane	<b>1.65</b>	<b>0.37</b>	< 0.1	< 0.2	< 0.2	---	---	---	---	< 0.11	< 0.11	< 0.11	0.6	0.06
Chloroethane	< 0.6	0.1	< 0.6	< 0.6	< 0.6	---	---	---	---	< 0.07	< 0.07	< 0.07	400	80
Chloroform	<b>19.6</b>	<b>4.4</b>	< 0.1	< 0.1	< 0.1	---	---	---	---	< 0.14	< 0.14	< 0.14	6	0.6
Chloromethane	< 0.2	0.12	< 0.2	< 0.2	< 0.2	---	---	---	---	< 0.063	< 0.063	< 0.063	3	0.3
1,4-Dichlorobenzene	< 0.1	< 0.05	1.13	< 0.8	< 0.8	---	---	---	---	< 0.13	< 0.13	< 0.13	75	15
1,2-DCA	< 0.1	0.15	< 0.1	< 0.2	< 0.2	< 0.3	< 0.2	< 0.28	< 0.2	< 0.14	< 0.14	< 0.14	5	0.5
1,2-Dichloropropane	<b>0.39</b>	< 0.1	< 0.1	< 0.2	< 0.2	---	---	---	---	< 0.11	< 0.11	< 0.11	5	0.05
Ethylbenzene	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.2	< 0.19	< 0.13	< 0.19	< 0.11	< 0.11	< 0.11	700	140
Methylene Chloride	< 0.4	0.91	< 0.4	< 0.4	< 0.4	---	---	---	---	< 0.25	< 0.25	< 0.25	---	---
MTBE	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.5	0.29	< 0.24	< 0.17	< 0.12	< 0.12	< 0.12	60	12
Naphthalene	< 1	< 1	< 1	< 1	< 1	< 1	< 0.21	< 0.16	< 0.21	< 0.06	< 0.06	< 0.06	100	10
Toluene	< 0.4	0.44	< 0.4	11.9	0.86	< 0.4	< 0.17	< 0.11	< 0.17	< 0.1	< 0.1	< 0.1	800	160
1,2,4- & 1,3,5-TMB	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.2	< 0.17	< 0.18	< 0.17	< 0.043	< 0.043	< 0.043	480	96
Total Xylenes	< 1	< 0.05	< 1	< 1	< 1	< 0.4	< 0.18	< 0.068	< 0.38	< 0.2	< 0.2	< 0.12	2,000	400

--- = not analyzed or no standard

DCA = 1,2-Dichloroethane

MTBE = methyl-tert-butylether

TMB = trimethylbenzene

***Bold italic*** numbers indicate concentrations above the ES outlined in NR 140.10.

**Bold** numbers indicate concentrations above the PAL outlined in NR 140.10.

PW-4 represents a sample collected from the new potable well at W887 Chili Road (former Krueger Residence) (TY722).

**TABLE 3  
FREE PRODUCT REMOVAL SUMMARY  
DAIRICONCEPTS SITE, CHILI, WISCONSIN**

	<b>MW-3A</b>		<b>MW-4</b>		<b>MW-10</b>	
Date	Product Thickness (in)	Gallons Removed	Product Thickness (in)	Gallons Removed	Product Thickness (in)	Gallons Removed
May 3, 2006	---	---	6	10	---	---
May 19, 2006	---	---	12	10	---	---
July 28, 2006	---	---	23	10	---	---
August 8, 2006	--	--	4	10	---	---
August 9, 2006	---	---	1.5	10	---	---
September 27, 2006	0	0	7	10	---	---
November 1, 2006	0	0	0.5	10	---	---
April 12, 2007	5	10	0.5	5	---	---
July 13, 2007	27	2	24	2	---	---
July 20, 2007	17	2	8	1.5	---	---
August 3, 2007	8.75	1	3.5	0.5	---	---
August 13, 2007	2.5	0.5	2	0.5	---	---
August 24, 2007	0.5	0.5	1.25	0.5	---	---
August 31, 2007	14	2	0.5	0	---	---
September 7, 2007	20.5	3	0.5	0	---	---
September 14, 2007	19	2.5	0.3	0	---	---
September 24, 2007	18	2.5	0.5	0	---	---
October 5, 2007	22	3.5	0.3	0	---	---
October 8, 2007	3.5	5	0	0	---	---
October 15, 2007	35	5	---	---	---	---
November 2, 2007	33	3.5	0	0	---	---
November 16, 2007	21	2	0	0	---	---
May 16, 2008	29	4	18	4	---	---
June 27, 2008	40	4.5	23.5	2.5	---	---
July 18, 2008	40	4.5	37	2	---	---
July 19, 2008	32	1.5	---	---	---	---
August 7, 2008	35	3.5	24	1	---	---
August 27, 2008	33	3.5	16	1	---	---
September 19, 2008	18	2	4	1	---	---
October 17, 2008	8	5	5	5	---	---
May 27, 2009	28	2	---	---	---	---
June 12, 2009	34	2	25	2	---	---
June 26, 2009	42	2.5	20	1.5	---	---
July 2, 2009	38	2.5	13	1.5	---	---
July 10, 2009	26	3	13	1.5	---	---
July 27, 2009	17	2	7	1	---	---
August 14, 2009	11	1	---	---	---	---
August 21, 2009	8	1.5	---	---	---	---
September 4, 2009	8	1	7	1	---	---
September 11, 2009	7	1	7	1	---	---
September 18, 2009	10	1.5	5	1	---	---
September 25, 2009	5	1	1	0.5	---	---
October 9, 2009	3	0.5	1	0.5	---	---

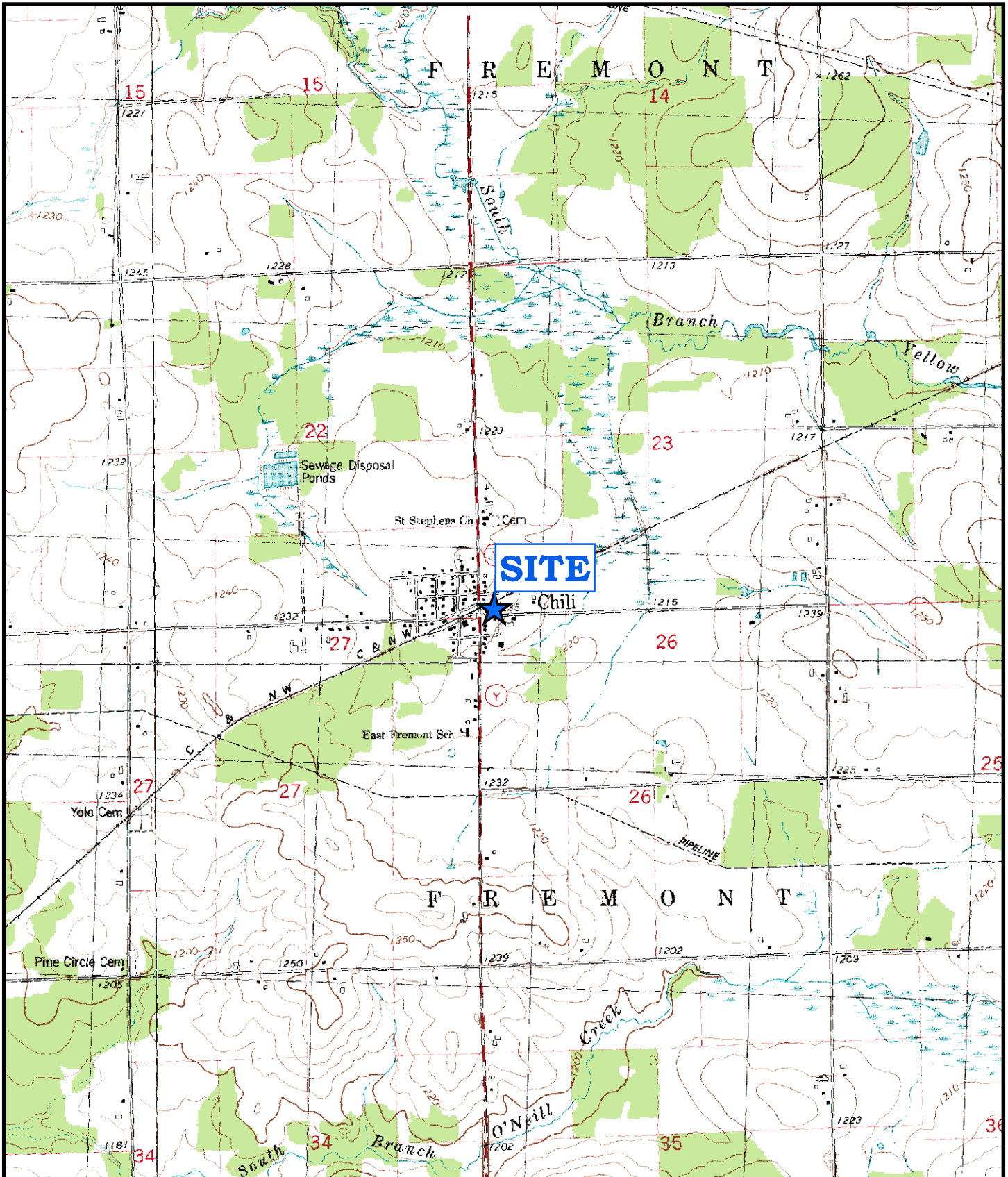
**TABLE 3  
FREE PRODUCT REMOVAL SUMMARY  
DAIRICONCEPTS SITE, CHILI, WISCONSIN**

Date	MW-3A		MW-4		MW-10	
	Product Thickness (in)	Gallons Removed	Product Thickness (in)	Gallons Removed	Product Thickness (in)	Gallons Removed
October 16, 2009	3	0.5	0.5	0.5	---	---
November 13, 2009	13	1	0.5	0.5	---	---
November 25, 2009	18	1	0.5	0.5	---	---
April 2, 2010	16	1	20	1	---	---
April 10, 2010	4.5	0.5	12	0.5	---	---
April 19, 2010	5	0.5	15	1.5	---	---
April 29, 2010	9	1	24	2	---	---
May 7, 2010	9	1	20	1	---	---
May 20, 2010	24	2	18	2	---	---
May 11, 2012	0	0	3	1	---	---
June 6, 2012	0	0	0.5	0.5	---	---
June 26, 2012	0	0	0.5	0.5	---	---
July 11, 2012	0	0	0.5	0.5	---	---
July 24, 2012	0	0	0	0	---	---
August 10, 2012	0	0	0.25	0.5	---	---
August 31, 2012	0	0	0.5	0.5	---	---
September 11, 2012	0	0	0	0	---	---
September 25, 2012	0	0	0.25	0.5	---	---
July 11, 2016	0	0	MW-4 abandoned 6-6-2016		---	---
September 8, 2017	0	0	---	---	4	5
December 4, 2017	0	0	---	---	15	15
April 30, 2018	1	10	---	---	4	15
June 5, 2018	0.5	15	---	---	4	15
July 9, 2018	0	0	---	---	3	15

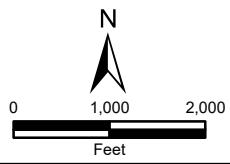


# Figures

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Map Reference: USGS 7.5" Quadrangles, Spencer South, Loyal East, Lindsey, and Granton, Wisconsin



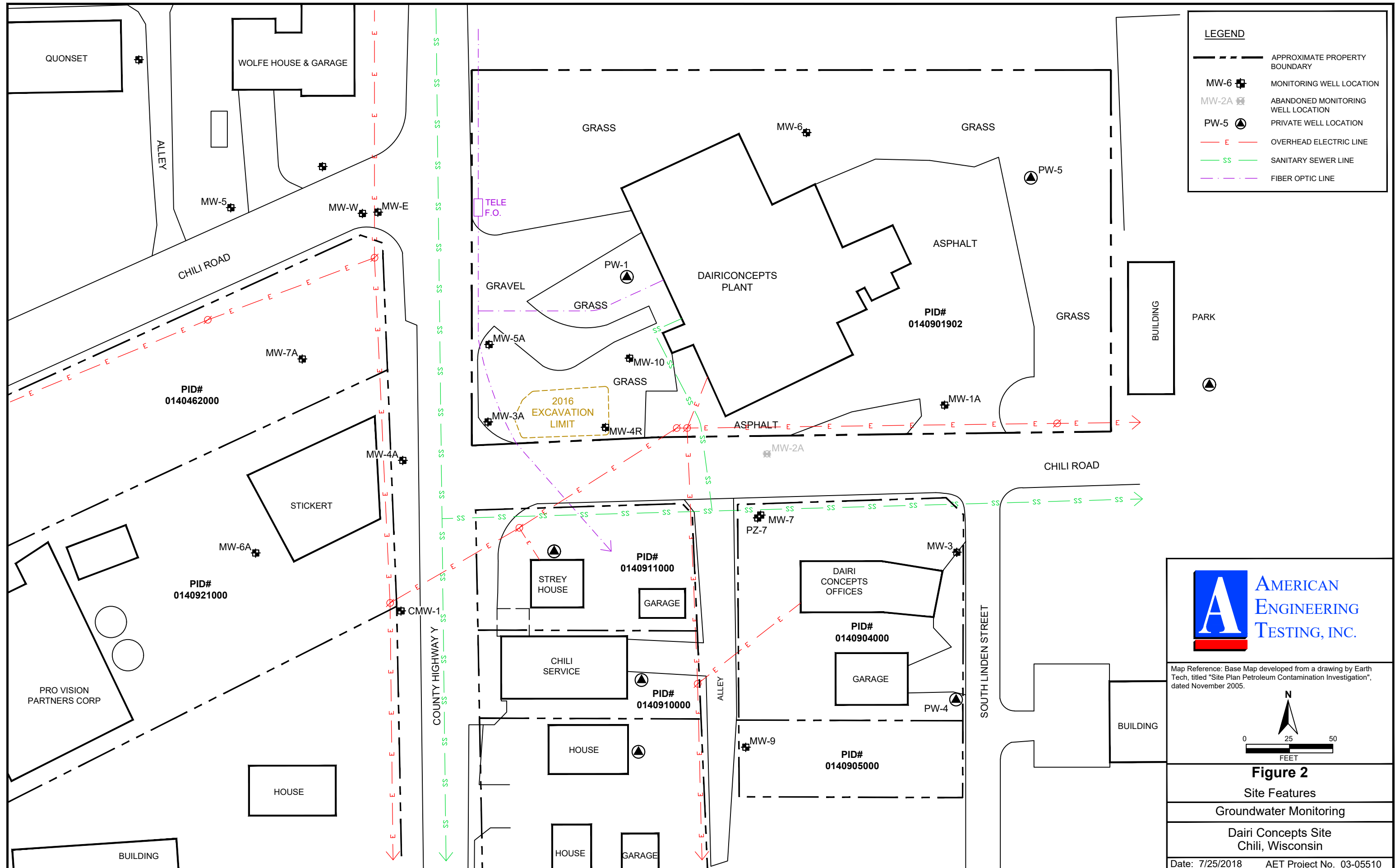
**Figure 1**  
Site Location Map

Groundwater Monitoring Report

Dairi Concepts Site  
Chili, Wisconsin

Date: 08/16/2016

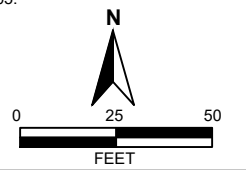
AET Project No. 03-05510



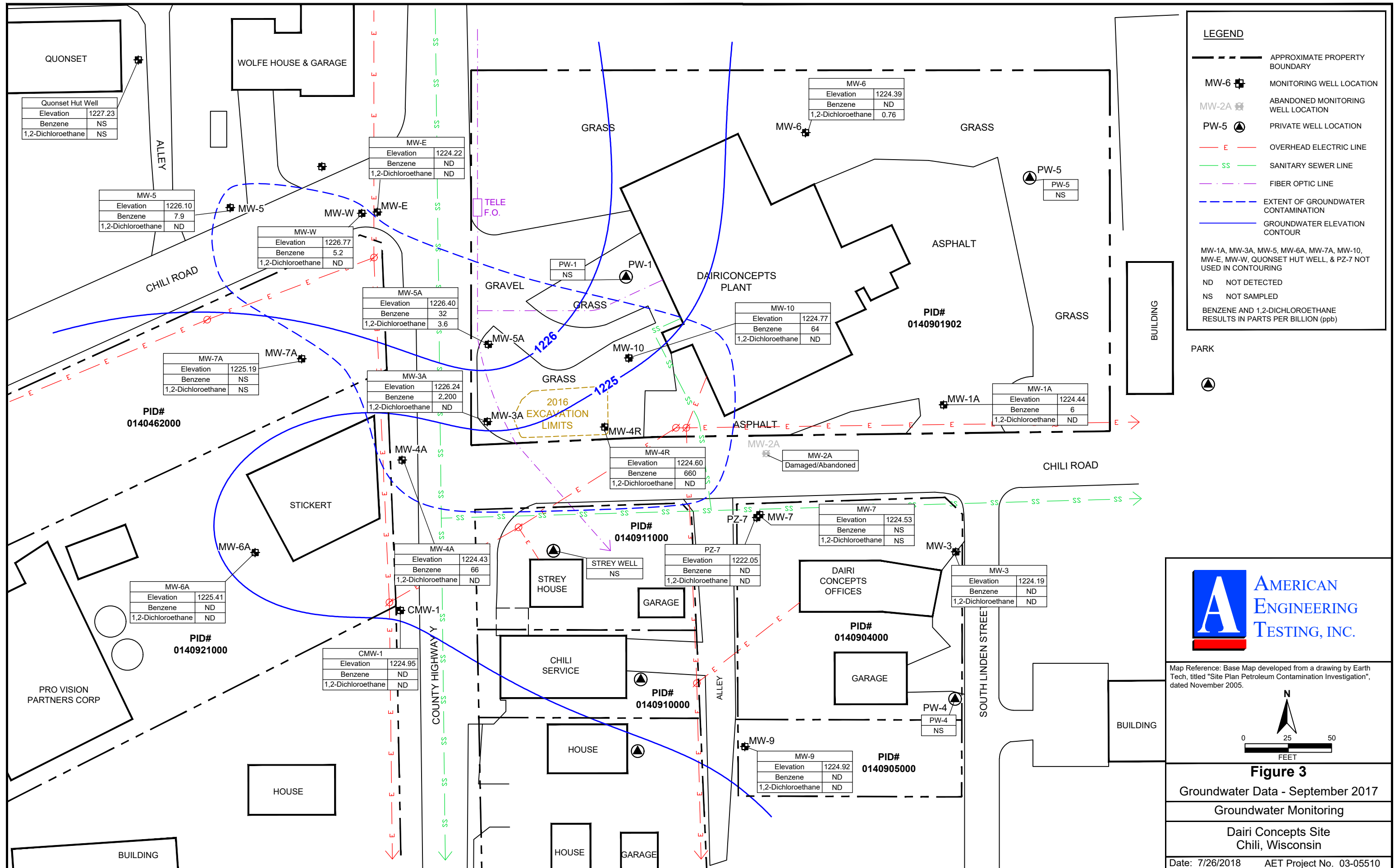
LEGEND	
---	APPROXIMATE PROPERTY BOUNDARY
MW-6	MONITORING WELL LOCATION
MW-2A	ABANDONED MONITORING WELL LOCATION
PW-5	PRIVATE WELL LOCATION
E	OVERHEAD ELECTRIC LINE
SS	SANITARY SEWER LINE
---	FIBER OPTIC LINE



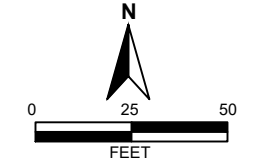
Map Reference: Base Map developed from a drawing by Earth Tech, titled "Site Plan Petroleum Contamination Investigation", dated November 2005.



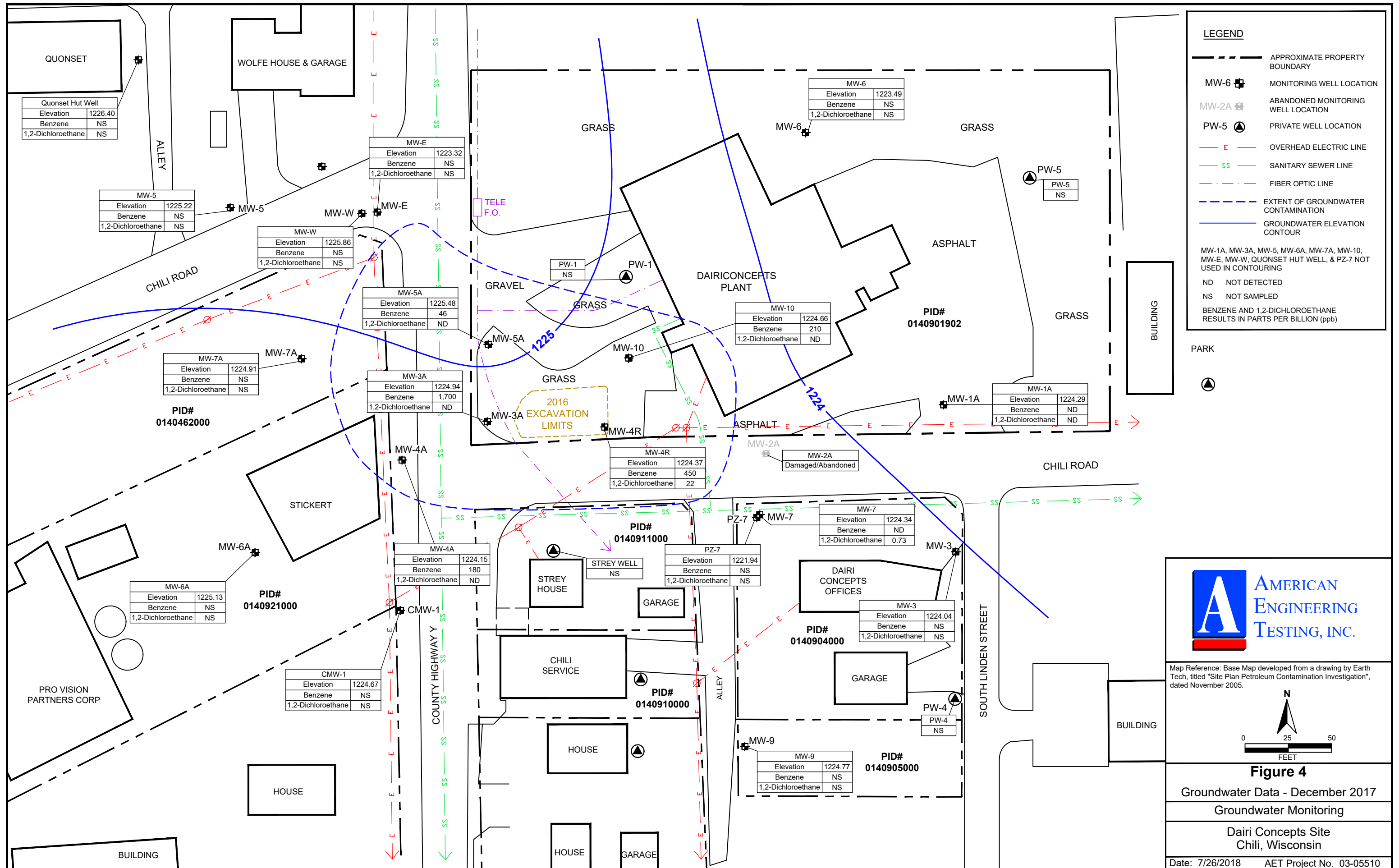
**Figure 2**  
 Site Features  
 Groundwater Monitoring  
 Dairy Concepts Site  
 Chili, Wisconsin  
 Date: 7/25/2018 AET Project No. 03-05510



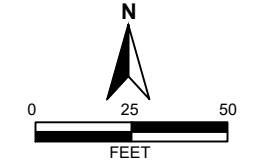
Map Reference: Base Map developed from a drawing by Earth Tech, titled "Site Plan Petroleum Contamination Investigation", dated November 2005.



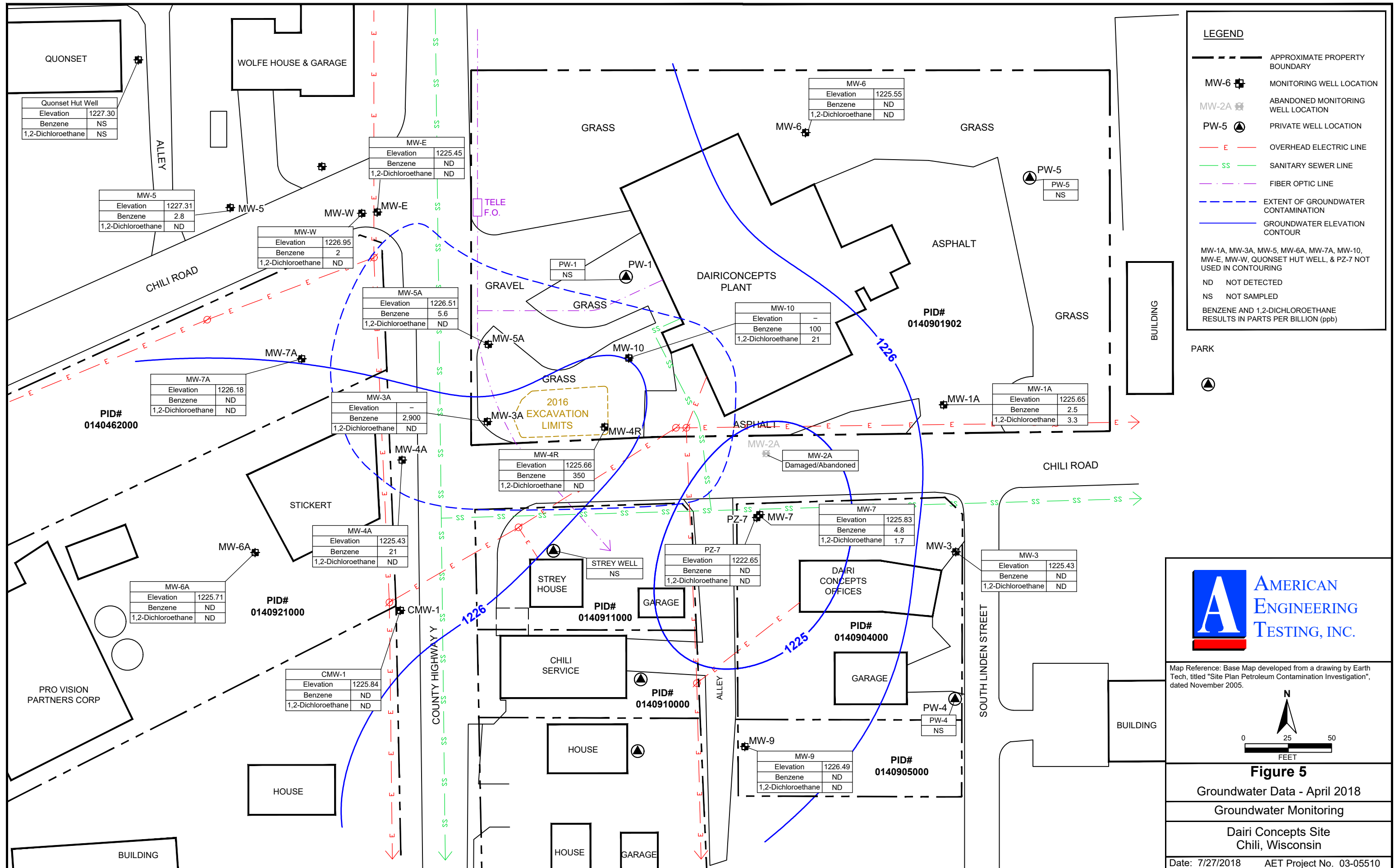
**Figure 3**  
Groundwater Data - September 2017  
Groundwater Monitoring  
Dairi Concepts Site  
Chili, Wisconsin  
Date: 7/26/2018 AET Project No. 03-05510



Map Reference: Base Map developed from a drawing by Earth Tech, titled "Site Plan Petroleum Contamination Investigation", dated November 2005.



**Figure 4**  
 Groundwater Data - December 2017  
 Groundwater Monitoring  
 Dairi Concepts Site  
 Chili, Wisconsin  
 Date: 7/26/2018 AET Project No. 03-05510



**LEGEND**

- APPROXIMATE PROPERTY BOUNDARY
- MW-6 MONITORING WELL LOCATION
- MW-2A ABANDONED MONITORING WELL LOCATION
- PW-5 PRIVATE WELL LOCATION
- E --- OVERHEAD ELECTRIC LINE
- SS --- SANITARY SEWER LINE
- FIBER OPTIC LINE
- EXTENT OF GROUNDWATER CONTAMINATION
- GROUNDWATER ELEVATION CONTOUR

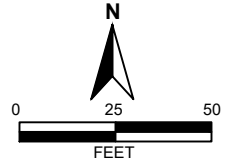
MW-1A, MW-3A, MW-5, MW-6A, MW-7A, MW-10, MW-E, MW-W, QUONSET HUT WELL, & PZ-7 NOT USED IN CONTOURING

ND NOT DETECTED  
NS NOT SAMPLED

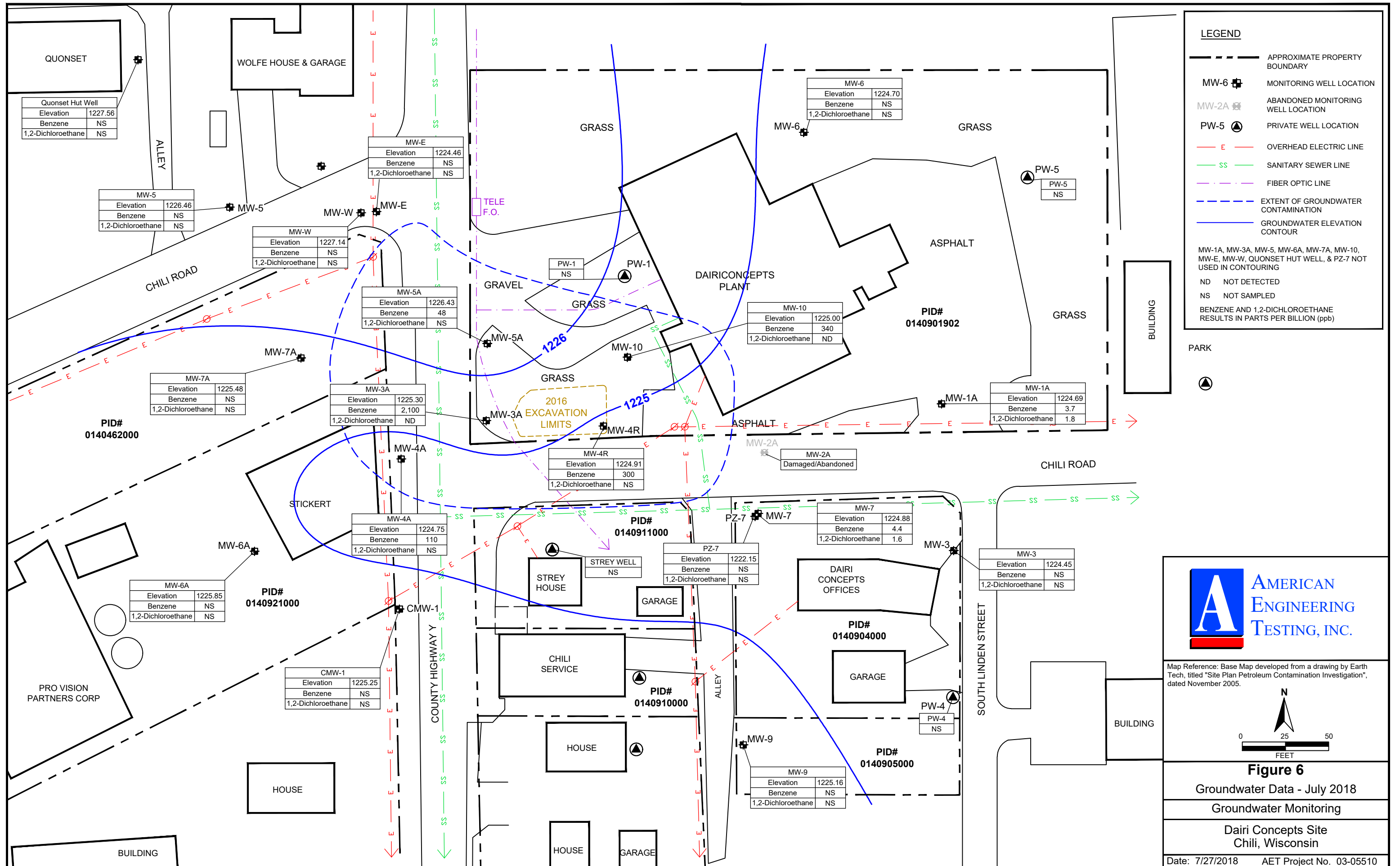
BENZENE AND 1,2-DICHLOROETHANE RESULTS IN PARTS PER BILLION (ppb)



Map Reference: Base Map developed from a drawing by Earth Tech, titled "Site Plan Petroleum Contamination Investigation", dated November 2005.



**Figure 5**  
 Groundwater Data - April 2018  
 Groundwater Monitoring  
 Dairi Concepts Site  
 Chili, Wisconsin  
 Date: 7/27/2018 AET Project No. 03-05510



**LEGEND**

- APPROXIMATE PROPERTY BOUNDARY
- MW-6 MONITORING WELL LOCATION
- MW-2A ABANDONED MONITORING WELL LOCATION
- PW-5 PRIVATE WELL LOCATION
- E --- OVERHEAD ELECTRIC LINE
- SS --- SANITARY SEWER LINE
- FIBER OPTIC LINE
- EXTENT OF GROUNDWATER CONTAMINATION
- GROUNDWATER ELEVATION CONTOUR

MW-1A, MW-3A, MW-5, MW-6A, MW-7A, MW-10, MW-E, MW-W, QUONSET HUT WELL, & PZ-7 NOT USED IN CONTOURING

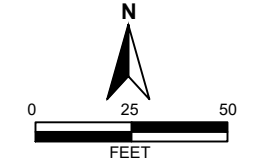
ND NOT DETECTED  
NS NOT SAMPLED

BENZENE AND 1,2-DICHLOROETHANE RESULTS IN PARTS PER BILLION (ppb)

PARK



Map Reference: Base Map developed from a drawing by Earth Tech, titled "Site Plan Petroleum Contamination Investigation", dated November 2005.



**Figure 6**  
Groundwater Data - July 2018  
Groundwater Monitoring  
Dairi Concepts Site  
Chili, Wisconsin  
Date: 7/27/2018 AET Project No. 03-05510

Quonset Hut Well	
Elevation	1227.56
Benzene	NS
1,2-Dichloroethane	NS

MW-5	
Elevation	1226.46
Benzene	NS
1,2-Dichloroethane	NS

MW-W	
Elevation	1227.14
Benzene	NS
1,2-Dichloroethane	NS

MW-E	
Elevation	1224.46
Benzene	NS
1,2-Dichloroethane	NS

MW-5A	
Elevation	1226.43
Benzene	48
1,2-Dichloroethane	NS

MW-7A	
Elevation	1225.48
Benzene	NS
1,2-Dichloroethane	NS

MW-3A	
Elevation	1225.30
Benzene	2,100
1,2-Dichloroethane	ND

MW-4R	
Elevation	1224.91
Benzene	300
1,2-Dichloroethane	NS

MW-10	
Elevation	1225.00
Benzene	340
1,2-Dichloroethane	ND

MW-1A	
Elevation	1224.69
Benzene	3.7
1,2-Dichloroethane	1.8

MW-4A	
Elevation	1224.75
Benzene	110
1,2-Dichloroethane	NS

PZ-7	
Elevation	1222.15
Benzene	NS
1,2-Dichloroethane	NS

MW-7	
Elevation	1224.88
Benzene	4.4
1,2-Dichloroethane	1.6

MW-3	
Elevation	1224.45
Benzene	NS
1,2-Dichloroethane	NS

MW-6A	
Elevation	1225.85
Benzene	NS
1,2-Dichloroethane	NS

CMW-1	
Elevation	1225.25
Benzene	NS
1,2-Dichloroethane	NS

MW-9	
Elevation	1225.16
Benzene	NS
1,2-Dichloroethane	NS

# Appendix A

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Acronyms and Abbreviations



## AET Standard List

°C	degrees Celsius
°F	degrees Fahrenheit
%	percent
AAI	EPA All Appropriate Inquiry (§312.10 of 40 CFR 312)
ACM	asbestos containing material
ACBM	asbestos containing building material
AET	American Engineering Testing, Inc.
AHERA	Asbestos Hazard Emergency Response Act
AST	aboveground storage tank
ASTM	American Society for Testing and Materials (now known only by acronym)
AUL	activity and use limitation
BETX	benzene, ethylbenzene, toluene, xylene
bgs	below ground surface
BRRTS	Bureau of Remediation and Redevelopment Tracking System
CAP	Corrective Action Plan
CERCLA	Comprehensive Environmental Response, Compensation, Liability Act (Superfund)
CERCLIS	Comprehensive Environmental Response, Compensation, Liability Information System
CESQG	RCRA Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CLEAN	Contaminated Lands Environmental Action Network
CoC	contaminant of concern
c.o.c.	chain of custody
CORRACTS	RCRA Corrective Actions Information System
cPAH	carcinogenic polynuclear aromatic hydrocarbon
CVOC	chlorinated volatile organic compound
cy or CY	cubic yards
DRO	diesel range organics
EC	engineering control
EIS	Environmental Impact Statement
EP	Environmental Professional (§312.10 of 40 CFR 312)
EPA	Environmental Protection Agency (also USEPA)
ES	enforcement standard
ERNS	Emergency Response Notification System (federal)
ESA	Environmental Site Assessment
f/cc	fibers per cubic centimeter
ft	feet
GC	gas chromatography
GC/MS	gas chromatography/mass spectroscopy
GEN	RCRA Generator

## AET Standard List

GIS	geographic information system
GPS	global positioning system
GRO	gasoline range organics
HASP	Health and Safety Plan
HIG	Historical Information Gatherers, Inc.
HREC	historical recognized environmental condition
IC	institutional control
LLP	landowner liability protection
LQG	RCRA Large Quantity Generator
LOQ	limit of quantitation
LSI	Limited Site Investigation
LUST	leaking underground storage tank
MCL	EPA Maximum Contaminant Level
MDL	method detection limit.
mg/kg	milligrams per kilogram (ppm)
mg/L	milligrams per liter (ppm)
MTBE	methyl tert-butyl ether
NA	not assigned or not applicable
ND	no detection
NEPA	National Environmental Protection Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFA	No Further Action
NFRAP	No Further Remedial Action Planned
NLR	RCRA No Longer Regulated Information System
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List (federal Superfund)
NR	not recorded
ODI	EPA Open Dump Inventory
OSHA	Occupational Safety and Health Administration
PECFA	Petroleum Environmental Clean-Up Fund Act
PAH	polynuclear aromatic hydrocarbon
PAL	preventive action limit
PEL	OSHA Permissible Exposure Limit
PCB	polychlorinated biphenyl
pcm	point count method
PE	Professional Engineer
PG	Professional Geologist
PID	photoionization detector
PLM	polarized light microscopy

## AET Standard List

PLP	Permanent List of Priorities (state Superfund)
ppb	parts per billion
PPE	personal protective equipment
ppm	parts per million
PVOC	petroleum volatile organic compound
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
RACM	regulated asbestos containing material
RAP	Response Action Plan
RCRA	Resource Conservation Recovery Act
RCL	residual contaminant level
REC	recognized environmental condition
RI	Remedial Investigation
RL	laboratory reporting limit
ROD	EPA Record of Decision
RP	responsible party
SDS	safety data sheet
SOP	standard operating procedure
SPILLS	WDNR Spills inventory
SQG	RCRA Small Quantity Generator
SREC	suspect recognized environmental condition
SSP	Site Safety Plan
SVE	soil vapor extraction
SVOC	semi-volatile organic compound
SWF/LF	WDNR Solid Waste Facilities/Landfill Sites
TCLP	Toxicity Characteristic Leaching Procedure
TMB	trimethylbenzene
TPH	total petroleum hydrocarbons
TRIS	EPA Toxic Release Inventory System
TSCA	Toxic Substances Control Act
TSD	RCRA Transportation Storage and Disposal inventory
µg/kg	micrograms per kilogram (ppb)
µg/l or µg/L	micrograms per liter (ppb)
µg/m <sup>3</sup>	micrograms per cubic meter
USEPA	United States Environmental Protection Agency (also EPA)
USGS	United States Geological Survey
UST	underground storage tank
VIC	Voluntary Investigation and Cleanup Program

### AET Standard List

VOC	volatile organic compound
WAC	Wisconsin Administrative Code
WDATCP	Wisconsin Department of Agriculture, Trade, and Consumer Protection
WDHS	Wisconsin Department of Health Services
WDNR	Wisconsin Department of Natural Resources
WDOT	Wisconsin Department of Transportation
WGNHS	Wisconsin Geological and Natural History Survey
WCA	Wetland Conservation Act
WPDES	Wisconsin Pollution Discharge Elimination System
WRRD	Wisconsin Remediation and Redevelopment Database
XRF	x-ray fluorescence

### DEFINITIONS

Controlled recognized environmental condition (CREC): a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

De minimus condition: a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies. Conditions determined to be de minimus conditions are not recognized environmental conditions nor controlled recognized environmental conditions.

Historical recognized environmental condition (HREC): a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Recognized environmental condition (REC): the presence or likely presence of hazardous substances or petroleum products in, on, or at a property: 1) due to release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment.

# Appendix B

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Environmental Sampling Methods

**ENVIRONMENTAL SAMPLING METHODS – GENERAL:  
EXCAVATIONS/TEST PITS, HAND AUGERS, SURFICIAL SOILS, STOCKPILES**

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**Site Safety Issues**

Safety is of paramount importance on construction, demolition, or other high-traffic sites with potentially unstable ground. Frequent visual and verbal contact is maintained with operators of heavy equipment in the sampling vicinity. Care is taken not to enter depressions or scale mounds that would constitute confined spaces, where engulfment, immersion, or falls are possible, or where harmful vapors may collect. Most observations and soil collection are performed from a stable and level ground surface with the help of heavy equipment operated by an excavation contractor.

**Contamination Reduction**

Sampling devices (except heavy equipment in most cases) are cleaned between sampling points to minimize cross contamination. The cleaning procedure may consist of an alconox detergent-water wash using a brush, followed by a tap water rinse. Certain types of projects may entail more or less stringent decontamination procedures.

**Soil Collection**

Most soil samples from excavations or test pits are collected directly from heavy equipment (e.g., excavation bucket, loader, or bulldozer), giving preference to soils that have not touched the equipment. A hand auger is used to complete shallow soil borings in locations of limited vehicle access. Hand auger borings are advanced manually, typically in 6" to 12" depth intervals. Soils are collected directly from the hollow auger barrel. A spade shovel is used to collect surficial soils (i.e., up to 6" depth). In many cases, soil samples can be collected by hand without added equipment.

Impacted soils or buried debris may be present in the ground that are not observed due to the spacing and depths of sampling points. Best judgment determinations, based on known site conditions and past experience in similar situations, do not guarantee identification or removal of all impacts.

**Soil Classification**

As the samples are obtained in the field, they are visually and manually classified by the field staff. Representative portions of the samples may be returned to the laboratory for further examination and for verification of the field classification. Soil classifications, visual/odor observations, and information on any groundwater encountered are reported on the Soil Screening Data Sheet or other field notes.

**Soil Sample Vapor Screening**

Soil samples collected directly or from equipment are screened with a photoionization detector (PID) for the presence of organic vapors with ionization potentials less than the lamp voltage. The PID is calibrated for direct reading in parts-per-million-volume (PPMv) of a benzene equivalent. Soil samples are collected and screened according to the bag-headspace field screening procedure, which consists of placing freshly collected soil into a polyethylene Whirl-Pak or freezer "baggie" (i.e., bag), sealing the bag to contain an air pocket (i.e., headspace), and allowing 10 to 20 minutes for vapors to disperse from the soil to the headspace. The highest reading upon inserting the PID probe into the bag headspace – typically attained within two to five seconds of probe insertion – is recorded on the Soil Screening Data Sheet or other field notes. Excessive moisture, temperature extremes, ambient vapors, or other unusual field circumstances can affect screening results.

**Other Field Screening**

For certain sites, field screening may be conducted for additional parameters in accordance with AET's Field Screening Methods Supplemental information sheet.

**Soil Sampling for Chemical Analysis**

Soil samples obtained for chemical analysis are collected directly or from the sampling device into laboratory-prepared containers with appropriate preservatives, according to laboratory protocols. The samples are delivered to the analytical laboratory within prescribed holding times, accompanied by proper chain-of-custody forms.

## ENVIRONMENTAL SAMPLING METHODS – HSA/PUSH PROBE SOIL BORINGS

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### **Contamination Reduction**

The hollow-stem auger (HSA) drill rig and down hole tooling are steam cleaned prior to mobilization. The split-spoon sampler is cleaned between samples to minimize cross contamination. The push-probe down hole tooling is steam cleaned prior to mobilization. New clear plastic liners are used for each drive, and the tooling is cleaned between borings to minimize cross contamination. The cleaning procedure consists of an alconox detergent-water wash using a brush, followed by a tapwater rinse. The alconox wash and rinse water are changed regularly – typically between borings. Certain types of projects may entail more stringent decontamination procedures.

### **Soil Boring Advancement and Limitations**

Split-spoon soil sampling in the standard-penetration soil borings is performed using hollow-stem auger techniques in general accordance with ASTM:D1586, with a modified hammer weight calibrated by pile driving analyzer (PDA). Using this procedure, a 2" outer-diameter (OD) split-spoon soil sampler is driven into the soil by a hammer weight with 60%-65% energy of a 140-lb. weight falling 30". After an initial set of 6", the number of blows required to drive the sampler an additional 12" is known as the penetration resistance or N value, an index of the relative density of cohesionless soils and the consistency of cohesive soils. Samples are typically collected in distinct 18" or 24" depth intervals separated by 12" or 6" depth intervals, using drive rods to extend the boring deeper beneath the ground surface. The split-spoon sampler is opened to expose distinct 18" or 24" sections of soil for classification and sampling.

Soil sampling in the soil borings is performed using a Geoprobe® system. Soil borings are advanced using a vehicle-mounted, hydraulically-powered, soil probing machine, which uses static force (vehicle weight) and percussion to advance small-diameter sampling tools into the subsurface for collecting soil core, soil gas, or groundwater samples. Using this system, a 2" outer-diameter (OD) MacroCore® soil sampler containing a 1.75" OD clear plastic liner is driven into the soil in distinct 48" depth intervals, except where subsurface conditions limit the equipment to shorter drive lengths. In cases where soil recovery is poor, typically due to grain-size or moisture, a smaller "discrete" soil sampler (1.5" OD containing a 1.0" OD clear plastic liner) with a retractable piston tip may be used to collect soil in distinct 24" depth intervals. Probe rods are added to extend borings deeper beneath the surface. The plastic liner is removed from the sampler and cut lengthwise to expose discrete sections of soil for classification and sampling.

Unless actually observed, contacts between soil layers are estimated based on the spacing of samples and the action of the drilling tools. Cobbles, boulders, and other large objects generally cannot be recovered from soil borings, and may be present in the ground even if they are not noted on the boring logs. Impacted soils or buried debris may be present that are not observed due to the spacing and depths of sampling points. Best judgment determinations, based on known site conditions and past experience in similar situations, do not guarantee identification of all impacts.

### **Soil Classification**

As the samples are obtained in the field, they are visually and manually classified by the field staff following the Unified Soil Classification (USC) system in general accordance with ASTM:D2488. Representative portions of the samples may be returned to the laboratory for further observation and for verification of the field identification. Logs of the borings are prepared indicating the depth and identification of the various strata, water level information, and other pertinent information regarding the method of maintaining and advancing the borings.

Boring logs include judgments of the geologic depositional origin. This judgment is primarily based on observations of the soil samples, which can be limited. Observations of the surrounding topography, vegetation, and development can sometimes aid this judgment. Visual/odor observations may aid in assessing impacts but are not relied on exclusively.

### **Soil Sample Vapor Screening**

Soil samples collected directly from the soil samplers are screened with a photoionization detector (PID) for the presence of organic vapors with ionization potentials less than the lamp voltage. The PID is calibrated for direct reading in parts-per-million-volume (PPMv) of a benzene equivalent. Soil samples are collected and screened according to the bag-headspace field screening procedure, which consists of placing freshly collected soil into a polyethylene Whirl-Pak or freezer "baggie" (i.e., bag), sealing the bag to contain an air pocket (i.e., headspace), and allowing 10 to 20 minutes for vapors to disperse from the soil to the headspace. The highest reading upon inserting the PID probe into the bag

## ENVIRONMENTAL SAMPLING METHODS – HSA/PUSH PROBE SOIL BORINGS

---

headspace – typically attained within two to five seconds of probe insertion – is recorded on the boring log. Excessive moisture, temperature extremes, ambient vapors, or other unusual field circumstances can affect screening results.

### **Other Field Screening**

For certain sites, field screening may be conducted for additional parameters in accordance with AET's Field Screening Methods Supplemental information sheet.

### **Soil Sampling for Chemical Analysis**

Soil samples obtained for chemical analysis are collected directly from the soil samplers and placed into laboratory-prepared containers with appropriate preservatives, according to laboratory protocols. The samples are delivered to the analytical laboratory within prescribed holding times, accompanied by proper chain-of-custody forms.

### **Water Level Measurements**

The groundwater level measurements are shown at the bottom of the boring logs. The following information appears under Water Level Measurements on the logs:

- Date and time of measurement
- Sampled Depth: greatest depth of soil sampling at the time of measurement
- Casing Depth: depth to bottom of casing or hollow-stem auger at time of measurement
- Cave-in Depth: tape-measured depth of borehole
- Water Level: tape-measured depth of free water in the borehole

The true depth of the water table at the boring locations may be different from the water levels measured in the boreholes. This is possible because several factors can affect the water-level measurements in the borehole such as permeability of each soil layer in profile, presence of perched water, amount of time between water level readings, and weather conditions.

### **Groundwater Sampling for Chemical Analysis**

Groundwater samples obtained for chemical analysis are collected directly from each borehole/temporary monitoring well by one of two techniques: (1) A new dedicated teflon bailer is lowered down the borehole/temporary monitoring well with new nylon rope or decontaminated downrigger cable; (2) Using a peristaltic pump or check-valve assembly, samples are pumped directly from the borehole/temporary monitoring well through new polyethylene tubing extended to depth through the casing. Samples are collected in laboratory-prepared containers with appropriate preservatives, according to laboratory protocols. For analyses in which field-filtering is required, samples are vacuum-filtered through a new dedicated plastic filter with 0.45- $\mu$ m pores. The samples are delivered to the analytical laboratory within prescribed holding times, accompanied by proper chain-of-custody forms.

Because boreholes/temporary monitoring wells are not typically in equilibrium with groundwater, results provide qualitative groundwater data. Purging additional water prior to sampling may improve the data representativeness somewhat. Monitoring wells are necessary to obtain more accurate quantitative groundwater data.

### **Surveying and Abandonment**

Following sampling, ground surface elevations at boring locations are typically measured to the nearest 0.1 foot. If a permanent benchmark of known elevation is unavailable, the measurement is referenced to a nearby temporary benchmark given the arbitrary reference elevation of 100.0 feet. Horizontal location control is typically based on tape measurements from fixed site features. Certain types of projects may entail more stringent measures such as global positioning systems (GPS) or contracting registered surveyors.

Boreholes/temporary monitoring wells are completely backfilled with bentonite and abandoned according to procedures outlined in Chapter NR 141.25 of the Wisconsin Administrative Code A WDNR Borehole Abandonment (3300-5W) form is completed for each soil boring not completed as a monitoring well.



## ENVIRONMENTAL SAMPLING METHODS – MONITORING WELLS

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### **Contamination Reduction**

The sampling downrigger and electronic water-level indicator are cleaned prior to sampling and between sampling from different monitoring wells. The cleaning procedure consists of an alconox detergent-water wash and distilled water rinse from spray dispensers. New disposable bailers are used for each well.

### **Monitoring Well Installation and Development**

Groundwater monitoring wells and piezometers are constructed and developed in accordance with Wisconsin Administrative Code – Chapter NR 141 requirements. Monitoring Well Construction (4400-113A) and Monitoring Well Development (4400-113B) forms are completed for each well. Typically, monitoring wells are installed in hollow-stem auger (HSA) soil boreholes that have been sampled for environmental parameters.

Monitoring wells are developed by removing a minimum of three to five borehole volumes, until water appears clear.

### **Groundwater Elevation Measurements**

Following monitoring well installation, the top-of-riser elevations are surveyed to the nearest 0.01 feet. If a permanent benchmark of known elevation is unavailable, the survey is referenced to a nearby temporary benchmark given the arbitrary reference elevation of 100.00 feet.

Groundwater elevations are determined by using an electronic water-level indicator. Measurements are obtained by lowering the probe into each well until the groundwater surface is encountered. Measurements, referenced to the top-of-riser elevations, are reported to the nearest 0.01 feet.

### **Groundwater Sampling for Chemical Analysis**

Groundwater samples obtained for chemical analysis are collected directly from each monitoring well using a new disposable bailer lowered down the well with new nylon rope or decontaminated downrigger cable. Samples are decanted directly from the bailer into laboratory-prepared containers with appropriate preservatives. Alternatively, samples may be drawn directly from the submersible pump discharge tubing. For analyses in which field-filtering is required, samples are vacuum-filtered through a new dedicated plastic filter with 0.45- $\mu$ m pores. The samples are delivered to the analytical laboratory within prescribed holding times, accompanied by proper chain-of-custody forms.

### **Free Product Removal Procedures**

We conducted free product removal procedure as follows:

- Remove well cover and scrape away excess dirt.
- Carefully remove test well plug, bailer, & sock from well casing. Remember that bailer and absorbent socks are tied to the plug.
- Set bailer aside and squeeze product from sock into bucket. After squeezing out sock set aside to dry.
- Measure depth to water/product with a product/groundwater interface probe. Record depth to product, groundwater, and thickness of product in feet.
- Secure bailer to rope or string and insert into well casing. Lower the bailer until contact with water table is made. Allow bailer to drop into the water for no more than one foot. Remove bailer and estimate product thickness. Empty contents of bailer into bucket and record product thickness.
- Continue to lower bailer into well and drop to the water table. Allow bailer to fill with no more than one foot of water/product. Remove bailer and empty contents into bucket. Continue fill bucket. Transfer filled buckets to drum.
- Repeat this process until thickness of free product is less than one inch. Record amount of water/product removed.
- If a groundwater sample will be collected use a new disposable bailer to obtain a water sample. Insert the bailers bottom emptying device and use to fill the appropriate sample bottle.
- Reattach string/rope to well plug, replace bailer and sock into well and cap with well plug. Replace well cover. Replace socks as needed.
- Secure cover on 55-gasllon drum.

# Appendix C

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Laboratory Reports and Chains of Custody

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-133876-1

Client Project/Site: Darri Concepts - 03-05510

For:

American Engineering Testing Inc.

1837 Cty Hwy OO

Chippewa Falls, Wisconsin 54729

Attn: Mr. Michael Neal



Authorized for release by:

9/21/2017 5:07:53 PM

Sandie Fredrick, Project Manager II

(920)261-1660

[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

**REVIEWED**

**By mneal at 9:42 am, Sep 22, 2017**

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Case Narrative

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Job ID: 500-133876-1

### Laboratory: TestAmerica Chicago

#### Narrative

#### Job Narrative 500-133876-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/12/2017 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.4° C.

#### Receipt Exceptions

One or more containers for the following samples were received broken or leaking: MW-1A (500-133876-1), MW-3A (500-133876-3), MW-7 (500-133876-10), MW-7A (500-133876-11), PW-1 (500-133876-18) and PW-4 (500-133876-19).

Sample #1 (MW-1A) 1 40-ml HCL vial was received broken, 2 remain.  
Sample #3 (MW-3A) 2 40-ml HCL vials were received broken, 1 vial remains.  
Sample #10 (MW-7) 3 40-ml HCL vials were received broken, 0 remain.  
Sample #11 (MW-7A) 3 40-ml HCL vials were received broken, 0 remain.  
Sample #18 (PW-1) 1 40-ml HCL vial was received broken, 2 remain.  
Sample #19 (PW-4) 1 40-ml HCL vial was received broken, 2 remain.

#### GC/MS VOA

Method(s) 524.2: The low level laboratory control sample (LLCS) for analytical batch 480-376510 recovered outside control limits for the following analyte: Methylene Chloride. This analyte was biased high in the LLCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: PW-1 (500-133876-18), PW-4 (500-133876-19), PW-5 (500-133876-20) and Strey Well (500-133876-21).

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-3A (500-133876-3), MW-4A (500-133876-4), MW-4R (500-133876-5), MW-5A (500-133876-7) and MW-10 (500-133876-14). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Client Sample ID: MW-1A

## Lab Sample ID: 500-133876-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.0		0.50	0.15	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-3

## Lab Sample ID: 500-133876-2

No Detections.

## Client Sample ID: MW-3A

## Lab Sample ID: 500-133876-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1400		20	7.2	ug/L	20		8260B	Total/NA
1,3,5-Trimethylbenzene	440		20	5.1	ug/L	20		8260B	Total/NA
Benzene	2200		10	2.9	ug/L	20		8260B	Total/NA
Ethylbenzene	1700		10	3.7	ug/L	20		8260B	Total/NA
Naphthalene	340		20	6.7	ug/L	20		8260B	Total/NA
Toluene - DL	15000		100	30	ug/L	200		8260B	Total/NA
Xylenes, Total - DL	8700		200	44	ug/L	200		8260B	Total/NA

## Client Sample ID: MW-4A

## Lab Sample ID: 500-133876-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	39		5.0	1.8	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	15		5.0	1.3	ug/L	5		8260B	Total/NA
Benzene	66		2.5	0.73	ug/L	5		8260B	Total/NA
Ethylbenzene	74		2.5	0.92	ug/L	5		8260B	Total/NA
Naphthalene	20		5.0	1.7	ug/L	5		8260B	Total/NA
Toluene	8.9		2.5	0.76	ug/L	5		8260B	Total/NA
Xylenes, Total	88		5.0	1.1	ug/L	5		8260B	Total/NA

## Client Sample ID: MW-4R

## Lab Sample ID: 500-133876-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	320		5.0	1.3	ug/L	5		8260B	Total/NA
Benzene	660		2.5	0.73	ug/L	5		8260B	Total/NA
Naphthalene	320		5.0	1.7	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	1300		50	18	ug/L	50		8260B	Total/NA
Ethylbenzene - DL	1200		25	9.2	ug/L	50		8260B	Total/NA
Toluene - DL	2200		25	7.6	ug/L	50		8260B	Total/NA
Xylenes, Total - DL	4800		50	11	ug/L	50		8260B	Total/NA

## Client Sample ID: MW-5

## Lab Sample ID: 500-133876-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	29		1.0	0.36	ug/L	1		8260B	Total/NA
Benzene	7.9		0.50	0.15	ug/L	1		8260B	Total/NA
Ethylbenzene	2.2		0.50	0.18	ug/L	1		8260B	Total/NA
Naphthalene	8.3		1.0	0.34	ug/L	1		8260B	Total/NA
Xylenes, Total	26		1.0	0.22	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-5A

## Lab Sample ID: 500-133876-7

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Client Sample ID: MW-5A (Continued)

Lab Sample ID: 500-133876-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	3.6		1.0	0.39	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	160		1.0	0.25	ug/L	1		8260B	Total/NA
Benzene	32		0.50	0.15	ug/L	1		8260B	Total/NA
Naphthalene	92		1.0	0.34	ug/L	1		8260B	Total/NA
Toluene	49		0.50	0.15	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	460		5.0	1.8	ug/L	5		8260B	Total/NA
Ethylbenzene - DL	290		2.5	0.92	ug/L	5		8260B	Total/NA
Xylenes, Total - DL	760		5.0	1.1	ug/L	5		8260B	Total/NA

## Client Sample ID: MW-6

Lab Sample ID: 500-133876-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.76	J	1.0	0.39	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-6A

Lab Sample ID: 500-133876-9

No Detections.

## Client Sample ID: PZ-7

Lab Sample ID: 500-133876-12

No Detections.

## Client Sample ID: MW-9

Lab Sample ID: 500-133876-13

No Detections.

## Client Sample ID: MW-10

Lab Sample ID: 500-133876-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	900		5.0	1.8	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	260		5.0	1.3	ug/L	5		8260B	Total/NA
Benzene	64		2.5	0.73	ug/L	5		8260B	Total/NA
Ethylbenzene	670		2.5	0.92	ug/L	5		8260B	Total/NA
Naphthalene	180		5.0	1.7	ug/L	5		8260B	Total/NA
Toluene	730		2.5	0.76	ug/L	5		8260B	Total/NA
Xylenes, Total - DL	2300		50	11	ug/L	50		8260B	Total/NA

## Client Sample ID: MW-E

Lab Sample ID: 500-133876-15

No Detections.

## Client Sample ID: MW-W

Lab Sample ID: 500-133876-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.2		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	1.3		1.0	0.22	ug/L	1		8260B	Total/NA

## Client Sample ID: CMW-1

Lab Sample ID: 500-133876-17

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

**Detection Summary**

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

**Client Sample ID: PW-1****Lab Sample ID: 500-133876-18**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.40	J	0.50	0.090	ug/L	1		524.2	Total/NA
1,3,5-Trimethylbenzene	0.19	J	0.50	0.13	ug/L	1		524.2	Total/NA

**Client Sample ID: PW-4****Lab Sample ID: 500-133876-19**
 No Detections.
**Client Sample ID: PW-5****Lab Sample ID: 500-133876-20**
 No Detections.
**Client Sample ID: Strey Well****Lab Sample ID: 500-133876-21**
 No Detections.
**Client Sample ID: Trip Blank****Lab Sample ID: 500-133876-22**
 No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago



# Method Summary

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

**Protocol References:**

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.  
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600  
TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Sample Summary

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-133876-1	MW-1A	Water	09/08/17 12:00	09/12/17 10:15
500-133876-2	MW-3	Water	09/08/17 10:45	09/12/17 10:15
500-133876-3	MW-3A	Water	09/08/17 16:15	09/12/17 10:15
500-133876-4	MW-4A	Water	09/08/17 14:30	09/12/17 10:15
500-133876-5	MW-4R	Water	09/08/17 16:00	09/12/17 10:15
500-133876-6	MW-5	Water	09/08/17 14:00	09/12/17 10:15
500-133876-7	MW-5A	Water	09/08/17 14:15	09/12/17 10:15
500-133876-8	MW-6	Water	09/08/17 11:45	09/12/17 10:15
500-133876-9	MW-6A	Water	09/08/17 12:45	09/12/17 10:15
500-133876-12	PZ-7	Water	09/08/17 11:30	09/12/17 10:15
500-133876-13	MW-9	Water	09/08/17 10:30	09/12/17 10:15
500-133876-14	MW-10	Water	09/08/17 16:30	09/12/17 10:15
500-133876-15	MW-E	Water	09/08/17 13:30	09/12/17 10:15
500-133876-16	MW-W	Water	09/08/17 13:45	09/12/17 10:15
500-133876-17	CMW-1	Water	09/08/17 12:20	09/12/17 10:15
500-133876-18	PW-1	Water	09/08/17 15:15	09/12/17 10:15
500-133876-19	PW-4	Water	09/08/17 15:30	09/12/17 10:15
500-133876-20	PW-5	Water	09/08/17 15:00	09/12/17 10:15
500-133876-21	Strey Well	Water	09/08/17 15:45	09/12/17 10:15
500-133876-22	Trip Blank	Water	09/08/17 00:00	09/12/17 10:15

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

Client Sample ID: MW-1A

Date Collected: 09/08/17 12:00

Date Received: 09/12/17 10:15

Lab Sample ID: 500-133876-1

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/20/17 14:26	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/20/17 14:26	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/20/17 14:26	1
<b>Benzene</b>	<b>6.0</b>		0.50	0.15	ug/L			09/20/17 14:26	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/20/17 14:26	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/20/17 14:26	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/20/17 14:26	1
Toluene	<0.15		0.50	0.15	ug/L			09/20/17 14:26	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/20/17 14:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		09/20/17 14:26	1
4-Bromofluorobenzene (Surr)	97		72 - 124		09/20/17 14:26	1
Dibromofluoromethane	92		75 - 120		09/20/17 14:26	1
Toluene-d8 (Surr)	93		75 - 120		09/20/17 14:26	1

Client Sample ID: MW-3

Date Collected: 09/08/17 10:45

Date Received: 09/12/17 10:15

Lab Sample ID: 500-133876-2

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/20/17 14:51	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/20/17 14:51	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/20/17 14:51	1
Benzene	<0.15		0.50	0.15	ug/L			09/20/17 14:51	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/20/17 14:51	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/20/17 14:51	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/20/17 14:51	1
Toluene	<0.15		0.50	0.15	ug/L			09/20/17 14:51	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/20/17 14:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 126		09/20/17 14:51	1
4-Bromofluorobenzene (Surr)	96		72 - 124		09/20/17 14:51	1
Dibromofluoromethane	93		75 - 120		09/20/17 14:51	1
Toluene-d8 (Surr)	93		75 - 120		09/20/17 14:51	1

Client Sample ID: MW-3A

Date Collected: 09/08/17 16:15

Date Received: 09/12/17 10:15

Lab Sample ID: 500-133876-3

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>1400</b>		20	7.2	ug/L			09/20/17 21:04	20
1,2-Dibromoethane (EDB)	<7.7		20	7.7	ug/L			09/20/17 21:04	20
1,2-Dichloroethane	<7.8		20	7.8	ug/L			09/20/17 21:04	20
<b>1,3,5-Trimethylbenzene</b>	<b>440</b>		20	5.1	ug/L			09/20/17 21:04	20
<b>Benzene</b>	<b>2200</b>		10	2.9	ug/L			09/20/17 21:04	20
<b>Ethylbenzene</b>	<b>1700</b>		10	3.7	ug/L			09/20/17 21:04	20

TestAmerica Chicago

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Client Sample ID: MW-3A

Date Collected: 09/08/17 16:15

Date Received: 09/12/17 10:15

## Lab Sample ID: 500-133876-3

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	<7.9		20	7.9	ug/L			09/20/17 21:04	20
<b>Naphthalene</b>	<b>340</b>		20	6.7	ug/L			09/20/17 21:04	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 126					09/20/17 21:04	20
4-Bromofluorobenzene (Surr)	93		72 - 124					09/20/17 21:04	20
Dibromofluoromethane	92		75 - 120					09/20/17 21:04	20
Toluene-d8 (Surr)	97		75 - 120					09/20/17 21:04	20

## Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Toluene</b>	<b>15000</b>		100	30	ug/L			09/20/17 21:28	200
<b>Xylenes, Total</b>	<b>8700</b>		200	44	ug/L			09/20/17 21:28	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126					09/20/17 21:28	200
4-Bromofluorobenzene (Surr)	97		72 - 124					09/20/17 21:28	200
Dibromofluoromethane	96		75 - 120					09/20/17 21:28	200
Toluene-d8 (Surr)	94		75 - 120					09/20/17 21:28	200

## Client Sample ID: MW-4A

Date Collected: 09/08/17 14:30

Date Received: 09/12/17 10:15

## Lab Sample ID: 500-133876-4

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>39</b>		5.0	1.8	ug/L			09/20/17 15:15	5
1,2-Dichloroethane	<2.0		5.0	2.0	ug/L			09/20/17 15:15	5
<b>1,3,5-Trimethylbenzene</b>	<b>15</b>		5.0	1.3	ug/L			09/20/17 15:15	5
<b>Benzene</b>	<b>66</b>		2.5	0.73	ug/L			09/20/17 15:15	5
<b>Ethylbenzene</b>	<b>74</b>		2.5	0.92	ug/L			09/20/17 15:15	5
Methyl tert-butyl ether	<2.0		5.0	2.0	ug/L			09/20/17 15:15	5
<b>Naphthalene</b>	<b>20</b>		5.0	1.7	ug/L			09/20/17 15:15	5
<b>Toluene</b>	<b>8.9</b>		2.5	0.76	ug/L			09/20/17 15:15	5
<b>Xylenes, Total</b>	<b>88</b>		5.0	1.1	ug/L			09/20/17 15:15	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 126					09/20/17 15:15	5
4-Bromofluorobenzene (Surr)	95		72 - 124					09/20/17 15:15	5
Dibromofluoromethane	92		75 - 120					09/20/17 15:15	5
Toluene-d8 (Surr)	94		75 - 120					09/20/17 15:15	5

## Client Sample ID: MW-4R

Date Collected: 09/08/17 16:00

Date Received: 09/12/17 10:15

## Lab Sample ID: 500-133876-5

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<2.0		5.0	2.0	ug/L			09/20/17 15:41	5
<b>1,3,5-Trimethylbenzene</b>	<b>320</b>		5.0	1.3	ug/L			09/20/17 15:41	5
<b>Benzene</b>	<b>660</b>		2.5	0.73	ug/L			09/20/17 15:41	5

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### Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

**Client Sample ID: MW-4R**  
**Date Collected: 09/08/17 16:00**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-5**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	<2.0		5.0	2.0	ug/L			09/20/17 15:41	5
<b>Naphthalene</b>	<b>320</b>		5.0	1.7	ug/L			09/20/17 15:41	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 126					09/20/17 15:41	5
4-Bromofluorobenzene (Surr)	90		72 - 124					09/20/17 15:41	5
Dibromofluoromethane	89		75 - 120					09/20/17 15:41	5
Toluene-d8 (Surr)	96		75 - 120					09/20/17 15:41	5

**Method: 8260B - Volatile Organic Compounds (GC/MS) - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>1300</b>		50	18	ug/L			09/20/17 16:06	50
<b>Ethylbenzene</b>	<b>1200</b>		25	9.2	ug/L			09/20/17 16:06	50
<b>Toluene</b>	<b>2200</b>		25	7.6	ug/L			09/20/17 16:06	50
<b>Xylenes, Total</b>	<b>4800</b>		50	11	ug/L			09/20/17 16:06	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		75 - 126					09/20/17 16:06	50
4-Bromofluorobenzene (Surr)	94		72 - 124					09/20/17 16:06	50
Dibromofluoromethane	91		75 - 120					09/20/17 16:06	50
Toluene-d8 (Surr)	94		75 - 120					09/20/17 16:06	50

**Client Sample ID: MW-5**  
**Date Collected: 09/08/17 14:00**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-6**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>29</b>		1.0	0.36	ug/L			09/20/17 16:31	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/20/17 16:31	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/20/17 16:31	1
<b>Benzene</b>	<b>7.9</b>		0.50	0.15	ug/L			09/20/17 16:31	1
<b>Ethylbenzene</b>	<b>2.2</b>		0.50	0.18	ug/L			09/20/17 16:31	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/20/17 16:31	1
<b>Naphthalene</b>	<b>8.3</b>		1.0	0.34	ug/L			09/20/17 16:31	1
Toluene	<0.15		0.50	0.15	ug/L			09/20/17 16:31	1
<b>Xylenes, Total</b>	<b>26</b>		1.0	0.22	ug/L			09/20/17 16:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 126					09/20/17 16:31	1
4-Bromofluorobenzene (Surr)	96		72 - 124					09/20/17 16:31	1
Dibromofluoromethane	91		75 - 120					09/20/17 16:31	1
Toluene-d8 (Surr)	95		75 - 120					09/20/17 16:31	1

**Client Sample ID: MW-5A**  
**Date Collected: 09/08/17 14:15**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-7**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2-Dichloroethane</b>	<b>3.6</b>		1.0	0.39	ug/L			09/21/17 12:00	1

TestAmerica Chicago

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Client Sample ID: MW-5A

Date Collected: 09/08/17 14:15

Date Received: 09/12/17 10:15

## Lab Sample ID: 500-133876-7

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	160		1.0	0.25	ug/L			09/21/17 12:00	1
Benzene	32		0.50	0.15	ug/L			09/21/17 12:00	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/21/17 12:00	1
Naphthalene	92		1.0	0.34	ug/L			09/21/17 12:00	1
Toluene	49		0.50	0.15	ug/L			09/21/17 12:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 126		09/21/17 12:00	1
4-Bromofluorobenzene (Surr)	95		72 - 124		09/21/17 12:00	1
Dibromofluoromethane	96		75 - 120		09/21/17 12:00	1
Toluene-d8 (Surr)	104		75 - 120		09/21/17 12:00	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	460		5.0	1.8	ug/L			09/20/17 16:56	5
Ethylbenzene	290		2.5	0.92	ug/L			09/20/17 16:56	5
Xylenes, Total	760		5.0	1.1	ug/L			09/20/17 16:56	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 126		09/20/17 16:56	5
4-Bromofluorobenzene (Surr)	94		72 - 124		09/20/17 16:56	5
Dibromofluoromethane	92		75 - 120		09/20/17 16:56	5
Toluene-d8 (Surr)	94		75 - 120		09/20/17 16:56	5

## Client Sample ID: MW-6

Date Collected: 09/08/17 11:45

Date Received: 09/12/17 10:15

## Lab Sample ID: 500-133876-8

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/20/17 17:46	1
1,2-Dichloroethane	0.76	J	1.0	0.39	ug/L			09/20/17 17:46	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/20/17 17:46	1
Benzene	<0.15		0.50	0.15	ug/L			09/20/17 17:46	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/20/17 17:46	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/20/17 17:46	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/20/17 17:46	1
Toluene	<0.15		0.50	0.15	ug/L			09/20/17 17:46	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/20/17 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		09/20/17 17:46	1
4-Bromofluorobenzene (Surr)	98		72 - 124		09/20/17 17:46	1
Dibromofluoromethane	94		75 - 120		09/20/17 17:46	1
Toluene-d8 (Surr)	95		75 - 120		09/20/17 17:46	1

TestAmerica Chicago

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

**Client Sample ID: MW-6A****Lab Sample ID: 500-133876-9****Date Collected: 09/08/17 12:45****Matrix: Water****Date Received: 09/12/17 10:15****Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/20/17 18:10	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/20/17 18:10	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/20/17 18:10	1
Benzene	<0.15		0.50	0.15	ug/L			09/20/17 18:10	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/20/17 18:10	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/20/17 18:10	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/20/17 18:10	1
Toluene	<0.15		0.50	0.15	ug/L			09/20/17 18:10	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/20/17 18:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 126					09/20/17 18:10	1
4-Bromofluorobenzene (Surr)	101		72 - 124					09/20/17 18:10	1
Dibromofluoromethane	94		75 - 120					09/20/17 18:10	1
Toluene-d8 (Surr)	93		75 - 120					09/20/17 18:10	1

**Client Sample ID: PZ-7****Lab Sample ID: 500-133876-12****Date Collected: 09/08/17 11:30****Matrix: Water****Date Received: 09/12/17 10:15****Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/20/17 18:35	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/20/17 18:35	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/20/17 18:35	1
Benzene	<0.15		0.50	0.15	ug/L			09/20/17 18:35	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/20/17 18:35	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/20/17 18:35	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/20/17 18:35	1
Toluene	<0.15		0.50	0.15	ug/L			09/20/17 18:35	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/20/17 18:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 126					09/20/17 18:35	1
4-Bromofluorobenzene (Surr)	97		72 - 124					09/20/17 18:35	1
Dibromofluoromethane	92		75 - 120					09/20/17 18:35	1
Toluene-d8 (Surr)	94		75 - 120					09/20/17 18:35	1

**Client Sample ID: MW-9****Lab Sample ID: 500-133876-13****Date Collected: 09/08/17 10:30****Matrix: Water****Date Received: 09/12/17 10:15****Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/20/17 19:00	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/20/17 19:00	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/20/17 19:00	1
Benzene	<0.15		0.50	0.15	ug/L			09/20/17 19:00	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/20/17 19:00	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/20/17 19:00	1

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### Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

**Client Sample ID: MW-9**  
**Date Collected: 09/08/17 10:30**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-13**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.34		1.0	0.34	ug/L			09/20/17 19:00	1
Toluene	<0.15		0.50	0.15	ug/L			09/20/17 19:00	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/20/17 19:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					09/20/17 19:00	1
4-Bromofluorobenzene (Surr)	99		72 - 124					09/20/17 19:00	1
Dibromofluoromethane	94		75 - 120					09/20/17 19:00	1
Toluene-d8 (Surr)	93		75 - 120					09/20/17 19:00	1

**Client Sample ID: MW-10**  
**Date Collected: 09/08/17 16:30**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-14**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>900</b>		5.0	1.8	ug/L			09/20/17 19:25	5
1,2-Dichloroethane	<2.0		5.0	2.0	ug/L			09/20/17 19:25	5
<b>1,3,5-Trimethylbenzene</b>	<b>260</b>		5.0	1.3	ug/L			09/20/17 19:25	5
<b>Benzene</b>	<b>64</b>		2.5	0.73	ug/L			09/20/17 19:25	5
<b>Ethylbenzene</b>	<b>670</b>		2.5	0.92	ug/L			09/20/17 19:25	5
Methyl tert-butyl ether	<2.0		5.0	2.0	ug/L			09/20/17 19:25	5
<b>Naphthalene</b>	<b>180</b>		5.0	1.7	ug/L			09/20/17 19:25	5
<b>Toluene</b>	<b>730</b>		2.5	0.76	ug/L			09/20/17 19:25	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					09/20/17 19:25	5
4-Bromofluorobenzene (Surr)	91		72 - 124					09/20/17 19:25	5
Dibromofluoromethane	93		75 - 120					09/20/17 19:25	5
Toluene-d8 (Surr)	97		75 - 120					09/20/17 19:25	5

**Method: 8260B - Volatile Organic Compounds (GC/MS) - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Xylenes, Total</b>	<b>2300</b>		50	11	ug/L			09/20/17 19:49	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 126					09/20/17 19:49	50
4-Bromofluorobenzene (Surr)	97		72 - 124					09/20/17 19:49	50
Dibromofluoromethane	94		75 - 120					09/20/17 19:49	50
Toluene-d8 (Surr)	93		75 - 120					09/20/17 19:49	50

**Client Sample ID: MW-E**  
**Date Collected: 09/08/17 13:30**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-15**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/20/17 20:14	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/20/17 20:14	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/20/17 20:14	1
Benzene	<0.15		0.50	0.15	ug/L			09/20/17 20:14	1

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## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Client Sample ID: MW-E

Date Collected: 09/08/17 13:30

Date Received: 09/12/17 10:15

## Lab Sample ID: 500-133876-15

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/20/17 20:14	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/20/17 20:14	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/20/17 20:14	1
Toluene	<0.15		0.50	0.15	ug/L			09/20/17 20:14	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/20/17 20:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 126		09/20/17 20:14	1
4-Bromofluorobenzene (Surr)	96		72 - 124		09/20/17 20:14	1
Dibromofluoromethane	92		75 - 120		09/20/17 20:14	1
Toluene-d8 (Surr)	92		75 - 120		09/20/17 20:14	1

## Client Sample ID: MW-W

Date Collected: 09/08/17 13:45

Date Received: 09/12/17 10:15

## Lab Sample ID: 500-133876-16

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/20/17 20:39	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/20/17 20:39	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/20/17 20:39	1
<b>Benzene</b>	<b>5.2</b>		0.50	0.15	ug/L			09/20/17 20:39	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/20/17 20:39	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/20/17 20:39	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/20/17 20:39	1
Toluene	<0.15		0.50	0.15	ug/L			09/20/17 20:39	1
<b>Xylenes, Total</b>	<b>1.3</b>		1.0	0.22	ug/L			09/20/17 20:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 126		09/20/17 20:39	1
4-Bromofluorobenzene (Surr)	99		72 - 124		09/20/17 20:39	1
Dibromofluoromethane	94		75 - 120		09/20/17 20:39	1
Toluene-d8 (Surr)	92		75 - 120		09/20/17 20:39	1

## Client Sample ID: CMW-1

Date Collected: 09/08/17 12:20

Date Received: 09/12/17 10:15

## Lab Sample ID: 500-133876-17

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/21/17 11:34	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/21/17 11:34	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/21/17 11:34	1
Benzene	<0.15		0.50	0.15	ug/L			09/21/17 11:34	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/21/17 11:34	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/21/17 11:34	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/21/17 11:34	1
Toluene	<0.15		0.50	0.15	ug/L			09/21/17 11:34	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/21/17 11:34	1

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## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Client Sample ID: CMW-1

Date Collected: 09/08/17 12:20

Date Received: 09/12/17 10:15

## Lab Sample ID: 500-133876-17

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		09/21/17 11:34	1
4-Bromofluorobenzene (Surr)	95		72 - 124		09/21/17 11:34	1
Dibromofluoromethane	98		75 - 120		09/21/17 11:34	1
Toluene-d8 (Surr)	101		75 - 120		09/21/17 11:34	1

## Client Sample ID: PW-1

Date Collected: 09/08/17 15:15

Date Received: 09/12/17 10:15

## Lab Sample ID: 500-133876-18

Matrix: Water

## Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.14		0.50	0.14	ug/L			09/13/17 17:52	1
1,1,1-Trichloroethane	<0.21		0.50	0.21	ug/L			09/13/17 17:52	1
1,1,2,2-Tetrachloroethane	<0.070		0.50	0.070	ug/L			09/13/17 17:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.17		0.50	0.17	ug/L			09/13/17 17:52	1
1,1,2-Trichloroethane	<0.17		0.50	0.17	ug/L			09/13/17 17:52	1
1,1-Dichloroethane	<0.18		0.50	0.18	ug/L			09/13/17 17:52	1
1,1-Dichloroethene	<0.16		0.50	0.16	ug/L			09/13/17 17:52	1
1,1-Dichloropropene	<0.063		0.50	0.063	ug/L			09/13/17 17:52	1
1,2,3-Trichlorobenzene	<0.16		0.50	0.16	ug/L			09/13/17 17:52	1
1,2,3-Trichloropropane	<0.12		0.50	0.12	ug/L			09/13/17 17:52	1
1,2,4-Trichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 17:52	1
<b>1,2,4-Trimethylbenzene</b>	<b>0.40</b>	<b>J</b>	0.50	0.090	ug/L			09/13/17 17:52	1
1,2-Dichlorobenzene	<0.16		0.50	0.16	ug/L			09/13/17 17:52	1
1,2-Dichloroethane	<0.14		0.50	0.14	ug/L			09/13/17 17:52	1
1,2-Dichloropropane	<0.11		0.50	0.11	ug/L			09/13/17 17:52	1
<b>1,3,5-Trimethylbenzene</b>	<b>0.19</b>	<b>J</b>	0.50	0.13	ug/L			09/13/17 17:52	1
1,3-Dichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 17:52	1
1,3-Dichloropropane	<0.15		0.50	0.15	ug/L			09/13/17 17:52	1
1,4-Dichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 17:52	1
2,2-Dichloropropane	<0.35		0.50	0.35	ug/L			09/13/17 17:52	1
2-Butanone (MEK)	<5.0		10	5.0	ug/L			09/13/17 17:52	1
2-Chlorotoluene	<0.12		0.50	0.12	ug/L			09/13/17 17:52	1
2-Hexanone	<5.0		10	5.0	ug/L			09/13/17 17:52	1
4-Chlorotoluene	<0.15		0.50	0.15	ug/L			09/13/17 17:52	1
4-Isopropyltoluene	<0.063		0.50	0.063	ug/L			09/13/17 17:52	1
4-Methyl-2-pentanone (MIBK)	<5.0		10	5.0	ug/L			09/13/17 17:52	1
Acetone	<5.0		10	5.0	ug/L			09/13/17 17:52	1
Acrylonitrile	<2.2		10	2.2	ug/L			09/13/17 17:52	1
Allyl chloride	<0.22		0.50	0.22	ug/L			09/13/17 17:52	1
Benzene	<0.13		0.50	0.13	ug/L			09/13/17 17:52	1
Bromobenzene	<0.13		0.50	0.13	ug/L			09/13/17 17:52	1
Bromochloromethane	<0.11		0.50	0.11	ug/L			09/13/17 17:52	1
Bromoform	<0.13		0.50	0.13	ug/L			09/13/17 17:52	1
Bromomethane	<0.23		0.50	0.23	ug/L			09/13/17 17:52	1
Carbon disulfide	<0.15		0.50	0.15	ug/L			09/13/17 17:52	1
Carbon tetrachloride	<0.21		0.50	0.21	ug/L			09/13/17 17:52	1
Chlorobenzene	<0.12		0.50	0.12	ug/L			09/13/17 17:52	1
Chlorodibromomethane	<0.16		0.50	0.16	ug/L			09/13/17 17:52	1
Chloroethane	<0.20		0.50	0.20	ug/L			09/13/17 17:52	1

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### Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

**Client Sample ID: PW-1**  
**Date Collected: 09/08/17 15:15**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-18**  
**Matrix: Water**

**Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.14		0.50	0.14	ug/L			09/13/17 17:52	1
Chloromethane	<0.17		0.50	0.17	ug/L			09/13/17 17:52	1
cis-1,2-Dichloroethene	<0.12		0.50	0.12	ug/L			09/13/17 17:52	1
cis-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			09/13/17 17:52	1
Dibromomethane	<0.17		0.50	0.17	ug/L			09/13/17 17:52	1
Dichlorobromomethane	<0.14		0.50	0.14	ug/L			09/13/17 17:52	1
Dichlorodifluoromethane	<0.15		0.50	0.15	ug/L			09/13/17 17:52	1
Dichlorofluoromethane	<0.13		0.50	0.13	ug/L			09/13/17 17:52	1
Ethyl ether	<0.12		0.50	0.12	ug/L			09/13/17 17:52	1
Ethylbenzene	<0.11		0.50	0.11	ug/L			09/13/17 17:52	1
Hexachlorobutadiene	<0.11		0.50	0.11	ug/L			09/13/17 17:52	1
Iodomethane	<0.15		0.50	0.15	ug/L			09/13/17 17:52	1
Isopropylbenzene	<0.16		0.50	0.16	ug/L			09/13/17 17:52	1
Methyl tert-butyl ether	<0.12		0.50	0.12	ug/L			09/13/17 17:52	1
Methylene Chloride	<0.99 *		2.5	0.99	ug/L			09/13/17 17:52	1
m-Xylene & p-Xylene	<0.30		1.0	0.30	ug/L			09/13/17 17:52	1
Naphthalene	<0.15		0.50	0.15	ug/L			09/13/17 17:52	1
n-Butylbenzene	<0.081		0.50	0.081	ug/L			09/13/17 17:52	1
N-Propylbenzene	<0.13		0.50	0.13	ug/L			09/13/17 17:52	1
o-Xylene	<0.12		0.50	0.12	ug/L			09/13/17 17:52	1
sec-Butylbenzene	<0.068		0.50	0.068	ug/L			09/13/17 17:52	1
Styrene	<0.13		0.50	0.13	ug/L			09/13/17 17:52	1
t-Butanol	<2.5		10	2.5	ug/L			09/13/17 17:52	1
tert-Butylbenzene	<0.060		0.50	0.060	ug/L			09/13/17 17:52	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			09/13/17 17:52	1
Toluene	<0.10		0.50	0.10	ug/L			09/13/17 17:52	1
trans-1,2-Dichloroethene	<0.13		0.50	0.13	ug/L			09/13/17 17:52	1
trans-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			09/13/17 17:52	1
trans-1,4-Dichloro-2-butene	<1.3		2.5	1.3	ug/L			09/13/17 17:52	1
Trichloroethene	<0.18		0.50	0.18	ug/L			09/13/17 17:52	1
Trichlorofluoromethane	<0.19		0.50	0.19	ug/L			09/13/17 17:52	1
Trihalomethanes, Total	<1.0		2.0	1.0	ug/L			09/13/17 17:52	1
Vinyl acetate	<0.45		2.5	0.45	ug/L			09/13/17 17:52	1
Vinyl chloride	<0.18		0.50	0.18	ug/L			09/13/17 17:52	1
Xylenes, Total	<0.12		1.0	0.12	ug/L			09/13/17 17:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	99		80 - 120					09/13/17 17:52	1
4-Bromofluorobenzene (Surr)	96		80 - 120					09/13/17 17:52	1

**Client Sample ID: PW-4**  
**Date Collected: 09/08/17 15:30**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-19**  
**Matrix: Water**

**Method: 524.2 - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.14		0.50	0.14	ug/L			09/13/17 18:19	1
1,1,1-Trichloroethane	<0.21		0.50	0.21	ug/L			09/13/17 18:19	1
1,1,2,2-Tetrachloroethane	<0.070		0.50	0.070	ug/L			09/13/17 18:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.17		0.50	0.17	ug/L			09/13/17 18:19	1

TestAmerica Chicago

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

Client Sample ID: PW-4

Lab Sample ID: 500-133876-19

Date Collected: 09/08/17 15:30

Matrix: Water

Date Received: 09/12/17 10:15

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.17		0.50	0.17	ug/L			09/13/17 18:19	1
1,1-Dichloroethane	<0.18		0.50	0.18	ug/L			09/13/17 18:19	1
1,1-Dichloroethene	<0.16		0.50	0.16	ug/L			09/13/17 18:19	1
1,1-Dichloropropene	<0.063		0.50	0.063	ug/L			09/13/17 18:19	1
1,2,3-Trichlorobenzene	<0.16		0.50	0.16	ug/L			09/13/17 18:19	1
1,2,3-Trichloropropane	<0.12		0.50	0.12	ug/L			09/13/17 18:19	1
1,2,4-Trichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
1,2,4-Trimethylbenzene	<0.090		0.50	0.090	ug/L			09/13/17 18:19	1
1,2-Dichlorobenzene	<0.16		0.50	0.16	ug/L			09/13/17 18:19	1
1,2-Dichloroethane	<0.14		0.50	0.14	ug/L			09/13/17 18:19	1
1,2-Dichloropropane	<0.11		0.50	0.11	ug/L			09/13/17 18:19	1
1,3,5-Trimethylbenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
1,3-Dichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
1,3-Dichloropropane	<0.15		0.50	0.15	ug/L			09/13/17 18:19	1
1,4-Dichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
2,2-Dichloropropane	<0.35		0.50	0.35	ug/L			09/13/17 18:19	1
2-Butanone (MEK)	<5.0		10	5.0	ug/L			09/13/17 18:19	1
2-Chlorotoluene	<0.12		0.50	0.12	ug/L			09/13/17 18:19	1
2-Hexanone	<5.0		10	5.0	ug/L			09/13/17 18:19	1
4-Chlorotoluene	<0.15		0.50	0.15	ug/L			09/13/17 18:19	1
4-Isopropyltoluene	<0.063		0.50	0.063	ug/L			09/13/17 18:19	1
4-Methyl-2-pentanone (MIBK)	<5.0		10	5.0	ug/L			09/13/17 18:19	1
Acetone	<5.0		10	5.0	ug/L			09/13/17 18:19	1
Acrylonitrile	<2.2		10	2.2	ug/L			09/13/17 18:19	1
Allyl chloride	<0.22		0.50	0.22	ug/L			09/13/17 18:19	1
Benzene	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
Bromobenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
Bromochloromethane	<0.11		0.50	0.11	ug/L			09/13/17 18:19	1
Bromoform	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
Bromomethane	<0.23		0.50	0.23	ug/L			09/13/17 18:19	1
Carbon disulfide	<0.15		0.50	0.15	ug/L			09/13/17 18:19	1
Carbon tetrachloride	<0.21		0.50	0.21	ug/L			09/13/17 18:19	1
Chlorobenzene	<0.12		0.50	0.12	ug/L			09/13/17 18:19	1
Chlorodibromomethane	<0.16		0.50	0.16	ug/L			09/13/17 18:19	1
Chloroethane	<0.20		0.50	0.20	ug/L			09/13/17 18:19	1
Chloroform	<0.14		0.50	0.14	ug/L			09/13/17 18:19	1
Chloromethane	<0.17		0.50	0.17	ug/L			09/13/17 18:19	1
cis-1,2-Dichloroethene	<0.12		0.50	0.12	ug/L			09/13/17 18:19	1
cis-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			09/13/17 18:19	1
Dibromomethane	<0.17		0.50	0.17	ug/L			09/13/17 18:19	1
Dichlorobromomethane	<0.14		0.50	0.14	ug/L			09/13/17 18:19	1
Dichlorodifluoromethane	<0.15		0.50	0.15	ug/L			09/13/17 18:19	1
Dichlorofluoromethane	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
Ethyl ether	<0.12		0.50	0.12	ug/L			09/13/17 18:19	1
Ethylbenzene	<0.11		0.50	0.11	ug/L			09/13/17 18:19	1
Hexachlorobutadiene	<0.11		0.50	0.11	ug/L			09/13/17 18:19	1
Iodomethane	<0.15		0.50	0.15	ug/L			09/13/17 18:19	1
Isopropylbenzene	<0.16		0.50	0.16	ug/L			09/13/17 18:19	1
Methyl tert-butyl ether	<0.12		0.50	0.12	ug/L			09/13/17 18:19	1

TestAmerica Chicago

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

Client Sample ID: PW-4

Lab Sample ID: 500-133876-19

Date Collected: 09/08/17 15:30

Matrix: Water

Date Received: 09/12/17 10:15

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<0.99	*	2.5	0.99	ug/L			09/13/17 18:19	1
m-Xylene & p-Xylene	<0.30		1.0	0.30	ug/L			09/13/17 18:19	1
Naphthalene	<0.15		0.50	0.15	ug/L			09/13/17 18:19	1
n-Butylbenzene	<0.081		0.50	0.081	ug/L			09/13/17 18:19	1
N-Propylbenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
o-Xylene	<0.12		0.50	0.12	ug/L			09/13/17 18:19	1
sec-Butylbenzene	<0.068		0.50	0.068	ug/L			09/13/17 18:19	1
Styrene	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
t-Butanol	<2.5		10	2.5	ug/L			09/13/17 18:19	1
tert-Butylbenzene	<0.060		0.50	0.060	ug/L			09/13/17 18:19	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			09/13/17 18:19	1
Toluene	<0.10		0.50	0.10	ug/L			09/13/17 18:19	1
trans-1,2-Dichloroethene	<0.13		0.50	0.13	ug/L			09/13/17 18:19	1
trans-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			09/13/17 18:19	1
trans-1,4-Dichloro-2-butene	<1.3		2.5	1.3	ug/L			09/13/17 18:19	1
Trichloroethene	<0.18		0.50	0.18	ug/L			09/13/17 18:19	1
Trichlorofluoromethane	<0.19		0.50	0.19	ug/L			09/13/17 18:19	1
Trihalomethanes, Total	<1.0		2.0	1.0	ug/L			09/13/17 18:19	1
Vinyl acetate	<0.45		2.5	0.45	ug/L			09/13/17 18:19	1
Vinyl chloride	<0.18		0.50	0.18	ug/L			09/13/17 18:19	1
Xylenes, Total	<0.12		1.0	0.12	ug/L			09/13/17 18:19	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichlorobenzene-d4	95		80 - 120					09/13/17 18:19	1
4-Bromofluorobenzene (Surr)	96		80 - 120					09/13/17 18:19	1

Client Sample ID: PW-5

Lab Sample ID: 500-133876-20

Date Collected: 09/08/17 15:00

Matrix: Water

Date Received: 09/12/17 10:15

## Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.14		0.50	0.14	ug/L			09/13/17 18:46	1
1,1,1-Trichloroethane	<0.21		0.50	0.21	ug/L			09/13/17 18:46	1
1,1,2,2-Tetrachloroethane	<0.070		0.50	0.070	ug/L			09/13/17 18:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.17		0.50	0.17	ug/L			09/13/17 18:46	1
1,1,2-Trichloroethane	<0.17		0.50	0.17	ug/L			09/13/17 18:46	1
1,1-Dichloroethane	<0.18		0.50	0.18	ug/L			09/13/17 18:46	1
1,1-Dichloroethene	<0.16		0.50	0.16	ug/L			09/13/17 18:46	1
1,1-Dichloropropene	<0.063		0.50	0.063	ug/L			09/13/17 18:46	1
1,2,3-Trichlorobenzene	<0.16		0.50	0.16	ug/L			09/13/17 18:46	1
1,2,3-Trichloropropane	<0.12		0.50	0.12	ug/L			09/13/17 18:46	1
1,2,4-Trichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
1,2,4-Trimethylbenzene	<0.090		0.50	0.090	ug/L			09/13/17 18:46	1
1,2-Dichlorobenzene	<0.16		0.50	0.16	ug/L			09/13/17 18:46	1
1,2-Dichloroethane	<0.14		0.50	0.14	ug/L			09/13/17 18:46	1
1,2-Dichloropropane	<0.11		0.50	0.11	ug/L			09/13/17 18:46	1
1,3,5-Trimethylbenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
1,3-Dichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
1,3-Dichloropropane	<0.15		0.50	0.15	ug/L			09/13/17 18:46	1

TestAmerica Chicago

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

Client Sample ID: PW-5

Lab Sample ID: 500-133876-20

Date Collected: 09/08/17 15:00

Matrix: Water

Date Received: 09/12/17 10:15

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
2,2-Dichloropropane	<0.35		0.50	0.35	ug/L			09/13/17 18:46	1
2-Butanone (MEK)	<5.0		10	5.0	ug/L			09/13/17 18:46	1
2-Chlorotoluene	<0.12		0.50	0.12	ug/L			09/13/17 18:46	1
2-Hexanone	<5.0		10	5.0	ug/L			09/13/17 18:46	1
4-Chlorotoluene	<0.15		0.50	0.15	ug/L			09/13/17 18:46	1
4-Isopropyltoluene	<0.063		0.50	0.063	ug/L			09/13/17 18:46	1
4-Methyl-2-pentanone (MIBK)	<5.0		10	5.0	ug/L			09/13/17 18:46	1
Acetone	<5.0		10	5.0	ug/L			09/13/17 18:46	1
Acrylonitrile	<2.2		10	2.2	ug/L			09/13/17 18:46	1
Allyl chloride	<0.22		0.50	0.22	ug/L			09/13/17 18:46	1
Benzene	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
Bromobenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
Bromochloromethane	<0.11		0.50	0.11	ug/L			09/13/17 18:46	1
Bromoform	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
Bromomethane	<0.23		0.50	0.23	ug/L			09/13/17 18:46	1
Carbon disulfide	<0.15		0.50	0.15	ug/L			09/13/17 18:46	1
Carbon tetrachloride	<0.21		0.50	0.21	ug/L			09/13/17 18:46	1
Chlorobenzene	<0.12		0.50	0.12	ug/L			09/13/17 18:46	1
Chlorodibromomethane	<0.16		0.50	0.16	ug/L			09/13/17 18:46	1
Chloroethane	<0.20		0.50	0.20	ug/L			09/13/17 18:46	1
Chloroform	<0.14		0.50	0.14	ug/L			09/13/17 18:46	1
Chloromethane	<0.17		0.50	0.17	ug/L			09/13/17 18:46	1
cis-1,2-Dichloroethene	<0.12		0.50	0.12	ug/L			09/13/17 18:46	1
cis-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			09/13/17 18:46	1
Dibromomethane	<0.17		0.50	0.17	ug/L			09/13/17 18:46	1
Dichlorobromomethane	<0.14		0.50	0.14	ug/L			09/13/17 18:46	1
Dichlorodifluoromethane	<0.15		0.50	0.15	ug/L			09/13/17 18:46	1
Dichlorofluoromethane	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
Ethyl ether	<0.12		0.50	0.12	ug/L			09/13/17 18:46	1
Ethylbenzene	<0.11		0.50	0.11	ug/L			09/13/17 18:46	1
Hexachlorobutadiene	<0.11		0.50	0.11	ug/L			09/13/17 18:46	1
Iodomethane	<0.15		0.50	0.15	ug/L			09/13/17 18:46	1
Isopropylbenzene	<0.16		0.50	0.16	ug/L			09/13/17 18:46	1
Methyl tert-butyl ether	<0.12		0.50	0.12	ug/L			09/13/17 18:46	1
Methylene Chloride	<0.99 *		2.5	0.99	ug/L			09/13/17 18:46	1
m-Xylene & p-Xylene	<0.30		1.0	0.30	ug/L			09/13/17 18:46	1
Naphthalene	<0.15		0.50	0.15	ug/L			09/13/17 18:46	1
n-Butylbenzene	<0.081		0.50	0.081	ug/L			09/13/17 18:46	1
N-Propylbenzene	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
o-Xylene	<0.12		0.50	0.12	ug/L			09/13/17 18:46	1
sec-Butylbenzene	<0.068		0.50	0.068	ug/L			09/13/17 18:46	1
Styrene	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
t-Butanol	<2.5		10	2.5	ug/L			09/13/17 18:46	1
tert-Butylbenzene	<0.060		0.50	0.060	ug/L			09/13/17 18:46	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			09/13/17 18:46	1
Toluene	<0.10		0.50	0.10	ug/L			09/13/17 18:46	1
trans-1,2-Dichloroethene	<0.13		0.50	0.13	ug/L			09/13/17 18:46	1
trans-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			09/13/17 18:46	1

TestAmerica Chicago

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

Client Sample ID: PW-5

Lab Sample ID: 500-133876-20

Date Collected: 09/08/17 15:00

Matrix: Water

Date Received: 09/12/17 10:15

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	<1.3		2.5	1.3	ug/L			09/13/17 18:46	1
Trichloroethene	<0.18		0.50	0.18	ug/L			09/13/17 18:46	1
Trichlorofluoromethane	<0.19		0.50	0.19	ug/L			09/13/17 18:46	1
Trihalomethanes, Total	<1.0		2.0	1.0	ug/L			09/13/17 18:46	1
Vinyl acetate	<0.45		2.5	0.45	ug/L			09/13/17 18:46	1
Vinyl chloride	<0.18		0.50	0.18	ug/L			09/13/17 18:46	1
Xylenes, Total	<0.12		1.0	0.12	ug/L			09/13/17 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	97		80 - 120					09/13/17 18:46	1
4-Bromofluorobenzene (Surr)	97		80 - 120					09/13/17 18:46	1

Client Sample ID: Strey Well

Lab Sample ID: 500-133876-21

Date Collected: 09/08/17 15:45

Matrix: Water

Date Received: 09/12/17 10:15

## Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.14		0.50	0.14	ug/L			09/13/17 19:12	1
1,1,1-Trichloroethane	<0.21		0.50	0.21	ug/L			09/13/17 19:12	1
1,1,2,2-Tetrachloroethane	<0.070		0.50	0.070	ug/L			09/13/17 19:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.17		0.50	0.17	ug/L			09/13/17 19:12	1
1,1,2-Trichloroethane	<0.17		0.50	0.17	ug/L			09/13/17 19:12	1
1,1-Dichloroethane	<0.18		0.50	0.18	ug/L			09/13/17 19:12	1
1,1-Dichloroethene	<0.16		0.50	0.16	ug/L			09/13/17 19:12	1
1,1-Dichloropropene	<0.063		0.50	0.063	ug/L			09/13/17 19:12	1
1,2,3-Trichlorobenzene	<0.16		0.50	0.16	ug/L			09/13/17 19:12	1
1,2,3-Trichloropropane	<0.12		0.50	0.12	ug/L			09/13/17 19:12	1
1,2,4-Trichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
1,2,4-Trimethylbenzene	<0.090		0.50	0.090	ug/L			09/13/17 19:12	1
1,2-Dichlorobenzene	<0.16		0.50	0.16	ug/L			09/13/17 19:12	1
1,2-Dichloroethane	<0.14		0.50	0.14	ug/L			09/13/17 19:12	1
1,2-Dichloropropane	<0.11		0.50	0.11	ug/L			09/13/17 19:12	1
1,3,5-Trimethylbenzene	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
1,3-Dichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
1,3-Dichloropropane	<0.15		0.50	0.15	ug/L			09/13/17 19:12	1
1,4-Dichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
2,2-Dichloropropane	<0.35		0.50	0.35	ug/L			09/13/17 19:12	1
2-Butanone (MEK)	<5.0		10	5.0	ug/L			09/13/17 19:12	1
2-Chlorotoluene	<0.12		0.50	0.12	ug/L			09/13/17 19:12	1
2-Hexanone	<5.0		10	5.0	ug/L			09/13/17 19:12	1
4-Chlorotoluene	<0.15		0.50	0.15	ug/L			09/13/17 19:12	1
4-Isopropyltoluene	<0.063		0.50	0.063	ug/L			09/13/17 19:12	1
4-Methyl-2-pentanone (MIBK)	<5.0		10	5.0	ug/L			09/13/17 19:12	1
Acetone	<5.0		10	5.0	ug/L			09/13/17 19:12	1
Acrylonitrile	<2.2		10	2.2	ug/L			09/13/17 19:12	1
Allyl chloride	<0.22		0.50	0.22	ug/L			09/13/17 19:12	1
Benzene	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
Bromobenzene	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
Bromochloromethane	<0.11		0.50	0.11	ug/L			09/13/17 19:12	1

TestAmerica Chicago

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

Client Sample ID: Strey Well

Lab Sample ID: 500-133876-21

Date Collected: 09/08/17 15:45

Matrix: Water

Date Received: 09/12/17 10:15

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
Bromomethane	<0.23		0.50	0.23	ug/L			09/13/17 19:12	1
Carbon disulfide	<0.15		0.50	0.15	ug/L			09/13/17 19:12	1
Carbon tetrachloride	<0.21		0.50	0.21	ug/L			09/13/17 19:12	1
Chlorobenzene	<0.12		0.50	0.12	ug/L			09/13/17 19:12	1
Chlorodibromomethane	<0.16		0.50	0.16	ug/L			09/13/17 19:12	1
Chloroethane	<0.20		0.50	0.20	ug/L			09/13/17 19:12	1
Chloroform	<0.14		0.50	0.14	ug/L			09/13/17 19:12	1
Chloromethane	<0.17		0.50	0.17	ug/L			09/13/17 19:12	1
cis-1,2-Dichloroethene	<0.12		0.50	0.12	ug/L			09/13/17 19:12	1
cis-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			09/13/17 19:12	1
Dibromomethane	<0.17		0.50	0.17	ug/L			09/13/17 19:12	1
Dichlorobromomethane	<0.14		0.50	0.14	ug/L			09/13/17 19:12	1
Dichlorodifluoromethane	<0.15		0.50	0.15	ug/L			09/13/17 19:12	1
Dichlorofluoromethane	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
Ethyl ether	<0.12		0.50	0.12	ug/L			09/13/17 19:12	1
Ethylbenzene	<0.11		0.50	0.11	ug/L			09/13/17 19:12	1
Hexachlorobutadiene	<0.11		0.50	0.11	ug/L			09/13/17 19:12	1
Iodomethane	<0.15		0.50	0.15	ug/L			09/13/17 19:12	1
Isopropylbenzene	<0.16		0.50	0.16	ug/L			09/13/17 19:12	1
Methyl tert-butyl ether	<0.12		0.50	0.12	ug/L			09/13/17 19:12	1
Methylene Chloride	<0.99 *		2.5	0.99	ug/L			09/13/17 19:12	1
m-Xylene & p-Xylene	<0.30		1.0	0.30	ug/L			09/13/17 19:12	1
Naphthalene	<0.15		0.50	0.15	ug/L			09/13/17 19:12	1
n-Butylbenzene	<0.081		0.50	0.081	ug/L			09/13/17 19:12	1
N-Propylbenzene	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
o-Xylene	<0.12		0.50	0.12	ug/L			09/13/17 19:12	1
sec-Butylbenzene	<0.068		0.50	0.068	ug/L			09/13/17 19:12	1
Styrene	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
t-Butanol	<2.5		10	2.5	ug/L			09/13/17 19:12	1
tert-Butylbenzene	<0.060		0.50	0.060	ug/L			09/13/17 19:12	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			09/13/17 19:12	1
Toluene	<0.10		0.50	0.10	ug/L			09/13/17 19:12	1
trans-1,2-Dichloroethene	<0.13		0.50	0.13	ug/L			09/13/17 19:12	1
trans-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			09/13/17 19:12	1
trans-1,4-Dichloro-2-butene	<1.3		2.5	1.3	ug/L			09/13/17 19:12	1
Trichloroethene	<0.18		0.50	0.18	ug/L			09/13/17 19:12	1
Trichlorofluoromethane	<0.19		0.50	0.19	ug/L			09/13/17 19:12	1
Trihalomethanes, Total	<1.0		2.0	1.0	ug/L			09/13/17 19:12	1
Vinyl acetate	<0.45		2.5	0.45	ug/L			09/13/17 19:12	1
Vinyl chloride	<0.18		0.50	0.18	ug/L			09/13/17 19:12	1
Xylenes, Total	<0.12		1.0	0.12	ug/L			09/13/17 19:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	96		80 - 120					09/13/17 19:12	1
4-Bromofluorobenzene (Surr)	97		80 - 120					09/13/17 19:12	1

TestAmerica Chicago



## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-133876-22

Date Collected: 09/08/17 00:00

Matrix: Water

Date Received: 09/12/17 10:15

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/21/17 11:07	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			09/21/17 11:07	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/21/17 11:07	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/21/17 11:07	1
Benzene	<0.15		0.50	0.15	ug/L			09/21/17 11:07	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/21/17 11:07	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/21/17 11:07	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/21/17 11:07	1
Toluene	<0.15		0.50	0.15	ug/L			09/21/17 11:07	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/21/17 11:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		09/21/17 11:07	1
4-Bromofluorobenzene (Surr)	95		72 - 124		09/21/17 11:07	1
Dibromofluoromethane	97		75 - 120		09/21/17 11:07	1
Toluene-d8 (Surr)	101		75 - 120		09/21/17 11:07	1

## Definitions/Glossary

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# QC Association Summary

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## GC/MS VOA

### Analysis Batch: 376510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-133876-18	PW-1	Total/NA	Water	524.2	
500-133876-19	PW-4	Total/NA	Water	524.2	
500-133876-20	PW-5	Total/NA	Water	524.2	
500-133876-21	Strey Well	Total/NA	Water	524.2	
MB 480-376510/8	Method Blank	Total/NA	Water	524.2	
LCS 480-376510/5	Lab Control Sample	Total/NA	Water	524.2	
LCS 480-376510/6	Lab Control Sample Dup	Total/NA	Water	524.2	
LLCS 480-376510/7	Lab Control Sample	Total/NA	Water	524.2	

### Analysis Batch: 402055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-133876-1	MW-1A	Total/NA	Water	8260B	
500-133876-2	MW-3	Total/NA	Water	8260B	
500-133876-3	MW-3A	Total/NA	Water	8260B	
500-133876-3 - DL	MW-3A	Total/NA	Water	8260B	
500-133876-4	MW-4A	Total/NA	Water	8260B	
500-133876-5	MW-4R	Total/NA	Water	8260B	
500-133876-5 - DL	MW-4R	Total/NA	Water	8260B	
500-133876-6	MW-5	Total/NA	Water	8260B	
500-133876-7 - DL	MW-5A	Total/NA	Water	8260B	
500-133876-8	MW-6	Total/NA	Water	8260B	
500-133876-9	MW-6A	Total/NA	Water	8260B	
500-133876-12	PZ-7	Total/NA	Water	8260B	
500-133876-13	MW-9	Total/NA	Water	8260B	
500-133876-14	MW-10	Total/NA	Water	8260B	
500-133876-14 - DL	MW-10	Total/NA	Water	8260B	
500-133876-15	MW-E	Total/NA	Water	8260B	
500-133876-16	MW-W	Total/NA	Water	8260B	
MB 500-402055/7	Method Blank	Total/NA	Water	8260B	
LCS 500-402055/5	Lab Control Sample	Total/NA	Water	8260B	
500-133876-1 MS	MW-1A	Total/NA	Water	8260B	
500-133876-1 MSD	MW-1A	Total/NA	Water	8260B	

### Analysis Batch: 402176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-133876-7	MW-5A	Total/NA	Water	8260B	
500-133876-17	CMW-1	Total/NA	Water	8260B	
500-133876-22	Trip Blank	Total/NA	Water	8260B	
MB 500-402176/7	Method Blank	Total/NA	Water	8260B	
LCS 500-402176/5	Lab Control Sample	Total/NA	Water	8260B	

# Surrogate Summary

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	12DCB (80-120)	BFB (80-120)
500-133876-18	PW-1	99	96
500-133876-19	PW-4	95	96
500-133876-20	PW-5	97	97
500-133876-21	Strey Well	96	97
LCS 480-376510/5	Lab Control Sample	98	96
LCSD 480-376510/6	Lab Control Sample Dup	99	98
LLCS 480-376510/7	Lab Control Sample	94	98
MB 480-376510/8	Method Blank	98	95

### Surrogate Legend

12DCB = 1,2-Dichlorobenzene-d4

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-133876-1	MW-1A	100	97	92	93
500-133876-1 MS	MW-1A	103	91	95	95
500-133876-1 MSD	MW-1A	101	93	93	95
500-133876-2	MW-3	101	96	93	93
500-133876-3	MW-3A	102	93	92	97
500-133876-3 - DL	MW-3A	105	97	96	94
500-133876-4	MW-4A	104	95	92	94
500-133876-5	MW-4R	101	90	89	96
500-133876-5 - DL	MW-4R	99	94	91	94
500-133876-6	MW-5	101	96	91	95
500-133876-7 - DL	MW-5A	102	94	92	94
500-133876-7	MW-5A	98	95	96	104
500-133876-8	MW-6	104	98	94	95
500-133876-9	MW-6A	104	101	94	93
500-133876-12	PZ-7	102	97	92	94
500-133876-13	MW-9	103	99	94	93
500-133876-14	MW-10	103	91	93	97
500-133876-14 - DL	MW-10	101	97	94	93
500-133876-15	MW-E	101	96	92	92
500-133876-16	MW-W	102	99	94	92
500-133876-17	CMW-1	103	95	98	101
500-133876-22	Trip Blank	104	95	97	101
LCS 500-402055/5	Lab Control Sample	97	93	91	95
LCS 500-402176/5	Lab Control Sample	100	95	98	103
MB 500-402055/7	Method Blank	103	101	94	93
MB 500-402176/7	Method Blank	99	97	97	101

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

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# Surrogate Summary

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

TOL = Toluene-d8 (Surr)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

#### Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-376510/8

Matrix: Water

Analysis Batch: 376510

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.14		0.50	0.14	ug/L			09/13/17 13:12	1
1,1,1-Trichloroethane	<0.21		0.50	0.21	ug/L			09/13/17 13:12	1
1,1,2,2-Tetrachloroethane	<0.070		0.50	0.070	ug/L			09/13/17 13:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.17		0.50	0.17	ug/L			09/13/17 13:12	1
1,1,2-Trichloroethane	<0.17		0.50	0.17	ug/L			09/13/17 13:12	1
1,1-Dichloroethane	<0.18		0.50	0.18	ug/L			09/13/17 13:12	1
1,1-Dichloroethene	<0.16		0.50	0.16	ug/L			09/13/17 13:12	1
1,1-Dichloropropene	<0.063		0.50	0.063	ug/L			09/13/17 13:12	1
1,2,3-Trichlorobenzene	<0.16		0.50	0.16	ug/L			09/13/17 13:12	1
1,2,3-Trichloropropane	<0.12		0.50	0.12	ug/L			09/13/17 13:12	1
1,2,4-Trichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
1,2,4-Trimethylbenzene	<0.090		0.50	0.090	ug/L			09/13/17 13:12	1
1,2-Dichlorobenzene	<0.16		0.50	0.16	ug/L			09/13/17 13:12	1
1,2-Dichloroethane	<0.14		0.50	0.14	ug/L			09/13/17 13:12	1
1,2-Dichloropropane	<0.11		0.50	0.11	ug/L			09/13/17 13:12	1
1,3,5-Trimethylbenzene	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
1,3-Dichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
1,3-Dichloropropane	<0.15		0.50	0.15	ug/L			09/13/17 13:12	1
1,4-Dichlorobenzene	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
2,2-Dichloropropane	<0.35		0.50	0.35	ug/L			09/13/17 13:12	1
2-Butanone (MEK)	<5.0		10	5.0	ug/L			09/13/17 13:12	1
2-Chlorotoluene	<0.12		0.50	0.12	ug/L			09/13/17 13:12	1
2-Hexanone	<5.0		10	5.0	ug/L			09/13/17 13:12	1
4-Chlorotoluene	<0.15		0.50	0.15	ug/L			09/13/17 13:12	1
4-Isopropyltoluene	<0.063		0.50	0.063	ug/L			09/13/17 13:12	1
4-Methyl-2-pentanone (MIBK)	<5.0		10	5.0	ug/L			09/13/17 13:12	1
Acetone	<5.0		10	5.0	ug/L			09/13/17 13:12	1
Acrylonitrile	<2.2		10	2.2	ug/L			09/13/17 13:12	1
Allyl chloride	<0.22		0.50	0.22	ug/L			09/13/17 13:12	1
Benzene	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
Bromobenzene	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
Bromochloromethane	<0.11		0.50	0.11	ug/L			09/13/17 13:12	1
Bromoform	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
Bromomethane	<0.23		0.50	0.23	ug/L			09/13/17 13:12	1
Carbon disulfide	<0.15		0.50	0.15	ug/L			09/13/17 13:12	1
Carbon tetrachloride	<0.21		0.50	0.21	ug/L			09/13/17 13:12	1
Chlorobenzene	<0.12		0.50	0.12	ug/L			09/13/17 13:12	1
Chlorodibromomethane	<0.16		0.50	0.16	ug/L			09/13/17 13:12	1
Chloroethane	<0.20		0.50	0.20	ug/L			09/13/17 13:12	1
Chloroform	<0.14		0.50	0.14	ug/L			09/13/17 13:12	1
Chloromethane	<0.17		0.50	0.17	ug/L			09/13/17 13:12	1
cis-1,2-Dichloroethene	<0.12		0.50	0.12	ug/L			09/13/17 13:12	1
cis-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			09/13/17 13:12	1
Dibromomethane	<0.17		0.50	0.17	ug/L			09/13/17 13:12	1
Dichlorobromomethane	<0.14		0.50	0.14	ug/L			09/13/17 13:12	1
Dichlorodifluoromethane	<0.15		0.50	0.15	ug/L			09/13/17 13:12	1
Dichlorofluoromethane	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
Ethyl ether	<0.12		0.50	0.12	ug/L			09/13/17 13:12	1

TestAmerica Chicago

### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

#### Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-376510/8**  
**Matrix: Water**  
**Analysis Batch: 376510**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.11		0.50	0.11	ug/L			09/13/17 13:12	1
Hexachlorobutadiene	<0.11		0.50	0.11	ug/L			09/13/17 13:12	1
Iodomethane	<0.15		0.50	0.15	ug/L			09/13/17 13:12	1
Isopropylbenzene	<0.16		0.50	0.16	ug/L			09/13/17 13:12	1
Methyl tert-butyl ether	<0.12		0.50	0.12	ug/L			09/13/17 13:12	1
Methylene Chloride	<0.99		2.5	0.99	ug/L			09/13/17 13:12	1
m-Xylene & p-Xylene	<0.30		1.0	0.30	ug/L			09/13/17 13:12	1
Naphthalene	<0.15		0.50	0.15	ug/L			09/13/17 13:12	1
n-Butylbenzene	<0.081		0.50	0.081	ug/L			09/13/17 13:12	1
N-Propylbenzene	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
o-Xylene	<0.12		0.50	0.12	ug/L			09/13/17 13:12	1
sec-Butylbenzene	<0.068		0.50	0.068	ug/L			09/13/17 13:12	1
Styrene	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
t-Butanol	<2.5		10	2.5	ug/L			09/13/17 13:12	1
tert-Butylbenzene	<0.060		0.50	0.060	ug/L			09/13/17 13:12	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			09/13/17 13:12	1
Toluene	<0.10		0.50	0.10	ug/L			09/13/17 13:12	1
trans-1,2-Dichloroethene	<0.13		0.50	0.13	ug/L			09/13/17 13:12	1
trans-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			09/13/17 13:12	1
trans-1,4-Dichloro-2-butene	<1.3		2.5	1.3	ug/L			09/13/17 13:12	1
Trichloroethene	<0.18		0.50	0.18	ug/L			09/13/17 13:12	1
Trichlorofluoromethane	<0.19		0.50	0.19	ug/L			09/13/17 13:12	1
Trihalomethanes, Total	<1.0		2.0	1.0	ug/L			09/13/17 13:12	1
Vinyl acetate	<0.45		2.5	0.45	ug/L			09/13/17 13:12	1
Vinyl chloride	<0.18		0.50	0.18	ug/L			09/13/17 13:12	1
Xylenes, Total	<0.12		1.0	0.12	ug/L			09/13/17 13:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	98		80 - 120		09/13/17 13:12	1
4-Bromofluorobenzene (Surr)	95		80 - 120		09/13/17 13:12	1

**Lab Sample ID: LCS 480-376510/5**  
**Matrix: Water**  
**Analysis Batch: 376510**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.82		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.75		ug/L		94	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.69		ug/L		92	70 - 130
1,1,2-Trichloroethane	4.00	3.80		ug/L		95	70 - 130
1,1-Dichloroethane	4.00	3.77		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.40		ug/L		85	70 - 130
1,1-Dichloropropene	4.00	3.91		ug/L		98	70 - 130
1,2,3-Trichlorobenzene	4.00	3.59		ug/L		90	70 - 130
1,2,3-Trichloropropane	4.00	3.87		ug/L		97	70 - 130
1,2,4-Trichlorobenzene	4.00	3.57		ug/L		89	70 - 130
1,2,4-Trimethylbenzene	4.00	3.66		ug/L		91	70 - 130
1,2-Dichlorobenzene	4.00	3.71		ug/L		93	70 - 130

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## QC Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-376510/5

Matrix: Water

Analysis Batch: 376510

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	4.00	3.85		ug/L		96	70 - 130
1,2-Dichloropropane	4.00	3.67		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.75		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.82		ug/L		95	70 - 130
1,3-Dichloropropane	4.00	3.70		ug/L		93	70 - 130
1,4-Dichlorobenzene	4.00	3.82		ug/L		95	70 - 130
2,2-Dichloropropane	4.00	3.36		ug/L		84	70 - 130
2-Butanone (MEK)	20.0	18.8		ug/L		94	70 - 130
2-Chlorotoluene	4.00	3.75		ug/L		94	70 - 130
2-Hexanone	20.0	18.2		ug/L		91	70 - 130
4-Chlorotoluene	4.00	3.79		ug/L		95	70 - 130
4-Isopropyltoluene	4.00	3.64		ug/L		91	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	17.9		ug/L		89	70 - 130
Acetone	20.0	21.3		ug/L		107	70 - 130
Benzene	4.00	3.95		ug/L		99	70 - 130
Bromobenzene	4.00	3.97		ug/L		99	70 - 130
Bromochloromethane	4.00	3.93		ug/L		98	70 - 130
Bromoform	4.00	3.86		ug/L		96	70 - 130
Bromomethane	4.00	3.92		ug/L		98	70 - 130
Carbon disulfide	4.00	3.76		ug/L		94	70 - 130
Carbon tetrachloride	4.00	3.74		ug/L		94	70 - 130
Chlorobenzene	4.00	3.78		ug/L		94	70 - 130
Chlorodibromomethane	4.00	3.70		ug/L		93	70 - 130
Chloroethane	4.00	3.76		ug/L		94	70 - 130
Chloroform	4.00	3.73		ug/L		93	70 - 130
Chloromethane	4.00	4.12		ug/L		103	70 - 130
cis-1,2-Dichloroethene	4.00	3.67		ug/L		92	70 - 130
cis-1,3-Dichloropropene	4.00	3.82		ug/L		95	70 - 130
Dibromomethane	4.00	3.70		ug/L		93	70 - 130
Dichlorobromomethane	4.00	3.72		ug/L		93	70 - 130
Dichlorodifluoromethane	4.00	4.17		ug/L		104	70 - 130
Ethylbenzene	4.00	3.66		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.61		ug/L		90	70 - 130
Isopropylbenzene	4.00	3.63		ug/L		91	70 - 130
Methyl tert-butyl ether	4.00	3.75		ug/L		94	70 - 130
Methylene Chloride	4.00	4.33		ug/L		108	70 - 130
Naphthalene	4.00	3.43		ug/L		86	70 - 130
n-Butylbenzene	4.00	3.56		ug/L		89	70 - 130
N-Propylbenzene	4.00	3.77		ug/L		94	70 - 130
sec-Butylbenzene	4.00	3.67		ug/L		92	70 - 130
Styrene	4.00	3.66		ug/L		91	70 - 130
tert-Butylbenzene	4.00	3.75		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.85		ug/L		96	70 - 130
Toluene	4.00	3.72		ug/L		93	70 - 130
trans-1,2-Dichloroethene	4.00	3.70		ug/L		92	70 - 130
trans-1,3-Dichloropropene	4.00	3.69		ug/L		92	70 - 130
Trichloroethene	4.00	3.86		ug/L		96	70 - 130
Trichlorofluoromethane	4.00	4.14		ug/L		104	70 - 130

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### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

#### Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 480-376510/5**  
**Matrix: Water**  
**Analysis Batch: 376510**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	4.00	4.05		ug/L		101	70 - 130
Xylenes, Total	8.00	7.34		ug/L		92	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichlorobenzene-d4	98		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120

**Lab Sample ID: LCSD 480-376510/6**  
**Matrix: Water**  
**Analysis Batch: 376510**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.85		ug/L		96	70 - 130	1	20
1,1,1-Trichloroethane	4.00	3.93		ug/L		98	70 - 130	5	20
1,1,1,2,2-Tetrachloroethane	4.00	3.79		ug/L		95	70 - 130	3	20
1,1,2-Trichloroethane	4.00	3.84		ug/L		96	70 - 130	1	20
1,1-Dichloroethane	4.00	3.79		ug/L		95	70 - 130	0	20
1,1-Dichloroethene	4.00	3.55		ug/L		89	70 - 130	4	20
1,1-Dichloropropene	4.00	4.02		ug/L		101	70 - 130	3	20
1,2,3-Trichlorobenzene	4.00	3.68		ug/L		92	70 - 130	2	20
1,2,3-Trichloropropane	4.00	3.95		ug/L		99	70 - 130	2	20
1,2,4-Trichlorobenzene	4.00	3.67		ug/L		92	70 - 130	3	20
1,2,4-Trimethylbenzene	4.00	3.81		ug/L		95	70 - 130	4	20
1,2-Dichlorobenzene	4.00	3.93		ug/L		98	70 - 130	6	20
1,2-Dichloroethane	4.00	3.93		ug/L		98	70 - 130	2	20
1,2-Dichloropropane	4.00	3.80		ug/L		95	70 - 130	3	20
1,3,5-Trimethylbenzene	4.00	3.96		ug/L		99	70 - 130	6	20
1,3-Dichlorobenzene	4.00	3.97		ug/L		99	70 - 130	4	20
1,3-Dichloropropane	4.00	3.80		ug/L		95	70 - 130	3	20
1,4-Dichlorobenzene	4.00	4.01		ug/L		100	70 - 130	5	20
2,2-Dichloropropane	4.00	3.55		ug/L		89	70 - 130	5	20
2-Butanone (MEK)	20.0	18.8		ug/L		94	70 - 130	0	20
2-Chlorotoluene	4.00	3.99		ug/L		100	70 - 130	6	20
2-Hexanone	20.0	18.3		ug/L		91	70 - 130	0	20
4-Chlorotoluene	4.00	4.01		ug/L		100	70 - 130	6	20
4-Isopropyltoluene	4.00	3.85		ug/L		96	70 - 130	6	20
4-Methyl-2-pentanone (MIBK)	20.0	17.7		ug/L		88	70 - 130	1	20
Acetone	20.0	20.6		ug/L		103	70 - 130	3	20
Benzene	4.00	3.98		ug/L		100	70 - 130	1	20
Bromobenzene	4.00	4.19		ug/L		105	70 - 130	5	20
Bromochloromethane	4.00	3.99		ug/L		100	70 - 130	1	20
Bromoform	4.00	3.92		ug/L		98	70 - 130	2	20
Bromomethane	4.00	4.30		ug/L		107	70 - 130	9	20
Carbon disulfide	4.00	3.83		ug/L		96	70 - 130	2	20
Carbon tetrachloride	4.00	3.90		ug/L		98	70 - 130	4	20
Chlorobenzene	4.00	3.86		ug/L		97	70 - 130	2	20
Chlorodibromomethane	4.00	3.80		ug/L		95	70 - 130	3	20
Chloroethane	4.00	3.77		ug/L		94	70 - 130	0	20

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### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

#### Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-376510/6  
 Matrix: Water  
 Analysis Batch: 376510

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform	4.00	3.85		ug/L		96	70 - 130	3	20
Chloromethane	4.00	4.20		ug/L		105	70 - 130	2	20
cis-1,2-Dichloroethene	4.00	3.75		ug/L		94	70 - 130	2	20
cis-1,3-Dichloropropene	4.00	3.85		ug/L		96	70 - 130	1	20
Dibromomethane	4.00	3.73		ug/L		93	70 - 130	1	20
Dichlorobromomethane	4.00	3.73		ug/L		93	70 - 130	0	20
Dichlorodifluoromethane	4.00	4.27		ug/L		107	70 - 130	2	20
Ethylbenzene	4.00	3.77		ug/L		94	70 - 130	3	20
Hexachlorobutadiene	4.00	3.81		ug/L		95	70 - 130	6	20
Isopropylbenzene	4.00	3.81		ug/L		95	70 - 130	5	20
Methyl tert-butyl ether	4.00	3.84		ug/L		96	70 - 130	2	20
Methylene Chloride	4.00	4.15		ug/L		104	70 - 130	4	20
Naphthalene	4.00	3.55		ug/L		89	70 - 130	3	20
n-Butylbenzene	4.00	3.74		ug/L		93	70 - 130	5	20
N-Propylbenzene	4.00	4.00		ug/L		100	70 - 130	6	20
sec-Butylbenzene	4.00	3.85		ug/L		96	70 - 130	5	20
Styrene	4.00	3.74		ug/L		93	70 - 130	2	20
tert-Butylbenzene	4.00	3.96		ug/L		99	70 - 130	6	20
Tetrachloroethene	4.00	4.03		ug/L		101	70 - 130	4	20
Toluene	4.00	3.71		ug/L		93	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.87		ug/L		97	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.78		ug/L		95	70 - 130	3	20
Trichloroethene	4.00	4.03		ug/L		101	70 - 130	4	20
Trichlorofluoromethane	4.00	4.28		ug/L		107	70 - 130	3	20
Vinyl chloride	4.00	4.19		ug/L		105	70 - 130	3	20
Xylenes, Total	8.00	7.64		ug/L		96	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichlorobenzene-d4	99		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120

Lab Sample ID: LLCS 480-376510/7  
 Matrix: Water  
 Analysis Batch: 376510

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.500	0.505		ug/L		101	50 - 150
1,1,1-Trichloroethane	0.500	0.516		ug/L		103	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.506		ug/L		101	50 - 150
1,1,2-Trichloroethane	0.500	0.528		ug/L		106	50 - 150
1,1-Dichloroethane	0.500	0.541		ug/L		108	50 - 150
1,1-Dichloroethene	0.500	0.516		ug/L		103	50 - 150
1,1-Dichloropropene	0.500	0.583		ug/L		117	50 - 150
1,2,3-Trichlorobenzene	0.500	0.500		ug/L		100	50 - 150
1,2,3-Trichloropropane	0.500	0.557		ug/L		111	50 - 150
1,2,4-Trichlorobenzene	0.500	0.476	J	ug/L		95	50 - 150
1,2,4-Trimethylbenzene	0.500	0.503		ug/L		101	50 - 150
1,2-Dichlorobenzene	0.500	0.544		ug/L		109	50 - 150

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## QC Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LLCS 480-376510/7

Matrix: Water

Analysis Batch: 376510

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	0.500	0.548		ug/L		110	50 - 150
1,2-Dichloropropane	0.500	0.521		ug/L		104	50 - 150
1,3,5-Trimethylbenzene	0.500	0.501		ug/L		100	50 - 150
1,3-Dichlorobenzene	0.500	0.539		ug/L		108	50 - 150
1,3-Dichloropropane	0.500	0.510		ug/L		102	50 - 150
1,4-Dichlorobenzene	0.500	0.534		ug/L		107	50 - 150
2,2-Dichloropropane	0.500	0.477	J	ug/L		95	50 - 150
2-Butanone (MEK)	2.50	<5.0		ug/L		118	50 - 150
2-Chlorotoluene	0.500	0.561		ug/L		112	50 - 150
2-Hexanone	2.50	<5.0		ug/L		106	50 - 150
4-Chlorotoluene	0.500	0.544		ug/L		109	50 - 150
4-Isopropyltoluene	0.500	0.508		ug/L		102	50 - 150
4-Methyl-2-pentanone (MIBK)	2.50	<5.0		ug/L		106	50 - 150
Acetone	2.50	<5.0		ug/L		133	50 - 150
Benzene	0.500	0.555		ug/L		111	50 - 150
Bromobenzene	0.500	0.535		ug/L		107	50 - 150
Bromochloromethane	0.500	0.550		ug/L		110	50 - 150
Bromoform	0.500	0.492	J	ug/L		98	50 - 150
Bromomethane	0.500	0.433	J	ug/L		87	50 - 150
Carbon disulfide	0.500	0.558		ug/L		112	50 - 150
Carbon tetrachloride	0.500	0.534		ug/L		107	50 - 150
Chlorobenzene	0.500	0.535		ug/L		107	50 - 150
Chlorodibromomethane	0.500	0.485	J	ug/L		97	50 - 150
Chloroethane	0.500	0.505		ug/L		101	50 - 150
Chloroform	0.500	0.585		ug/L		117	50 - 150
Chloromethane	0.500	0.583		ug/L		117	50 - 150
cis-1,2-Dichloroethene	0.500	0.531		ug/L		106	50 - 150
cis-1,3-Dichloropropene	0.500	0.507		ug/L		101	50 - 150
Dibromomethane	0.500	0.502		ug/L		100	50 - 150
Dichlorobromomethane	0.500	0.513		ug/L		103	50 - 150
Dichlorodifluoromethane	0.500	0.511		ug/L		102	50 - 150
Ethylbenzene	0.500	0.518		ug/L		104	50 - 150
Hexachlorobutadiene	0.500	0.508		ug/L		102	50 - 150
Isopropylbenzene	0.500	0.508		ug/L		102	50 - 150
Methyl tert-butyl ether	0.500	0.520		ug/L		104	50 - 150
Methylene Chloride	0.500	<0.99	*	ug/L		195	50 - 150
Naphthalene	0.500	0.504		ug/L		101	50 - 150
n-Butylbenzene	0.500	0.491	J	ug/L		98	50 - 150
N-Propylbenzene	0.500	0.545		ug/L		109	50 - 150
sec-Butylbenzene	0.500	0.489	J	ug/L		98	50 - 150
Styrene	0.500	0.518		ug/L		104	50 - 150
tert-Butylbenzene	0.500	0.502		ug/L		100	50 - 150
Tetrachloroethene	0.500	0.534		ug/L		107	50 - 150
Toluene	0.500	0.557		ug/L		111	50 - 150
trans-1,2-Dichloroethene	0.500	0.567		ug/L		113	50 - 150
trans-1,3-Dichloropropene	0.500	0.491	J	ug/L		98	50 - 150
Trichloroethene	0.500	0.552		ug/L		110	50 - 150
Trichlorofluoromethane	0.500	0.496	J	ug/L		99	50 - 150

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### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

#### Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LLCS 480-376510/7  
 Matrix: Water  
 Analysis Batch: 376510

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	0.500	0.554		ug/L		111	50 - 150
Xylenes, Total	1.00	1.06		ug/L		106	50 - 150

Surrogate	LLCS %Recovery	LLCS Qualifier	Limits
1,2-Dichlorobenzene-d4	94		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120

#### Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-402055/7  
 Matrix: Water  
 Analysis Batch: 402055

Client Sample ID: Method Blank  
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/20/17 14:01	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			09/20/17 14:01	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/20/17 14:01	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/20/17 14:01	1
Benzene	<0.15		0.50	0.15	ug/L			09/20/17 14:01	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/20/17 14:01	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/20/17 14:01	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/20/17 14:01	1
Toluene	<0.15		0.50	0.15	ug/L			09/20/17 14:01	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/20/17 14:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		09/20/17 14:01	1
4-Bromofluorobenzene (Surr)	101		72 - 124		09/20/17 14:01	1
Dibromofluoromethane	94		75 - 120		09/20/17 14:01	1
Toluene-d8 (Surr)	93		75 - 120		09/20/17 14:01	1

Lab Sample ID: LCS 500-402055/5  
 Matrix: Water  
 Analysis Batch: 402055

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	50.0	43.4		ug/L		87	70 - 123
1,2-Dibromoethane (EDB)	50.0	43.3		ug/L		87	70 - 125
1,2-Dichloroethane	50.0	49.0		ug/L		98	68 - 127
1,3,5-Trimethylbenzene	50.0	45.1		ug/L		90	70 - 123
Benzene	50.0	45.5		ug/L		91	70 - 120
Ethylbenzene	50.0	43.7		ug/L		87	70 - 120
Methyl tert-butyl ether	50.0	42.8		ug/L		86	70 - 120
Naphthalene	50.0	40.2		ug/L		80	59 - 130
Toluene	50.0	47.1		ug/L		94	70 - 125
Xylenes, Total	100	90.8		ug/L		91	70 - 125

### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

#### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 500-402055/5**  
**Matrix: Water**  
**Analysis Batch: 402055**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		75 - 126
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane	91		75 - 120
Toluene-d8 (Surr)	95		75 - 120

**Lab Sample ID: 500-133876-1 MS**  
**Matrix: Water**  
**Analysis Batch: 402055**

**Client Sample ID: MW-1A**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	<0.36		50.0	44.0		ug/L		88	70 - 123
1,2-Dichloroethane	<0.39		50.0	54.0		ug/L		108	68 - 127
1,3,5-Trimethylbenzene	<0.25		50.0	44.9		ug/L		90	70 - 123
Benzene	6.0		50.0	52.4		ug/L		93	70 - 120
Ethylbenzene	<0.18		50.0	43.2		ug/L		86	70 - 120
Methyl tert-butyl ether	<0.39		50.0	44.1		ug/L		88	70 - 120
Naphthalene	<0.34		50.0	42.9		ug/L		86	59 - 130
Toluene	<0.15		50.0	47.3		ug/L		95	70 - 125
Xylenes, Total	<0.22		100	91.6		ug/L		92	70 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		75 - 126
4-Bromofluorobenzene (Surr)	91		72 - 124
Dibromofluoromethane	95		75 - 120
Toluene-d8 (Surr)	95		75 - 120

**Lab Sample ID: 500-133876-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 402055**

**Client Sample ID: MW-1A**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	<0.36		50.0	46.1		ug/L		92	70 - 123	5	20
1,2-Dichloroethane	<0.39		50.0	54.6		ug/L		109	68 - 127	1	20
1,3,5-Trimethylbenzene	<0.25		50.0	47.0		ug/L		94	70 - 123	5	20
Benzene	6.0		50.0	54.2		ug/L		96	70 - 120	3	20
Ethylbenzene	<0.18		50.0	45.3		ug/L		91	70 - 120	5	20
Methyl tert-butyl ether	<0.39		50.0	44.4		ug/L		89	70 - 120	1	20
Naphthalene	<0.34		50.0	42.9		ug/L		86	59 - 130	0	20
Toluene	<0.15		50.0	49.3		ug/L		99	70 - 125	4	20
Xylenes, Total	<0.22		100	94.2		ug/L		94	70 - 125	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		75 - 126
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane	93		75 - 120
Toluene-d8 (Surr)	95		75 - 120

### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

#### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-402176/7

Matrix: Water

Analysis Batch: 402176

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/21/17 10:40	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			09/21/17 10:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/21/17 10:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/21/17 10:40	1
Benzene	<0.15		0.50	0.15	ug/L			09/21/17 10:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/21/17 10:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/21/17 10:40	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/21/17 10:40	1
Toluene	<0.15		0.50	0.15	ug/L			09/21/17 10:40	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/21/17 10:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		75 - 126		09/21/17 10:40	1
4-Bromofluorobenzene (Surr)	97		72 - 124		09/21/17 10:40	1
Dibromofluoromethane	97		75 - 120		09/21/17 10:40	1
Toluene-d8 (Surr)	101		75 - 120		09/21/17 10:40	1

Lab Sample ID: LCS 500-402176/5

Matrix: Water

Analysis Batch: 402176

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	50.0	44.1		ug/L		88	70 - 123
1,2-Dibromoethane (EDB)	50.0	46.9		ug/L		94	70 - 125
1,2-Dichloroethane	50.0	47.5		ug/L		95	68 - 127
1,3,5-Trimethylbenzene	50.0	44.9		ug/L		90	70 - 123
Benzene	50.0	43.6		ug/L		87	70 - 120
Ethylbenzene	50.0	45.8		ug/L		92	70 - 120
Methyl tert-butyl ether	50.0	49.2		ug/L		98	70 - 120
Naphthalene	50.0	46.0		ug/L		92	59 - 130
Toluene	50.0	45.0		ug/L		90	70 - 125
Xylenes, Total	100	90.6		ug/L		91	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		75 - 126
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane	98		75 - 120
Toluene-d8 (Surr)	103		75 - 120

## Lab Chronicle

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

**Client Sample ID: MW-1A**

Date Collected: 09/08/17 12:00

Date Received: 09/12/17 10:15

**Lab Sample ID: 500-133876-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402055	09/20/17 14:26	DJD	TAL CHI

**Client Sample ID: MW-3**

Date Collected: 09/08/17 10:45

Date Received: 09/12/17 10:15

**Lab Sample ID: 500-133876-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402055	09/20/17 14:51	DJD	TAL CHI

**Client Sample ID: MW-3A**

Date Collected: 09/08/17 16:15

Date Received: 09/12/17 10:15

**Lab Sample ID: 500-133876-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	402055	09/20/17 21:04	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	200	402055	09/20/17 21:28	DJD	TAL CHI

**Client Sample ID: MW-4A**

Date Collected: 09/08/17 14:30

Date Received: 09/12/17 10:15

**Lab Sample ID: 500-133876-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	402055	09/20/17 15:15	DJD	TAL CHI

**Client Sample ID: MW-4R**

Date Collected: 09/08/17 16:00

Date Received: 09/12/17 10:15

**Lab Sample ID: 500-133876-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	402055	09/20/17 15:41	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	50	402055	09/20/17 16:06	DJD	TAL CHI

**Client Sample ID: MW-5**

Date Collected: 09/08/17 14:00

Date Received: 09/12/17 10:15

**Lab Sample ID: 500-133876-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402055	09/20/17 16:31	DJD	TAL CHI

## Lab Chronicle

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

**Client Sample ID: MW-5A****Date Collected: 09/08/17 14:15****Date Received: 09/12/17 10:15****Lab Sample ID: 500-133876-7****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5	402055	09/20/17 16:56	DJD	TAL CHI
Total/NA	Analysis	8260B		1	402176	09/21/17 12:00	PMF	TAL CHI

**Client Sample ID: MW-6****Date Collected: 09/08/17 11:45****Date Received: 09/12/17 10:15****Lab Sample ID: 500-133876-8****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402055	09/20/17 17:46	DJD	TAL CHI

**Client Sample ID: MW-6A****Date Collected: 09/08/17 12:45****Date Received: 09/12/17 10:15****Lab Sample ID: 500-133876-9****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402055	09/20/17 18:10	DJD	TAL CHI

**Client Sample ID: PZ-7****Date Collected: 09/08/17 11:30****Date Received: 09/12/17 10:15****Lab Sample ID: 500-133876-12****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402055	09/20/17 18:35	DJD	TAL CHI

**Client Sample ID: MW-9****Date Collected: 09/08/17 10:30****Date Received: 09/12/17 10:15****Lab Sample ID: 500-133876-13****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402055	09/20/17 19:00	DJD	TAL CHI

**Client Sample ID: MW-10****Date Collected: 09/08/17 16:30****Date Received: 09/12/17 10:15****Lab Sample ID: 500-133876-14****Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	402055	09/20/17 19:25	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	50	402055	09/20/17 19:49	DJD	TAL CHI

TestAmerica Chicago



# Lab Chronicle

Client: American Engineering Testing Inc.  
 Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

**Client Sample ID: MW-E**  
**Date Collected: 09/08/17 13:30**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-15**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402055	09/20/17 20:14	DJD	TAL CHI

**Client Sample ID: MW-W**  
**Date Collected: 09/08/17 13:45**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-16**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402055	09/20/17 20:39	DJD	TAL CHI

**Client Sample ID: CMW-1**  
**Date Collected: 09/08/17 12:20**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-17**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402176	09/21/17 11:34	PMF	TAL CHI

**Client Sample ID: PW-1**  
**Date Collected: 09/08/17 15:15**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-18**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	376510	09/13/17 17:52	CDC	TAL BUF

**Client Sample ID: PW-4**  
**Date Collected: 09/08/17 15:30**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-19**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	376510	09/13/17 18:19	CDC	TAL BUF

**Client Sample ID: PW-5**  
**Date Collected: 09/08/17 15:00**  
**Date Received: 09/12/17 10:15**

**Lab Sample ID: 500-133876-20**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	376510	09/13/17 18:46	CDC	TAL BUF

# Lab Chronicle

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

**Client Sample ID: Strey Well**

**Lab Sample ID: 500-133876-21**

**Date Collected: 09/08/17 15:45**

**Matrix: Water**

**Date Received: 09/12/17 10:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	376510	09/13/17 19:12	CDC	TAL BUF

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-133876-22**

**Date Collected: 09/08/17 00:00**

**Matrix: Water**

**Date Received: 09/12/17 10:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	402176	09/21/17 11:07	PMF	TAL CHI

**Laboratory References:**

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: American Engineering Testing Inc.  
Project/Site: Darri Concepts - 03-05510

TestAmerica Job ID: 500-133876-1

## Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18

## Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998310390	08-31-18

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# 18174003

## Chain of Custody Record

Lab Job #: 500-133876  
 Chain of Custody Number: \_\_\_\_\_  
 Page 1 of 34  
 Temperature °C of Cooler: 5.4

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
AET		03-05510		1 1		PVOC+120CA + naphthalene		PVOC+120CA + naphthalene + EDB		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		Sampling		# of Containers		Matrix		Comments	
Danni Concepts				Date Time							
Project Location/State		Lab PM		Date		Time		# of Containers		Matrix	
Chili, WI		Sandie F.		9-8-17							
Sampler		Lab PM		Date		Time		# of Containers		Matrix	
Michael K. Neal		Sandie F.									
Lab ID	MS/MSD	Sample ID		Date		Time		# of Containers		Matrix	
1		MW-1A		9-8-17		12:00		3 W		X	
2		MW-3		9-8-17		10:45		3 W		X	
3		MW-3A		9-8-17		16:15		3 W		X	
4		MW-4A		9-8-17		14:30		3 W		X	
5		MW-4R		9-8-17		16:00		3 W		X	
6		MW-5		9-8-17		14:00		3 W		X	
7		MW-5A		9-8-17		14:15		3 W		X	
8		MW-6		9-8-17		11:45		3 W		X	
9		MW-6A		9-8-17		12:45		3 W		X	
10		MW-7		9-8-17		11:00		3 W		X	

Turnaround Time Required (Business Days)

\_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days \_\_\_ 10 Days  15 Days \_\_\_ Other

Sample Disposal

Return to Client  Disposal by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Requested Due Date

Relinquished By <i>[Signature]</i>	Company AET	Date 9-11-17	Time 14:30	Received By Fed +	Company TA	Date 09/12/17	Time 1015
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: \_\_\_\_\_  
 Shipped: \_\_\_\_\_  
 Hand Delivered: \_\_\_\_\_

Matrix Key

- WW - Wastewater
- W - Water
- S - Soil
- SL - Sludge
- MS - Miscellaneous
- OL - Oil
- A - Air
- SE - Sediment
- SO - Soil
- L - Leachate
- WI - Wipe
- DW - Drinking Water
- O - Other

Client Comments

PELFA

Lab Comments:



500-133876 COC

Report To \_\_\_\_\_ (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To \_\_\_\_\_ (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# 18174003

Lab Job #: 500-133876  
 Chain of Custody Number: \_\_\_\_\_  
 Page 2 of 3  
 Temperature °C of Cooler: 5.4

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM		
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix			Comments	
AET		03-05510		1		PVC + 12 DCA + Naphthalene		VOLS 5221.2		
Darrri Concepts		Chili, WI				Michael K. Neal		Sandra F.		
11		MW-7A	9-8-17	13:00	3	W	X			
12		P2-7		11:30	3	W	X			
13		MW-9		10:30	3	W	X			
14		MW-10		16:30	3	W	X			
15		MW-E		13:30	3	W	X			
16		MW-W		13:45	3	W	X			
17		CMW-1		12:20	3	W	X			
18		PW-1		15:15	3	DW		X		
19		PW-4		15:30	3	DW		X		
20										

Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days \_\_\_ 10 Days X 15 Days \_\_\_ Other  
 Requested Due Date \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: AET Date: 9-11-17 Time: 14:30	Received By: <u>[Signature]</u> Company: Fed X Date: _____ Time: _____	Lab Courier: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: <u>[Signature]</u> Company: TA Date: 09/12/17 Time: 1015	Shipped: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: _____

- Matrix Key
- WW - Wastewater
  - W - Water
  - S - Soil
  - SL - Sludge
  - MS - Miscellaneous
  - OL - Oil
  - A - Air
  - SE - Sediment
  - SO - Soil
  - L - Leachate
  - WI - Wipe
  - DW - Drinking Water
  - O - Other

Client Comments  
PECTFA

Lab Comments:

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional) \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional) \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# 18174003

## Chain of Custody Record

Lab Job #: 500-133876  
 Chain of Custody Number: \_\_\_\_\_  
 Page 3 of 3  
 Temperature °C of Cooler: 5.4

Client		Client Project #		Preservative		Parameter		Comments	
AET		03-05510		1				Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name		Lab Project #		# of Containers		Matrix			
Dart Concepts				3		VOCs 524.2 Proc + NIGHT by logz			
Project Location/State		Lab PM		Date		Time			
Chili, WI		Sandre F.		9-8-17		15:00			
Sampler		Sample ID		Date		Time			
Michael K. Neal		PW-5		9-8-17		15:00		3 DW X	
Lab ID		Sample ID		Date		Time			
20		PW-5		9-8-17		15:00		3 DW X	
21		Strey Well		9-8-17		15:45		3 DW X	
22		Trip Blnk		9-8-17		-		1 W X	

Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days \_\_\_ 10 Days  15 Days \_\_\_ Other  
 Requested Due Date \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <i>[Signature]</i> Company: AET Date: 9-11-17 Time: 17:30	Received By <i>[Signature]</i> Company: TA Date: 09/12/17 Time: 10:15	Lab Courier
Relinquished By	Received By	Shipped
Relinquished By	Received By	Hand Delivered

- Matrix Key
- WW - Wastewater
  - W - Water
  - S - Soil
  - SL - Sludge
  - MS - Miscellaneous
  - OL - Oil
  - A - Air
  - SE - Sediment
  - SO - Soil
  - L - Leachate
  - WI - Wipe
  - DW - Drinking Water
  - O - Other

Client Comments  
PELFA

Lab Comments:



500-133876 Waybill

ORIGIN ID: JOTA (708) 534-5200  
MICHAEL NEAL  
AMERICAN ENGINEERING TESTING INC.  
1837 CTY HWY 00

SHIP DATE: 15AUG17  
ACTWTG: 25.00 LB MAN  
CAD: 33264/CAFE3107

CHIPPEWA FALLS, WI 54729  
UNITED STATES US

TO **SAMPLE LOGIN**  
**TESTAMERICA LABS**  
**2417 BOND ST**

**UNIVERSITY PARK IL 60466**

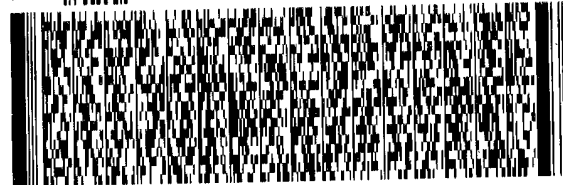
(708) 534-5200

REF:

INV:

DEPT:

RMA: ||| |||||



**FedEx**  
Express

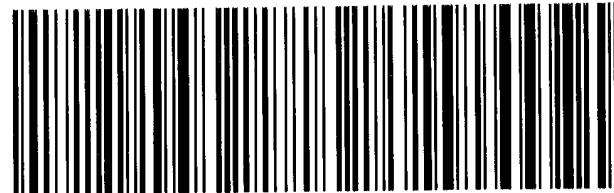


**FedEx**  
TRK# 6514 8437 9698  
0221

**TUE - 12 SEP 10:30A**  
**PRIORITY OVERNIGHT**

**NA JOTA**

60466  
IL-US ORD



#208109 09/11 549J1/FF19/104C

546CL/577E/53C1

RT **519**  
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**TestAmerica Chicago**

2417 Bond Street  
 University Park, IL 60484  
 Phone (708) 534-5200 Fax (708) 534-5211

**Chain of Custody Record**



**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

AET Project No. 03-05510

<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab PM:		Carrier Tracking No(s):		COC No:					
Client Contact: Shipping/Receiving		Phone:		E-Mail: sandie.fredrick@testamericainc.com		State of Origin: Wisconsin		Page: Page 1 of 1					
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Wisconsin		Job #: 500-133876-1									
Address: 10 Hazelwood Drive,		Due Date Requested: 9/22/2017		<b>Analysis Requested</b>						<b>Preservation Codes:</b>			
City: Amherst		TAT Requested (days):											
State, Zip: NY, 14228-2298		PO #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		524.2_Preserved/ Standard Analyte list		Total Number of containers		A - HCL                      M - Hexane B - NaOH                    N - None C - Zn Acetate              O - AsNaO2 D - Nitric Acid              P - Na2O4S E - NaHSO4                  Q - Na2SO3 F - MeOH                      R - Na2S2O3 G - Amchlor                  S - H2SO4 H - Ascorbic Acid            T - TSP Dodecahydrate I - Ice                            U - Acetone J - DI Water                  V - MCAA K - EDTA                      W - pH 4-5 L - EDA                        Z - other (specify)	
Phone: 716-691-2600(Tel) 716-691-7991(Fax)		WO #:											
Email:		Project #: 50007204		Preservation Code:		Special Instructions/Note:							
Project Name: Darrt Concepts - 03-05510		SSOW#:											
Site:													

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

<b>Possible Hazard Identification</b>		<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>	
Unconfirmed		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2	
		Special Instructions/QC Requirements:	

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date/Time: 09/12/17 @ 1600		Company: TA		Received by: <i>[Signature]</i>	
Relinquished by:		Date/Time:		Company:		Received by:	
Relinquished by:		Date/Time:		Company:		Received by:	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #1 4.2
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9/21/2017

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## Login Sample Receipt Checklist

Client: American Engineering Testing Inc.

Job Number: 500-133876-1

**Login Number: 133876****List Source: TestAmerica Chicago****List Number: 1****Creator: Kelsey, Shawn M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.4c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Refer to Job Narrative for details.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: American Engineering Testing Inc.

Job Number: 500-133876-1

**Login Number: 133876****List Number: 2****Creator: Hulbert, Michael J****List Source: TestAmerica Buffalo****List Creation: 09/13/17 04:39 PM**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2 #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-138118-1

Client Project/Site: Dairi Concepts - 03-05510

For:

American Engineering Testing Inc.

1837 Cty Hwy OO

Chippewa Falls, Wisconsin 54729

Attn: Mr. Michael Neal



Authorized for release by:

12/19/2017 4:13:14 PM

Sandie Fredrick, Project Manager II

(920)261-1660

[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

**REVIEWED**

**By mneal at 7:35 am, Dec 20, 2017**

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



LINKS

Review your project results through **TotalAccess**

Have a Question?



Visit us at: [www.testamericainc.com](http://www.testamericainc.com)

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# Case Narrative

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

**Job ID: 500-138118-1**

**Laboratory: TestAmerica Chicago**

**Narrative**

**Job Narrative  
500-138118-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 12/5/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

**GC/MS VOA**

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-3A (500-138118-2), MW-4R (500-138118-3), MW-5A (500-138118-5) and MW-10 (500-138118-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



# Detection Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

## Client Sample ID: MW-1A

Lab Sample ID: 500-138118-1

No Detections.

## Client Sample ID: MW-3A

Lab Sample ID: 500-138118-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1700		10	2.9	ug/L	20		8260B	Total/NA
Naphthalene	1700		20	6.7	ug/L	20		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	8100		200	72	ug/L	200		8260B	Total/NA
1,3,5-Trimethylbenzene - DL	2800		200	51	ug/L	200		8260B	Total/NA
Ethylbenzene - DL	3600		100	37	ug/L	200		8260B	Total/NA
Toluene - DL	11000		100	30	ug/L	200		8260B	Total/NA
Xylenes, Total - DL	17000		200	44	ug/L	200		8260B	Total/NA

## Client Sample ID: MW-4R

Lab Sample ID: 500-138118-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1300		10	3.6	ug/L	10		8260B	Total/NA
1,2-Dichloroethane	22		10	3.9	ug/L	10		8260B	Total/NA
1,3,5-Trimethylbenzene	380		10	2.5	ug/L	10		8260B	Total/NA
Benzene	450		5.0	1.5	ug/L	10		8260B	Total/NA
Ethylbenzene	1200		5.0	1.8	ug/L	10		8260B	Total/NA
Naphthalene	320		10	3.4	ug/L	10		8260B	Total/NA
Toluene	1700		5.0	1.5	ug/L	10		8260B	Total/NA
Xylenes, Total	4300		100	22	ug/L	100		8260B	Total/NA

## Client Sample ID: MW-4A

Lab Sample ID: 500-138118-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	22		1.0	0.36	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	4.0		1.0	0.25	ug/L	1		8260B	Total/NA
Benzene	180		0.50	0.15	ug/L	1		8260B	Total/NA
Ethylbenzene	66		0.50	0.18	ug/L	1		8260B	Total/NA
Naphthalene	12		1.0	0.34	ug/L	1		8260B	Total/NA
Toluene	5.9		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	57		1.0	0.22	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-5A

Lab Sample ID: 500-138118-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	250		2.0	0.51	ug/L	2		8260B	Total/NA
Benzene	46		1.0	0.29	ug/L	2		8260B	Total/NA
Naphthalene	200		2.0	0.67	ug/L	2		8260B	Total/NA
Toluene	84		1.0	0.30	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	690		20	7.2	ug/L	20		8260B	Total/NA
Ethylbenzene - DL	470		10	3.7	ug/L	20		8260B	Total/NA
Xylenes, Total - DL	920		20	4.4	ug/L	20		8260B	Total/NA

## Client Sample ID: MW-7

Lab Sample ID: 500-138118-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.73	J	1.0	0.39	ug/L	1		8260B	Total/NA
Naphthalene	0.58	J	1.0	0.34	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

### Client Sample ID: MW-7 (Continued)

Lab Sample ID: 500-138118-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.17	J	0.50	0.15	ug/L	1		8260B	Total/NA

### Client Sample ID: MW-10

Lab Sample ID: 500-138118-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	890		10	2.5	ug/L	10		8260B	Total/NA
Benzene	210		5.0	1.5	ug/L	10		8260B	Total/NA
Ethylbenzene	1200		5.0	1.8	ug/L	10		8260B	Total/NA
Naphthalene	540		10	3.4	ug/L	10		8260B	Total/NA
Toluene	1000		5.0	1.5	ug/L	10		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	2300		100	36	ug/L	100		8260B	Total/NA
Xylenes, Total - DL	3600		100	22	ug/L	100		8260B	Total/NA

### Client Sample ID: Trip Blank

Lab Sample ID: 500-138118-8

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Method Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

---

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

---

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200





# Sample Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-138118-1	MW-1A	Water	12/04/17 10:15	12/05/17 09:30
500-138118-2	MW-3A	Water	12/04/17 12:00	12/05/17 09:30
500-138118-3	MW-4R	Water	12/04/17 11:45	12/05/17 09:30
500-138118-4	MW-4A	Water	12/04/17 11:15	12/05/17 09:30
500-138118-5	MW-5A	Water	12/04/17 10:45	12/05/17 09:30
500-138118-6	MW-7	Water	12/04/17 09:45	12/05/17 09:30
500-138118-7	MW-10	Water	12/04/17 12:30	12/05/17 09:30
500-138118-8	Trip Blank	Water	12/04/17 00:00	12/05/17 09:30

# Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

**Client Sample ID: MW-1A**  
**Date Collected: 12/04/17 10:15**  
**Date Received: 12/05/17 09:30**

**Lab Sample ID: 500-138118-1**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/17/17 13:32	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/17/17 13:32	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/17/17 13:32	1
Benzene	<0.15		0.50	0.15	ug/L			12/17/17 13:32	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/17/17 13:32	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/17/17 13:32	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/17/17 13:32	1
Toluene	<0.15		0.50	0.15	ug/L			12/17/17 13:32	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/17/17 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		12/17/17 13:32	1
4-Bromofluorobenzene (Surr)	87		72 - 124		12/17/17 13:32	1
Dibromofluoromethane	99		75 - 120		12/17/17 13:32	1
Toluene-d8 (Surr)	97		75 - 120		12/17/17 13:32	1

**Client Sample ID: MW-3A**  
**Date Collected: 12/04/17 12:00**  
**Date Received: 12/05/17 09:30**

**Lab Sample ID: 500-138118-2**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<7.8		20	7.8	ug/L			12/18/17 11:36	20
<b>Benzene</b>	<b>1700</b>		10	2.9	ug/L			12/18/17 11:36	20
Methyl tert-butyl ether	<7.9		20	7.9	ug/L			12/18/17 11:36	20
<b>Naphthalene</b>	<b>1700</b>		20	6.7	ug/L			12/18/17 11:36	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 126		12/18/17 11:36	20
4-Bromofluorobenzene (Surr)	93		72 - 124		12/18/17 11:36	20
Dibromofluoromethane	95		75 - 120		12/18/17 11:36	20
Toluene-d8 (Surr)	107		75 - 120		12/18/17 11:36	20

**Method: 8260B - Volatile Organic Compounds (GC/MS) - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>8100</b>		200	72	ug/L			12/17/17 15:30	200
<b>1,3,5-Trimethylbenzene</b>	<b>2800</b>		200	51	ug/L			12/17/17 15:30	200
<b>Ethylbenzene</b>	<b>3600</b>		100	37	ug/L			12/17/17 15:30	200
<b>Toluene</b>	<b>11000</b>		100	30	ug/L			12/17/17 15:30	200
<b>Xylenes, Total</b>	<b>17000</b>		200	44	ug/L			12/17/17 15:30	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		12/17/17 15:30	200
4-Bromofluorobenzene (Surr)	89		72 - 124		12/17/17 15:30	200
Dibromofluoromethane	99		75 - 120		12/17/17 15:30	200
Toluene-d8 (Surr)	97		75 - 120		12/17/17 15:30	200

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Dairy Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

Client Sample ID: MW-4R

Lab Sample ID: 500-138118-3

Date Collected: 12/04/17 11:45

Matrix: Water

Date Received: 12/05/17 09:30

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1300		10	3.6	ug/L			12/17/17 15:56	10
1,2-Dichloroethane	22		10	3.9	ug/L			12/17/17 15:56	10
1,3,5-Trimethylbenzene	380		10	2.5	ug/L			12/17/17 15:56	10
Benzene	450		5.0	1.5	ug/L			12/17/17 15:56	10
Ethylbenzene	1200		5.0	1.8	ug/L			12/17/17 15:56	10
Methyl tert-butyl ether	<3.9		10	3.9	ug/L			12/17/17 15:56	10
Naphthalene	320		10	3.4	ug/L			12/17/17 15:56	10
Toluene	1700		5.0	1.5	ug/L			12/17/17 15:56	10
Xylenes, Total	4300		100	22	ug/L			12/17/17 16:24	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		12/17/17 15:56	10
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		12/17/17 16:24	100
4-Bromofluorobenzene (Surr)	89		72 - 124		12/17/17 15:56	10
4-Bromofluorobenzene (Surr)	88		72 - 124		12/17/17 16:24	100
Dibromofluoromethane	99		75 - 120		12/17/17 15:56	10
Dibromofluoromethane	99		75 - 120		12/17/17 16:24	100
Toluene-d8 (Surr)	100		75 - 120		12/17/17 15:56	10
Toluene-d8 (Surr)	96		75 - 120		12/17/17 16:24	100

Client Sample ID: MW-4A

Lab Sample ID: 500-138118-4

Date Collected: 12/04/17 11:15

Matrix: Water

Date Received: 12/05/17 09:30

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	22		1.0	0.36	ug/L			12/17/17 16:52	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/17/17 16:52	1
1,3,5-Trimethylbenzene	4.0		1.0	0.25	ug/L			12/17/17 16:52	1
Benzene	180		0.50	0.15	ug/L			12/17/17 16:52	1
Ethylbenzene	66		0.50	0.18	ug/L			12/17/17 16:52	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/17/17 16:52	1
Naphthalene	12		1.0	0.34	ug/L			12/17/17 16:52	1
Toluene	5.9		0.50	0.15	ug/L			12/17/17 16:52	1
Xylenes, Total	57		1.0	0.22	ug/L			12/17/17 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		12/17/17 16:52	1
4-Bromofluorobenzene (Surr)	86		72 - 124		12/17/17 16:52	1
Dibromofluoromethane	97		75 - 120		12/17/17 16:52	1
Toluene-d8 (Surr)	99		75 - 120		12/17/17 16:52	1

Client Sample ID: MW-5A

Lab Sample ID: 500-138118-5

Date Collected: 12/04/17 10:45

Matrix: Water

Date Received: 12/05/17 09:30

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.78		2.0	0.78	ug/L			12/17/17 17:19	2
1,3,5-Trimethylbenzene	250		2.0	0.51	ug/L			12/17/17 17:19	2

TestAmerica Chicago

# Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

**Client Sample ID: MW-5A**

**Lab Sample ID: 500-138118-5**

**Date Collected: 12/04/17 10:45**

**Matrix: Water**

**Date Received: 12/05/17 09:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>46</b>		1.0	0.29	ug/L			12/17/17 17:19	2
Methyl tert-butyl ether	<0.79		2.0	0.79	ug/L			12/17/17 17:19	2
<b>Naphthalene</b>	<b>200</b>		2.0	0.67	ug/L			12/17/17 17:19	2
<b>Toluene</b>	<b>84</b>		1.0	0.30	ug/L			12/17/17 17:19	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126					12/17/17 17:19	2
4-Bromofluorobenzene (Surr)	88		72 - 124					12/17/17 17:19	2
Dibromofluoromethane	99		75 - 120					12/17/17 17:19	2
Toluene-d8 (Surr)	98		75 - 120					12/17/17 17:19	2

**Method: 8260B - Volatile Organic Compounds (GC/MS) - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>690</b>		20	7.2	ug/L			12/17/17 17:46	20
<b>Ethylbenzene</b>	<b>470</b>		10	3.7	ug/L			12/17/17 17:46	20
<b>Xylenes, Total</b>	<b>920</b>		20	4.4	ug/L			12/17/17 17:46	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		75 - 126					12/17/17 17:46	20
4-Bromofluorobenzene (Surr)	90		72 - 124					12/17/17 17:46	20
Dibromofluoromethane	97		75 - 120					12/17/17 17:46	20
Toluene-d8 (Surr)	97		75 - 120					12/17/17 17:46	20

**Client Sample ID: MW-7**

**Lab Sample ID: 500-138118-6**

**Date Collected: 12/04/17 09:45**

**Matrix: Water**

**Date Received: 12/05/17 09:30**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/17/17 18:12	1
<b>1,2-Dichloroethane</b>	<b>0.73</b>	<b>J</b>	1.0	0.39	ug/L			12/17/17 18:12	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/17/17 18:12	1
Benzene	<0.15		0.50	0.15	ug/L			12/17/17 18:12	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/17/17 18:12	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/17/17 18:12	1
<b>Naphthalene</b>	<b>0.58</b>	<b>J</b>	1.0	0.34	ug/L			12/17/17 18:12	1
<b>Toluene</b>	<b>0.17</b>	<b>J</b>	0.50	0.15	ug/L			12/17/17 18:12	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/17/17 18:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126					12/17/17 18:12	1
4-Bromofluorobenzene (Surr)	87		72 - 124					12/17/17 18:12	1
Dibromofluoromethane	98		75 - 120					12/17/17 18:12	1
Toluene-d8 (Surr)	97		75 - 120					12/17/17 18:12	1

# Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

## Client Sample ID: MW-10

Date Collected: 12/04/17 12:30

Date Received: 12/05/17 09:30

## Lab Sample ID: 500-138118-7

Matrix: Water

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<3.9		10	3.9	ug/L			12/18/17 14:35	10
<b>1,3,5-Trimethylbenzene</b>	<b>890</b>		10	2.5	ug/L			12/18/17 14:35	10
<b>Benzene</b>	<b>210</b>		5.0	1.5	ug/L			12/18/17 14:35	10
<b>Ethylbenzene</b>	<b>1200</b>		5.0	1.8	ug/L			12/18/17 14:35	10
Methyl tert-butyl ether	<3.9		10	3.9	ug/L			12/18/17 14:35	10
<b>Naphthalene</b>	<b>540</b>		10	3.4	ug/L			12/18/17 14:35	10
<b>Toluene</b>	<b>1000</b>		5.0	1.5	ug/L			12/18/17 14:35	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		12/18/17 14:35	10
4-Bromofluorobenzene (Surr)	89		72 - 124		12/18/17 14:35	10
Dibromofluoromethane	96		75 - 120		12/18/17 14:35	10
Toluene-d8 (Surr)	98		75 - 120		12/18/17 14:35	10

### Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>2300</b>		100	36	ug/L			12/18/17 12:06	100
<b>Xylenes, Total</b>	<b>3600</b>		100	22	ug/L			12/18/17 12:06	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		12/18/17 12:06	100
4-Bromofluorobenzene (Surr)	92		72 - 124		12/18/17 12:06	100
Dibromofluoromethane	97		75 - 120		12/18/17 12:06	100
Toluene-d8 (Surr)	96		75 - 120		12/18/17 12:06	100

## Client Sample ID: Trip Blank

Date Collected: 12/04/17 00:00

Date Received: 12/05/17 09:30

## Lab Sample ID: 500-138118-8

Matrix: Water

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/17/17 12:39	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/17/17 12:39	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/17/17 12:39	1
Benzene	<0.15		0.50	0.15	ug/L			12/17/17 12:39	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/17/17 12:39	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/17/17 12:39	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/17/17 12:39	1
Toluene	<0.15		0.50	0.15	ug/L			12/17/17 12:39	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/17/17 12:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		12/17/17 12:39	1
4-Bromofluorobenzene (Surr)	87		72 - 124		12/17/17 12:39	1
Dibromofluoromethane	98		75 - 120		12/17/17 12:39	1
Toluene-d8 (Surr)	98		75 - 120		12/17/17 12:39	1

## Definitions/Glossary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

**QC Association Summary**

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

**GC/MS VOA****Analysis Batch: 414119**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-138118-1	MW-1A	Total/NA	Water	8260B	
500-138118-2 - DL	MW-3A	Total/NA	Water	8260B	
500-138118-3	MW-4R	Total/NA	Water	8260B	
500-138118-3	MW-4R	Total/NA	Water	8260B	
500-138118-4	MW-4A	Total/NA	Water	8260B	
500-138118-5	MW-5A	Total/NA	Water	8260B	
500-138118-5 - DL	MW-5A	Total/NA	Water	8260B	
500-138118-6	MW-7	Total/NA	Water	8260B	
500-138118-8	Trip Blank	Total/NA	Water	8260B	
MB 500-414119/8	Method Blank	Total/NA	Water	8260B	
LCS 500-414119/6	Lab Control Sample	Total/NA	Water	8260B	

**Analysis Batch: 414165**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-138118-2	MW-3A	Total/NA	Water	8260B	
500-138118-7 - DL	MW-10	Total/NA	Water	8260B	
500-138118-7	MW-10	Total/NA	Water	8260B	
MB 500-414165/7	Method Blank	Total/NA	Water	8260B	
LCS 500-414165/5	Lab Control Sample	Total/NA	Water	8260B	

# Surrogate Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-138118-1	MW-1A	97	87	99	97
500-138118-2 - DL	MW-3A	97	89	99	97
500-138118-2	MW-3A	102	93	95	107
500-138118-3	MW-4R	100	89	99	100
500-138118-3	MW-4R	97	88	99	96
500-138118-4	MW-4A	97	86	97	99
500-138118-5	MW-5A	100	88	99	98
500-138118-5 - DL	MW-5A	96	90	97	97
500-138118-6	MW-7	97	87	98	97
500-138118-7 - DL	MW-10	100	92	97	96
500-138118-7	MW-10	100	89	96	98
500-138118-8	Trip Blank	94	87	98	98
LCS 500-414119/6	Lab Control Sample	91	86	98	95
LCS 500-414165/5	Lab Control Sample	104	90	98	96
MB 500-414119/8	Method Blank	94	88	96	95
MB 500-414165/7	Method Blank	101	94	98	98

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)



### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

#### Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-414119/8

Matrix: Water

Analysis Batch: 414119

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/17/17 10:27	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/17/17 10:27	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/17/17 10:27	1
Benzene	<0.15		0.50	0.15	ug/L			12/17/17 10:27	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/17/17 10:27	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/17/17 10:27	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/17/17 10:27	1
Toluene	<0.15		0.50	0.15	ug/L			12/17/17 10:27	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/17/17 10:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		12/17/17 10:27	1
4-Bromofluorobenzene (Surr)	88		72 - 124		12/17/17 10:27	1
Dibromofluoromethane	96		75 - 120		12/17/17 10:27	1
Toluene-d8 (Surr)	95		75 - 120		12/17/17 10:27	1

Lab Sample ID: LCS 500-414119/6

Matrix: Water

Analysis Batch: 414119

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	50.0	46.9		ug/L		94	70 - 123
1,2-Dichloroethane	50.0	43.6		ug/L		87	68 - 127
1,3,5-Trimethylbenzene	50.0	46.3		ug/L		93	70 - 123
Benzene	50.0	45.9		ug/L		92	70 - 120
Ethylbenzene	50.0	47.9		ug/L		96	70 - 120
Methyl tert-butyl ether	50.0	43.7		ug/L		87	70 - 120
Naphthalene	50.0	43.4		ug/L		87	59 - 130
Toluene	50.0	40.9		ug/L		82	70 - 125
Xylenes, Total	100	86.7		ug/L		87	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		75 - 126
4-Bromofluorobenzene (Surr)	86		72 - 124
Dibromofluoromethane	98		75 - 120
Toluene-d8 (Surr)	95		75 - 120

Lab Sample ID: MB 500-414165/7

Matrix: Water

Analysis Batch: 414165

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/18/17 10:35	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			12/18/17 10:35	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/18/17 10:35	1
Benzene	<0.15		0.50	0.15	ug/L			12/18/17 10:35	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/18/17 10:35	1

TestAmerica Chicago

### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

#### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-414165/7  
 Matrix: Water  
 Analysis Batch: 414165

Client Sample ID: Method Blank  
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/18/17 10:35	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/18/17 10:35	1
Toluene	<0.15		0.50	0.15	ug/L			12/18/17 10:35	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/18/17 10:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 126		12/18/17 10:35	1
4-Bromofluorobenzene (Surr)	94		72 - 124		12/18/17 10:35	1
Dibromofluoromethane	98		75 - 120		12/18/17 10:35	1
Toluene-d8 (Surr)	98		75 - 120		12/18/17 10:35	1

Lab Sample ID: LCS 500-414165/5  
 Matrix: Water  
 Analysis Batch: 414165

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	50.0	47.8		ug/L		96	70 - 123
1,2-Dichloroethane	50.0	51.5		ug/L		103	68 - 127
1,3,5-Trimethylbenzene	50.0	47.0		ug/L		94	70 - 123
Benzene	50.0	47.4		ug/L		95	70 - 120
Ethylbenzene	50.0	49.3		ug/L		99	70 - 120
Methyl tert-butyl ether	50.0	50.1		ug/L		100	70 - 120
Naphthalene	50.0	48.1		ug/L		96	59 - 130
Toluene	50.0	48.1		ug/L		96	70 - 125
Xylenes, Total	100	95.9		ug/L		96	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		75 - 126
4-Bromofluorobenzene (Surr)	90		72 - 124
Dibromofluoromethane	98		75 - 120
Toluene-d8 (Surr)	96		75 - 120

## Lab Chronicle

Client: American Engineering Testing Inc.  
Project/Site: Dairy Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

**Client Sample ID: MW-1A**

Date Collected: 12/04/17 10:15

Date Received: 12/05/17 09:30

**Lab Sample ID: 500-138118-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	414119	12/17/17 13:32	JDD	TAL CHI

**Client Sample ID: MW-3A**

Date Collected: 12/04/17 12:00

Date Received: 12/05/17 09:30

**Lab Sample ID: 500-138118-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	200	414119	12/17/17 15:30	JDD	TAL CHI
Total/NA	Analysis	8260B		20	414165	12/18/17 11:36	PMF	TAL CHI

**Client Sample ID: MW-4R**

Date Collected: 12/04/17 11:45

Date Received: 12/05/17 09:30

**Lab Sample ID: 500-138118-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	414119	12/17/17 15:56	JDD	TAL CHI
Total/NA	Analysis	8260B		100	414119	12/17/17 16:24	JDD	TAL CHI

**Client Sample ID: MW-4A**

Date Collected: 12/04/17 11:15

Date Received: 12/05/17 09:30

**Lab Sample ID: 500-138118-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	414119	12/17/17 16:52	JDD	TAL CHI

**Client Sample ID: MW-5A**

Date Collected: 12/04/17 10:45

Date Received: 12/05/17 09:30

**Lab Sample ID: 500-138118-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	414119	12/17/17 17:19	JDD	TAL CHI
Total/NA	Analysis	8260B	DL	20	414119	12/17/17 17:46	JDD	TAL CHI

**Client Sample ID: MW-7**

Date Collected: 12/04/17 09:45

Date Received: 12/05/17 09:30

**Lab Sample ID: 500-138118-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	414119	12/17/17 18:12	JDD	TAL CHI

# Lab Chronicle

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

**Client Sample ID: MW-10**

**Lab Sample ID: 500-138118-7**

**Date Collected: 12/04/17 12:30**

**Matrix: Water**

**Date Received: 12/05/17 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	100	414165	12/18/17 12:06	PMF	TAL CHI
Total/NA	Analysis	8260B		10	414165	12/18/17 14:35	PMF	TAL CHI

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-138118-8**

**Date Collected: 12/04/17 00:00**

**Matrix: Water**

**Date Received: 12/05/17 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	414119	12/17/17 12:39	JDD	TAL CHI

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Accreditation/Certification Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-138118-1

## Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18

- 1
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THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60  
Phone: 708.534.5200 Fax: 708.534



500-138118 COC

Report To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

Bill To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#/Reference# 18174003

## Chain of Custody Record

Lab Job #: 500-138118  
Chain of Custody Number: \_\_\_\_\_  
Page 1 of 1  
Temperature °C of Cooler: 18 → 3.3

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM		
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix			Comments	
AET		03-05510		1		PFOC + NPFA + Naphthalene				
DAIRI Concepts		Chili, WI				Michael Ke Neal		Sandie F.		
1		MW-1A	12-4-17	10:15	3	W	X			
2		MW-3A		12:00	3	W	X			
3		MW-4R		11:45	3	W	X			
4		MW-4A		11:15	3	W	X			
5		MW-5A		10:45	3	W	X			
6		MW-7		9:45	3	W	X			
7		MW-10		12:30	3	W	X			
8		Trip Blank		-	1	W	X			

Turnaround Time Required (Business Days)  
 1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
 Requested Due Date: \_\_\_\_\_  
 Sample Disposal:  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: AET Date: 12-4-17 Time: 12:30	Received By: <u>Feed</u> Company: _____ Date: _____ Time: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: <u>[Signature]</u> Company: _____ Date: 12/5/17 Time: 09:30
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____

Lab Courier: \_\_\_\_\_  
Shipped: Feed  
Hand Delivered: \_\_\_\_\_

**Matrix Key**  
 WW - Wastewater SE - Sediment  
 W - Water SO - Soil  
 S - Soil L - Leachate  
 SL - Sludge WI - Wipe  
 MS - Miscellaneous DW - Drinking Water  
 OL - Oil O - Other  
 A - Air

**Client Comments**  
PFC FA site

**Lab Comments:**

### Login Sample Receipt Checklist

Client: American Engineering Testing Inc.

Job Number: 500-138118-1

**Login Number: 138118**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-144828-1

Client Project/Site: Dairi Concepts - 03-05510

For:

American Engineering Testing Inc.

1837 Cty Hwy OO

Chippewa Falls, Wisconsin 54729

Attn: Mr. Michael Neal



Authorized for release by:

5/17/2018 12:52:58 PM

Sandie Fredrick, Project Manager II

(920)261-1660

[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

**APPROVED**

**By mneal at 1:34 pm, May 17, 2018**

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



### LINKS

Review your project results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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# Case Narrative

Client: American Engineering Testing Inc.  
Project/Site: Dairy Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Job ID: 500-144828-1**

**Laboratory: TestAmerica Chicago**

## Narrative

**Job Narrative  
500-144828-1**

### Comments

No additional comments.

### Receipt

The samples were received on 5/3/2018 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9° C.

### GC/MS VOA

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-3A (500-144828-3) and MW-4R (500-144828-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following samples were diluted due to the abundance of non-target analytes: MW-4A (500-144828-4) and MW-10 (500-144828-14). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



# Detection Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

## Client Sample ID: MW-1A

## Lab Sample ID: 500-144828-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	3.3		1.0	0.39	ug/L	1		8260B	Total/NA
Benzene	2.5		0.50	0.15	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-3

## Lab Sample ID: 500-144828-2

No Detections.

## Client Sample ID: MW-3A

## Lab Sample ID: 500-144828-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	3500		20	7.2	ug/L	20		8260B	Total/NA
1,3,5-Trimethylbenzene	1100		20	5.1	ug/L	20		8260B	Total/NA
Benzene	2900		10	2.9	ug/L	20		8260B	Total/NA
Ethylbenzene	2600		10	3.7	ug/L	20		8260B	Total/NA
Naphthalene	750		20	6.7	ug/L	20		8260B	Total/NA
Toluene - DL	18000		100	30	ug/L	200		8260B	Total/NA
Xylenes, Total - DL	16000		200	44	ug/L	200		8260B	Total/NA

## Client Sample ID: MW-4A

## Lab Sample ID: 500-144828-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	7.7		2.0	0.72	ug/L	2		8260B	Total/NA
1,3,5-Trimethylbenzene	11		2.0	0.51	ug/L	2		8260B	Total/NA
Benzene	21		1.0	0.29	ug/L	2		8260B	Total/NA
Ethylbenzene	16		1.0	0.37	ug/L	2		8260B	Total/NA
Naphthalene	2.5		2.0	0.67	ug/L	2		8260B	Total/NA
Toluene	6.9		1.0	0.30	ug/L	2		8260B	Total/NA
Xylenes, Total	30		2.0	0.44	ug/L	2		8260B	Total/NA

## Client Sample ID: MW-4R

## Lab Sample ID: 500-144828-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	350		2.0	0.51	ug/L	2		8260B	Total/NA
Benzene	350		1.0	0.29	ug/L	2		8260B	Total/NA
Naphthalene	340		2.0	0.67	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	1500		20	7.2	ug/L	20		8260B	Total/NA
Ethylbenzene - DL	1200		10	3.7	ug/L	20		8260B	Total/NA
Toluene - DL	1300		10	3.0	ug/L	20		8260B	Total/NA
Xylenes, Total - DL	4600		20	4.4	ug/L	20		8260B	Total/NA

## Client Sample ID: MW-5

## Lab Sample ID: 500-144828-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.72	J	1.0	0.36	ug/L	1		8260B	Total/NA
Benzene	2.8		0.50	0.15	ug/L	1		8260B	Total/NA
Ethylbenzene	0.36	J	0.50	0.18	ug/L	1		8260B	Total/NA
Naphthalene	1.4		1.0	0.34	ug/L	1		8260B	Total/NA
Toluene	0.42	J	0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	1.7		1.0	0.22	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

## Client Sample ID: MW-5A

Lab Sample ID: 500-144828-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	150		1.0	0.25	ug/L	1		8260B	Total/NA
Benzene	5.6		0.50	0.15	ug/L	1		8260B	Total/NA
Ethylbenzene	140		0.50	0.18	ug/L	1		8260B	Total/NA
Naphthalene	65		1.0	0.34	ug/L	1		8260B	Total/NA
Toluene	11		0.50	0.15	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	410		10	3.6	ug/L	10		8260B	Total/NA
Xylenes, Total - DL	320		10	2.2	ug/L	10		8260B	Total/NA

## Client Sample ID: MW-6

Lab Sample ID: 500-144828-8

No Detections.

## Client Sample ID: MW-6A

Lab Sample ID: 500-144828-9

No Detections.

## Client Sample ID: MW-7

Lab Sample ID: 500-144828-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	1.7		1.0	0.39	ug/L	1		8260B	Total/NA
Benzene	4.8		0.50	0.15	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-7A

Lab Sample ID: 500-144828-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.56	J	1.0	0.36	ug/L	1		8260B	Total/NA
Toluene	0.66		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	0.64	J	1.0	0.22	ug/L	1		8260B	Total/NA

## Client Sample ID: PZ-7

Lab Sample ID: 500-144828-12

No Detections.

## Client Sample ID: MW-9

Lab Sample ID: 500-144828-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	0.50	J	1.0	0.22	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-10

Lab Sample ID: 500-144828-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2900		20	7.2	ug/L	20		8260B	Total/NA
1,2-Dichloroethane	21		20	7.8	ug/L	20		8260B	Total/NA
1,3,5-Trimethylbenzene	880		20	5.1	ug/L	20		8260B	Total/NA
Benzene	100		10	2.9	ug/L	20		8260B	Total/NA
Ethylbenzene	1400		10	3.7	ug/L	20		8260B	Total/NA
Naphthalene	530		20	6.7	ug/L	20		8260B	Total/NA
Toluene	1000		10	3.0	ug/L	20		8260B	Total/NA
Xylenes, Total	4500		20	4.4	ug/L	20		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

**Detection Summary**

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Client Sample ID: MW-E****Lab Sample ID: 500-144828-15**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.2		1.0	0.34	ug/L	1		8260B	Total/NA

**Client Sample ID: MW-W****Lab Sample ID: 500-144828-16**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.0		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	0.57	J	1.0	0.22	ug/L	1		8260B	Total/NA

**Client Sample ID: CMW-1****Lab Sample ID: 500-144828-17**

No Detections.

**Client Sample ID: Trip Blank****Lab Sample ID: 500-144828-18**

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Method Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Sample Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144828-1	MW-1A	Water	04/30/18 11:30	05/03/18 09:10
500-144828-2	MW-3	Water	04/30/18 10:30	05/03/18 09:10
500-144828-3	MW-3A	Water	04/30/18 14:45	05/03/18 09:10
500-144828-4	MW-4A	Water	04/30/18 14:15	05/03/18 09:10
500-144828-5	MW-4R	Water	04/30/18 14:30	05/03/18 09:10
500-144828-6	MW-5	Water	04/30/18 13:45	05/03/18 09:10
500-144828-7	MW-5A	Water	04/30/18 14:00	05/03/18 09:10
500-144828-8	MW-6	Water	04/30/18 10:15	05/03/18 09:10
500-144828-9	MW-6A	Water	04/30/18 12:15	05/03/18 09:10
500-144828-10	MW-7	Water	04/30/18 11:15	05/03/18 09:10
500-144828-11	MW-7A	Water	04/30/18 00:00	05/03/18 09:10
500-144828-12	PZ-7	Water	04/30/18 11:15	05/03/18 09:10
500-144828-13	MW-9	Water	04/30/18 11:00	05/03/18 09:10
500-144828-14	MW-10	Water	04/30/18 15:00	05/03/18 09:10
500-144828-15	MW-E	Water	04/30/18 13:00	05/03/18 09:10
500-144828-16	MW-W	Water	04/30/18 13:15	05/03/18 09:10
500-144828-17	CMW-1	Water	04/30/18 12:00	05/03/18 09:10
500-144828-18	Trip Blank	Water	04/30/18 00:00	05/03/18 09:10

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Dairy Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

Client Sample ID: MW-1A

Date Collected: 04/30/18 11:30

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144828-1

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/10/18 17:40	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/10/18 17:40	1
<b>1,2-Dichloroethane</b>	<b>3.3</b>		1.0	0.39	ug/L			05/10/18 17:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/10/18 17:40	1
<b>Benzene</b>	<b>2.5</b>		0.50	0.15	ug/L			05/10/18 17:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/10/18 17:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/10/18 17:40	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/10/18 17:40	1
Toluene	<0.15		0.50	0.15	ug/L			05/10/18 17:40	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/10/18 17:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		05/10/18 17:40	1
4-Bromofluorobenzene (Surr)	99		72 - 124		05/10/18 17:40	1
Dibromofluoromethane	97		75 - 120		05/10/18 17:40	1
Toluene-d8 (Surr)	103		75 - 120		05/10/18 17:40	1

Client Sample ID: MW-3

Date Collected: 04/30/18 10:30

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144828-2

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/10/18 18:07	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/10/18 18:07	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/10/18 18:07	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/10/18 18:07	1
Benzene	<0.15		0.50	0.15	ug/L			05/10/18 18:07	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/10/18 18:07	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/10/18 18:07	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/10/18 18:07	1
Toluene	<0.15		0.50	0.15	ug/L			05/10/18 18:07	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/10/18 18:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 126		05/10/18 18:07	1
4-Bromofluorobenzene (Surr)	96		72 - 124		05/10/18 18:07	1
Dibromofluoromethane	98		75 - 120		05/10/18 18:07	1
Toluene-d8 (Surr)	102		75 - 120		05/10/18 18:07	1

Client Sample ID: MW-3A

Date Collected: 04/30/18 14:45

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144828-3

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>3500</b>		20	7.2	ug/L			05/10/18 23:11	20
1,2-Dibromoethane (EDB)	<7.7		20	7.7	ug/L			05/10/18 23:11	20
1,2-Dichloroethane	<7.8		20	7.8	ug/L			05/10/18 23:11	20
<b>1,3,5-Trimethylbenzene</b>	<b>1100</b>		20	5.1	ug/L			05/10/18 23:11	20

TestAmerica Chicago



## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Dairy Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

Client Sample ID: MW-3A

Date Collected: 04/30/18 14:45

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144828-3

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2900		10	2.9	ug/L			05/10/18 23:11	20
Ethylbenzene	2600		10	3.7	ug/L			05/10/18 23:11	20
Methyl tert-butyl ether	<7.9		20	7.9	ug/L			05/10/18 23:11	20
Naphthalene	750		20	6.7	ug/L			05/10/18 23:11	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126					05/10/18 23:11	20
4-Bromofluorobenzene (Surr)	97		72 - 124					05/10/18 23:11	20
Dibromofluoromethane	92		75 - 120					05/10/18 23:11	20
Toluene-d8 (Surr)	104		75 - 120					05/10/18 23:11	20

## Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	18000		100	30	ug/L			05/10/18 23:38	200
Xylenes, Total	16000		200	44	ug/L			05/10/18 23:38	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126					05/10/18 23:38	200
4-Bromofluorobenzene (Surr)	102		72 - 124					05/10/18 23:38	200
Dibromofluoromethane	96		75 - 120					05/10/18 23:38	200
Toluene-d8 (Surr)	103		75 - 120					05/10/18 23:38	200

Client Sample ID: MW-4A

Date Collected: 04/30/18 14:15

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144828-4

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	7.7		2.0	0.72	ug/L			05/10/18 18:33	2
1,2-Dibromoethane (EDB)	<0.77		2.0	0.77	ug/L			05/10/18 18:33	2
1,2-Dichloroethane	<0.78		2.0	0.78	ug/L			05/10/18 18:33	2
1,3,5-Trimethylbenzene	11		2.0	0.51	ug/L			05/10/18 18:33	2
Benzene	21		1.0	0.29	ug/L			05/10/18 18:33	2
Ethylbenzene	16		1.0	0.37	ug/L			05/10/18 18:33	2
Methyl tert-butyl ether	<0.79		2.0	0.79	ug/L			05/10/18 18:33	2
Naphthalene	2.5		2.0	0.67	ug/L			05/10/18 18:33	2
Toluene	6.9		1.0	0.30	ug/L			05/10/18 18:33	2
Xylenes, Total	30		2.0	0.44	ug/L			05/10/18 18:33	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		75 - 126					05/10/18 18:33	2
4-Bromofluorobenzene (Surr)	99		72 - 124					05/10/18 18:33	2
Dibromofluoromethane	92		75 - 120					05/10/18 18:33	2
Toluene-d8 (Surr)	104		75 - 120					05/10/18 18:33	2

TestAmerica Chicago

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Dairy Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

Client Sample ID: MW-4R

Date Collected: 04/30/18 14:30

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144828-5

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	<0.77		2.0	0.77	ug/L			05/11/18 00:04	2
1,2-Dichloroethane	<0.78		2.0	0.78	ug/L			05/11/18 00:04	2
<b>1,3,5-Trimethylbenzene</b>	<b>350</b>		2.0	0.51	ug/L			05/11/18 00:04	2
<b>Benzene</b>	<b>350</b>		1.0	0.29	ug/L			05/11/18 00:04	2
Methyl tert-butyl ether	<0.79		2.0	0.79	ug/L			05/11/18 00:04	2
<b>Naphthalene</b>	<b>340</b>		2.0	0.67	ug/L			05/11/18 00:04	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		05/11/18 00:04	2
4-Bromofluorobenzene (Surr)	101		72 - 124		05/11/18 00:04	2
Dibromofluoromethane	96		75 - 120		05/11/18 00:04	2
Toluene-d8 (Surr)	105		75 - 120		05/11/18 00:04	2

## Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>1500</b>		20	7.2	ug/L			05/11/18 00:31	20
<b>Ethylbenzene</b>	<b>1200</b>		10	3.7	ug/L			05/11/18 00:31	20
<b>Toluene</b>	<b>1300</b>		10	3.0	ug/L			05/11/18 00:31	20
<b>Xylenes, Total</b>	<b>4600</b>		20	4.4	ug/L			05/11/18 00:31	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126		05/11/18 00:31	20
4-Bromofluorobenzene (Surr)	102		72 - 124		05/11/18 00:31	20
Dibromofluoromethane	95		75 - 120		05/11/18 00:31	20
Toluene-d8 (Surr)	103		75 - 120		05/11/18 00:31	20

Client Sample ID: MW-5

Date Collected: 04/30/18 13:45

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144828-6

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>0.72</b>	<b>J</b>	1.0	0.36	ug/L			05/11/18 00:58	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 00:58	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 00:58	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 00:58	1
<b>Benzene</b>	<b>2.8</b>		0.50	0.15	ug/L			05/11/18 00:58	1
<b>Ethylbenzene</b>	<b>0.36</b>	<b>J</b>	0.50	0.18	ug/L			05/11/18 00:58	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 00:58	1
<b>Naphthalene</b>	<b>1.4</b>		1.0	0.34	ug/L			05/11/18 00:58	1
<b>Toluene</b>	<b>0.42</b>	<b>J</b>	0.50	0.15	ug/L			05/11/18 00:58	1
<b>Xylenes, Total</b>	<b>1.7</b>		1.0	0.22	ug/L			05/11/18 00:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		05/11/18 00:58	1
4-Bromofluorobenzene (Surr)	104		72 - 124		05/11/18 00:58	1
Dibromofluoromethane	95		75 - 120		05/11/18 00:58	1
Toluene-d8 (Surr)	105		75 - 120		05/11/18 00:58	1

TestAmerica Chicago

# Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairy Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Client Sample ID: MW-5A**

**Lab Sample ID: 500-144828-7**

**Date Collected: 04/30/18 14:00**

**Matrix: Water**

**Date Received: 05/03/18 09:10**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 01:24	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 01:24	1
<b>1,3,5-Trimethylbenzene</b>	<b>150</b>		1.0	0.25	ug/L			05/11/18 01:24	1
<b>Benzene</b>	<b>5.6</b>		0.50	0.15	ug/L			05/11/18 01:24	1
<b>Ethylbenzene</b>	<b>140</b>		0.50	0.18	ug/L			05/11/18 01:24	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 01:24	1
<b>Naphthalene</b>	<b>65</b>		1.0	0.34	ug/L			05/11/18 01:24	1
<b>Toluene</b>	<b>11</b>		0.50	0.15	ug/L			05/11/18 01:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		05/11/18 01:24	1
4-Bromofluorobenzene (Surr)	99		72 - 124		05/11/18 01:24	1
Dibromofluoromethane	98		75 - 120		05/11/18 01:24	1
Toluene-d8 (Surr)	103		75 - 120		05/11/18 01:24	1

**Method: 8260B - Volatile Organic Compounds (GC/MS) - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>410</b>		10	3.6	ug/L			05/11/18 01:52	10
<b>Xylenes, Total</b>	<b>320</b>		10	2.2	ug/L			05/11/18 01:52	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126		05/11/18 01:52	10
4-Bromofluorobenzene (Surr)	103		72 - 124		05/11/18 01:52	10
Dibromofluoromethane	94		75 - 120		05/11/18 01:52	10
Toluene-d8 (Surr)	104		75 - 120		05/11/18 01:52	10

**Client Sample ID: MW-6**

**Lab Sample ID: 500-144828-8**

**Date Collected: 04/30/18 10:15**

**Matrix: Water**

**Date Received: 05/03/18 09:10**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/11/18 02:18	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 02:18	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 02:18	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 02:18	1
Benzene	<0.15		0.50	0.15	ug/L			05/11/18 02:18	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/11/18 02:18	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 02:18	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/11/18 02:18	1
Toluene	<0.15		0.50	0.15	ug/L			05/11/18 02:18	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/11/18 02:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126		05/11/18 02:18	1
4-Bromofluorobenzene (Surr)	101		72 - 124		05/11/18 02:18	1
Dibromofluoromethane	96		75 - 120		05/11/18 02:18	1
Toluene-d8 (Surr)	104		75 - 120		05/11/18 02:18	1

### Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairy Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Client Sample ID: MW-6A**  
**Date Collected: 04/30/18 12:15**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-9**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/11/18 02:46	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 02:46	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 02:46	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 02:46	1
Benzene	<0.15		0.50	0.15	ug/L			05/11/18 02:46	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/11/18 02:46	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 02:46	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/11/18 02:46	1
Toluene	<0.15		0.50	0.15	ug/L			05/11/18 02:46	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/11/18 02:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		75 - 126					05/11/18 02:46	1
4-Bromofluorobenzene (Surr)	98		72 - 124					05/11/18 02:46	1
Dibromofluoromethane	98		75 - 120					05/11/18 02:46	1
Toluene-d8 (Surr)	104		75 - 120					05/11/18 02:46	1

**Client Sample ID: MW-7**  
**Date Collected: 04/30/18 11:15**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-10**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/11/18 03:12	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 03:12	1
<b>1,2-Dichloroethane</b>	<b>1.7</b>		1.0	0.39	ug/L			05/11/18 03:12	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 03:12	1
<b>Benzene</b>	<b>4.8</b>		0.50	0.15	ug/L			05/11/18 03:12	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/11/18 03:12	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 03:12	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/11/18 03:12	1
Toluene	<0.15		0.50	0.15	ug/L			05/11/18 03:12	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/11/18 03:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		75 - 126					05/11/18 03:12	1
4-Bromofluorobenzene (Surr)	99		72 - 124					05/11/18 03:12	1
Dibromofluoromethane	98		75 - 120					05/11/18 03:12	1
Toluene-d8 (Surr)	102		75 - 120					05/11/18 03:12	1

**Client Sample ID: MW-7A**  
**Date Collected: 04/30/18 00:00**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-11**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>0.56</b>	<b>J</b>	1.0	0.36	ug/L			05/11/18 03:40	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 03:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 03:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 03:40	1

TestAmerica Chicago

### Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Client Sample ID: MW-7A**  
**Date Collected: 04/30/18 00:00**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-11**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/11/18 03:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/11/18 03:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 03:40	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/11/18 03:40	1
<b>Toluene</b>	<b>0.66</b>		0.50	0.15	ug/L			05/11/18 03:40	1
<b>Xylenes, Total</b>	<b>0.64</b>	<b>J</b>	1.0	0.22	ug/L			05/11/18 03:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		75 - 126		05/11/18 03:40	1
4-Bromofluorobenzene (Surr)	102		72 - 124		05/11/18 03:40	1
Dibromofluoromethane	100		75 - 120		05/11/18 03:40	1
Toluene-d8 (Surr)	102		75 - 120		05/11/18 03:40	1

**Client Sample ID: PZ-7**  
**Date Collected: 04/30/18 11:15**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-12**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/11/18 04:07	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 04:07	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 04:07	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 04:07	1
Benzene	<0.15		0.50	0.15	ug/L			05/11/18 04:07	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/11/18 04:07	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 04:07	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/11/18 04:07	1
Toluene	<0.15		0.50	0.15	ug/L			05/11/18 04:07	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/11/18 04:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		05/11/18 04:07	1
4-Bromofluorobenzene (Surr)	102		72 - 124		05/11/18 04:07	1
Dibromofluoromethane	98		75 - 120		05/11/18 04:07	1
Toluene-d8 (Surr)	104		75 - 120		05/11/18 04:07	1

**Client Sample ID: MW-9**  
**Date Collected: 04/30/18 11:00**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-13**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/11/18 04:34	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 04:34	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 04:34	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 04:34	1
Benzene	<0.15		0.50	0.15	ug/L			05/11/18 04:34	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/11/18 04:34	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 04:34	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/11/18 04:34	1

# Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Client Sample ID: MW-9**  
**Date Collected: 04/30/18 11:00**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-13**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.50	0.15	ug/L			05/11/18 04:34	1
<b>Xylenes, Total</b>	<b>0.50</b>	<b>J</b>	1.0	0.22	ug/L			05/11/18 04:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		75 - 126					05/11/18 04:34	1
4-Bromofluorobenzene (Surr)	101		72 - 124					05/11/18 04:34	1
Dibromofluoromethane	98		75 - 120					05/11/18 04:34	1
Toluene-d8 (Surr)	103		75 - 120					05/11/18 04:34	1

**Client Sample ID: MW-10**  
**Date Collected: 04/30/18 15:00**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-14**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>2900</b>		20	7.2	ug/L			05/11/18 05:01	20
1,2-Dibromoethane (EDB)	<7.7		20	7.7	ug/L			05/11/18 05:01	20
<b>1,2-Dichloroethane</b>	<b>21</b>		20	7.8	ug/L			05/11/18 05:01	20
<b>1,3,5-Trimethylbenzene</b>	<b>880</b>		20	5.1	ug/L			05/11/18 05:01	20
<b>Benzene</b>	<b>100</b>		10	2.9	ug/L			05/11/18 05:01	20
<b>Ethylbenzene</b>	<b>1400</b>		10	3.7	ug/L			05/11/18 05:01	20
Methyl tert-butyl ether	<7.9		20	7.9	ug/L			05/11/18 05:01	20
<b>Naphthalene</b>	<b>530</b>		20	6.7	ug/L			05/11/18 05:01	20
<b>Toluene</b>	<b>1000</b>		10	3.0	ug/L			05/11/18 05:01	20
<b>Xylenes, Total</b>	<b>4500</b>		20	4.4	ug/L			05/11/18 05:01	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126					05/11/18 05:01	20
4-Bromofluorobenzene (Surr)	106		72 - 124					05/11/18 05:01	20
Dibromofluoromethane	94		75 - 120					05/11/18 05:01	20
Toluene-d8 (Surr)	104		75 - 120					05/11/18 05:01	20

**Client Sample ID: MW-E**  
**Date Collected: 04/30/18 13:00**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-15**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/11/18 05:29	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 05:29	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 05:29	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 05:29	1
Benzene	<0.15		0.50	0.15	ug/L			05/11/18 05:29	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/11/18 05:29	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 05:29	1
<b>Naphthalene</b>	<b>1.2</b>		1.0	0.34	ug/L			05/11/18 05:29	1
Toluene	<0.15		0.50	0.15	ug/L			05/11/18 05:29	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/11/18 05:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		75 - 126					05/11/18 05:29	1

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# Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Client Sample ID: MW-E**  
**Date Collected: 04/30/18 13:00**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-15**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		72 - 124		05/11/18 05:29	1
Dibromofluoromethane	102		75 - 120		05/11/18 05:29	1
Toluene-d8 (Surr)	103		75 - 120		05/11/18 05:29	1

**Client Sample ID: MW-W**  
**Date Collected: 04/30/18 13:15**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-16**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/11/18 05:57	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 05:57	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 05:57	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 05:57	1
<b>Benzene</b>	<b>2.0</b>		0.50	0.15	ug/L			05/11/18 05:57	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/11/18 05:57	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 05:57	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/11/18 05:57	1
Toluene	<0.15		0.50	0.15	ug/L			05/11/18 05:57	1
<b>Xylenes, Total</b>	<b>0.57 J</b>		1.0	0.22	ug/L			05/11/18 05:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		75 - 126		05/11/18 05:57	1
4-Bromofluorobenzene (Surr)	102		72 - 124		05/11/18 05:57	1
Dibromofluoromethane	101		75 - 120		05/11/18 05:57	1
Toluene-d8 (Surr)	105		75 - 120		05/11/18 05:57	1

**Client Sample ID: CMW-1**  
**Date Collected: 04/30/18 12:00**  
**Date Received: 05/03/18 09:10**

**Lab Sample ID: 500-144828-17**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/11/18 06:24	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 06:24	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 06:24	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 06:24	1
Benzene	<0.15		0.50	0.15	ug/L			05/11/18 06:24	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/11/18 06:24	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 06:24	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/11/18 06:24	1
Toluene	<0.15		0.50	0.15	ug/L			05/11/18 06:24	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/11/18 06:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		05/11/18 06:24	1
4-Bromofluorobenzene (Surr)	103		72 - 124		05/11/18 06:24	1
Dibromofluoromethane	96		75 - 120		05/11/18 06:24	1
Toluene-d8 (Surr)	105		75 - 120		05/11/18 06:24	1

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# Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-144828-18**

**Date Collected: 04/30/18 00:00**

**Matrix: Water**

**Date Received: 05/03/18 09:10**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/11/18 06:51	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/11/18 06:51	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/11/18 06:51	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/11/18 06:51	1
Benzene	<0.15		0.50	0.15	ug/L			05/11/18 06:51	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/11/18 06:51	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/11/18 06:51	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/11/18 06:51	1
Toluene	<0.15		0.50	0.15	ug/L			05/11/18 06:51	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/11/18 06:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		75 - 126		05/11/18 06:51	1
4-Bromofluorobenzene (Surr)	101		72 - 124		05/11/18 06:51	1
Dibromofluoromethane	99		75 - 120		05/11/18 06:51	1
Toluene-d8 (Surr)	103		75 - 120		05/11/18 06:51	1



## Definitions/Glossary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# QC Association Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

## GC/MS VOA

### Analysis Batch: 431518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144828-1	MW-1A	Total/NA	Water	8260B	
500-144828-2	MW-3	Total/NA	Water	8260B	
500-144828-4	MW-4A	Total/NA	Water	8260B	
MB 500-431518/7	Method Blank	Total/NA	Water	8260B	
LCS 500-431518/5	Lab Control Sample	Total/NA	Water	8260B	

### Analysis Batch: 431635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144828-3	MW-3A	Total/NA	Water	8260B	
500-144828-3 - DL	MW-3A	Total/NA	Water	8260B	
500-144828-5	MW-4R	Total/NA	Water	8260B	
500-144828-5 - DL	MW-4R	Total/NA	Water	8260B	
500-144828-6	MW-5	Total/NA	Water	8260B	
500-144828-7	MW-5A	Total/NA	Water	8260B	
500-144828-7 - DL	MW-5A	Total/NA	Water	8260B	
500-144828-8	MW-6	Total/NA	Water	8260B	
500-144828-9	MW-6A	Total/NA	Water	8260B	
500-144828-10	MW-7	Total/NA	Water	8260B	
500-144828-11	MW-7A	Total/NA	Water	8260B	
500-144828-12	PZ-7	Total/NA	Water	8260B	
500-144828-13	MW-9	Total/NA	Water	8260B	
500-144828-14	MW-10	Total/NA	Water	8260B	
500-144828-15	MW-E	Total/NA	Water	8260B	
500-144828-16	MW-W	Total/NA	Water	8260B	
500-144828-17	CMW-1	Total/NA	Water	8260B	
500-144828-18	Trip Blank	Total/NA	Water	8260B	
MB 500-431635/6	Method Blank	Total/NA	Water	8260B	
LCS 500-431635/4	Lab Control Sample	Total/NA	Water	8260B	
500-144828-17 MS	CMW-1	Total/NA	Water	8260B	
500-144828-17 MSD	CMW-1	Total/NA	Water	8260B	

# Surrogate Summary

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

**Matrix: Water**

**Prep Type: Total/NA**

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-144828-1	MW-1A	103	99	97	103
500-144828-2	MW-3	102	96	98	102
500-144828-3	MW-3A	100	97	92	104
500-144828-3 - DL	MW-3A	105	102	96	103
500-144828-4	MW-4A	99	99	92	104
500-144828-5 - DL	MW-4R	105	102	95	103
500-144828-5	MW-4R	104	101	96	105
500-144828-6	MW-5	106	104	95	105
500-144828-7	MW-5A	106	99	98	103
500-144828-7 - DL	MW-5A	105	103	94	104
500-144828-8	MW-6	105	101	96	104
500-144828-9	MW-6A	108	98	98	104
500-144828-10	MW-7	110	99	98	102
500-144828-11	MW-7A	111	102	100	102
500-144828-12	PZ-7	107	102	98	104
500-144828-13	MW-9	112	101	98	103
500-144828-14	MW-10	106	106	94	104
500-144828-15	MW-E	111	101	102	103
500-144828-16	MW-W	108	102	101	105
500-144828-17	CMW-1	110	103	96	105
500-144828-17 MS	CMW-1	109	99	98	102
500-144828-17 MSD	CMW-1	106	100	97	102
500-144828-18	Trip Blank	114	101	99	103
LCS 500-431518/5	Lab Control Sample	103	94	93	103
LCS 500-431635/4	Lab Control Sample	101	97	95	103
MB 500-431518/7	Method Blank	107	99	97	103
MB 500-431635/6	Method Blank	107	98	99	104

**Surrogate Legend**

- DCA = 1,2-Dichloroethane-d4 (Surr)
- BFB = 4-Bromofluorobenzene (Surr)
- DBFM = Dibromofluoromethane
- TOL = Toluene-d8 (Surr)

### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

#### Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-431518/7

Matrix: Water

Analysis Batch: 431518

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/10/18 11:51	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/10/18 11:51	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/10/18 11:51	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/10/18 11:51	1
Benzene	<0.15		0.50	0.15	ug/L			05/10/18 11:51	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/10/18 11:51	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/10/18 11:51	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/10/18 11:51	1
Toluene	<0.15		0.50	0.15	ug/L			05/10/18 11:51	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/10/18 11:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		05/10/18 11:51	1
4-Bromofluorobenzene (Surr)	99		72 - 124		05/10/18 11:51	1
Dibromofluoromethane	97		75 - 120		05/10/18 11:51	1
Toluene-d8 (Surr)	103		75 - 120		05/10/18 11:51	1

Lab Sample ID: LCS 500-431518/5

Matrix: Water

Analysis Batch: 431518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	50.0	44.6		ug/L		89	70 - 123
1,2-Dibromoethane (EDB)	50.0	48.4		ug/L		97	70 - 125
1,2-Dichloroethane	50.0	47.5		ug/L		95	68 - 127
1,3,5-Trimethylbenzene	50.0	44.2		ug/L		88	70 - 123
Benzene	50.0	44.1		ug/L		88	70 - 120
Ethylbenzene	50.0	45.4		ug/L		91	70 - 120
Methyl tert-butyl ether	50.0	44.8		ug/L		90	70 - 120
Naphthalene	50.0	52.7		ug/L		105	59 - 130
Toluene	50.0	47.7		ug/L		95	70 - 125
Xylenes, Total	100	95.4		ug/L		95	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		75 - 126
4-Bromofluorobenzene (Surr)	94		72 - 124
Dibromofluoromethane	93		75 - 120
Toluene-d8 (Surr)	103		75 - 120

Lab Sample ID: MB 500-431635/6

Matrix: Water

Analysis Batch: 431635

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/10/18 22:44	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			05/10/18 22:44	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/10/18 22:44	1

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### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

#### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-431635/6  
 Matrix: Water  
 Analysis Batch: 431635

Client Sample ID: Method Blank  
 Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/10/18 22:44	1
Benzene	<0.15		0.50	0.15	ug/L			05/10/18 22:44	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/10/18 22:44	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/10/18 22:44	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/10/18 22:44	1
Toluene	<0.15		0.50	0.15	ug/L			05/10/18 22:44	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/10/18 22:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		05/10/18 22:44	1
4-Bromofluorobenzene (Surr)	98		72 - 124		05/10/18 22:44	1
Dibromofluoromethane	99		75 - 120		05/10/18 22:44	1
Toluene-d8 (Surr)	104		75 - 120		05/10/18 22:44	1

Lab Sample ID: LCS 500-431635/4  
 Matrix: Water  
 Analysis Batch: 431635

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	50.0	50.9		ug/L		102	70 - 125
1,2-Dichloroethane	50.0	51.3		ug/L		103	68 - 127
1,3,5-Trimethylbenzene	50.0	47.0		ug/L		94	70 - 123
Benzene	50.0	47.4		ug/L		95	70 - 120
Ethylbenzene	50.0	46.7		ug/L		93	70 - 120
Methyl tert-butyl ether	50.0	46.9		ug/L		94	70 - 120
Naphthalene	50.0	52.8		ug/L		106	59 - 130
Toluene	50.0	49.3		ug/L		99	70 - 125
Xylenes, Total	100	98.1		ug/L		98	70 - 125

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		75 - 126
4-Bromofluorobenzene (Surr)	97		72 - 124
Dibromofluoromethane	95		75 - 120
Toluene-d8 (Surr)	103		75 - 120

Lab Sample ID: 500-144828-17 MS  
 Matrix: Water  
 Analysis Batch: 431635

Client Sample ID: CMW-1  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	<0.39		50.0	52.3		ug/L		105	70 - 125
1,2-Dichloroethane	<0.39		50.0	57.8		ug/L		116	68 - 127
1,3,5-Trimethylbenzene	<0.25		50.0	48.3		ug/L		97	70 - 123
Benzene	<0.15		50.0	48.5		ug/L		97	70 - 120
Ethylbenzene	<0.18		50.0	47.7		ug/L		95	70 - 120
Methyl tert-butyl ether	<0.39		50.0	53.1		ug/L		106	70 - 120

TestAmerica Chicago

## QC Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-144828-17 MS

Matrix: Water

Analysis Batch: 431635

Client Sample ID: CMW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	<0.34		50.0	51.2		ug/L		102	59 - 130
Toluene	<0.15		50.0	50.4		ug/L		101	70 - 125
Xylenes, Total	<0.22		100	101		ug/L		101	70 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		75 - 126
4-Bromofluorobenzene (Surr)	99		72 - 124
Dibromofluoromethane	98		75 - 120
Toluene-d8 (Surr)	102		75 - 120

Lab Sample ID: 500-144828-17 MSD

Matrix: Water

Analysis Batch: 431635

Client Sample ID: CMW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	<0.36		50.0	49.3		ug/L		99	70 - 123	1	20
1,2-Dibromoethane (EDB)	<0.39		50.0	52.9		ug/L		106	70 - 125	1	20
1,2-Dichloroethane	<0.39		50.0	57.2		ug/L		114	68 - 127	1	20
1,3,5-Trimethylbenzene	<0.25		50.0	49.1		ug/L		98	70 - 123	2	20
Benzene	<0.15		50.0	48.7		ug/L		97	70 - 120	0	20
Ethylbenzene	<0.18		50.0	47.4		ug/L		95	70 - 120	1	20
Methyl tert-butyl ether	<0.39		50.0	52.8		ug/L		106	70 - 120	0	20
Naphthalene	<0.34		50.0	55.9		ug/L		112	59 - 130	9	20
Toluene	<0.15		50.0	50.8		ug/L		102	70 - 125	1	20
Xylenes, Total	<0.22		100	101		ug/L		101	70 - 125	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		75 - 126
4-Bromofluorobenzene (Surr)	100		72 - 124
Dibromofluoromethane	97		75 - 120
Toluene-d8 (Surr)	102		75 - 120

# Lab Chronicle

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Client Sample ID: MW-1A**

Date Collected: 04/30/18 11:30

Date Received: 05/03/18 09:10

**Lab Sample ID: 500-144828-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431518	05/10/18 17:40	JDD	TAL CHI

**Client Sample ID: MW-3**

Date Collected: 04/30/18 10:30

Date Received: 05/03/18 09:10

**Lab Sample ID: 500-144828-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431518	05/10/18 18:07	JDD	TAL CHI

**Client Sample ID: MW-3A**

Date Collected: 04/30/18 14:45

Date Received: 05/03/18 09:10

**Lab Sample ID: 500-144828-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	431635	05/10/18 23:11	JDD	TAL CHI
Total/NA	Analysis	8260B	DL	200	431635	05/10/18 23:38	JDD	TAL CHI

**Client Sample ID: MW-4A**

Date Collected: 04/30/18 14:15

Date Received: 05/03/18 09:10

**Lab Sample ID: 500-144828-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	431518	05/10/18 18:33	JDD	TAL CHI

**Client Sample ID: MW-4R**

Date Collected: 04/30/18 14:30

Date Received: 05/03/18 09:10

**Lab Sample ID: 500-144828-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	431635	05/11/18 00:04	JDD	TAL CHI
Total/NA	Analysis	8260B	DL	20	431635	05/11/18 00:31	JDD	TAL CHI

**Client Sample ID: MW-5**

Date Collected: 04/30/18 13:45

Date Received: 05/03/18 09:10

**Lab Sample ID: 500-144828-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 00:58	JDD	TAL CHI

## Lab Chronicle

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Client Sample ID: MW-5A****Lab Sample ID: 500-144828-7****Date Collected: 04/30/18 14:00****Matrix: Water****Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 01:24	JDD	TAL CHI
Total/NA	Analysis	8260B	DL	10	431635	05/11/18 01:52	JDD	TAL CHI

**Client Sample ID: MW-6****Lab Sample ID: 500-144828-8****Date Collected: 04/30/18 10:15****Matrix: Water****Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 02:18	JDD	TAL CHI

**Client Sample ID: MW-6A****Lab Sample ID: 500-144828-9****Date Collected: 04/30/18 12:15****Matrix: Water****Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 02:46	JDD	TAL CHI

**Client Sample ID: MW-7****Lab Sample ID: 500-144828-10****Date Collected: 04/30/18 11:15****Matrix: Water****Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 03:12	JDD	TAL CHI

**Client Sample ID: MW-7A****Lab Sample ID: 500-144828-11****Date Collected: 04/30/18 00:00****Matrix: Water****Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 03:40	JDD	TAL CHI

**Client Sample ID: PZ-7****Lab Sample ID: 500-144828-12****Date Collected: 04/30/18 11:15****Matrix: Water****Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 04:07	JDD	TAL CHI



# Lab Chronicle

Client: American Engineering Testing Inc.  
Project/Site: Dairy Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

**Client Sample ID: MW-9**

**Lab Sample ID: 500-144828-13**

**Date Collected: 04/30/18 11:00**

**Matrix: Water**

**Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 04:34	JDD	TAL CHI

**Client Sample ID: MW-10**

**Lab Sample ID: 500-144828-14**

**Date Collected: 04/30/18 15:00**

**Matrix: Water**

**Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	431635	05/11/18 05:01	JDD	TAL CHI

**Client Sample ID: MW-E**

**Lab Sample ID: 500-144828-15**

**Date Collected: 04/30/18 13:00**

**Matrix: Water**

**Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 05:29	JDD	TAL CHI

**Client Sample ID: MW-W**

**Lab Sample ID: 500-144828-16**

**Date Collected: 04/30/18 13:15**

**Matrix: Water**

**Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 05:57	JDD	TAL CHI

**Client Sample ID: CMW-1**

**Lab Sample ID: 500-144828-17**

**Date Collected: 04/30/18 12:00**

**Matrix: Water**

**Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 06:24	JDD	TAL CHI

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-144828-18**

**Date Collected: 04/30/18 00:00**

**Matrix: Water**

**Date Received: 05/03/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	431635	05/11/18 06:51	JDD	TAL CHI

### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts - 03-05510

TestAmerica Job ID: 500-144828-1

## Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18

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THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

Bill To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#/Reference# 18174003

## Chain of Custody Record

Lab Job #: 50078 AS 5/18  
500-144828  
Chain of Custody Number: \_\_\_\_\_  
Page 1 of 2  
Temperature °C of Cooler: -0.670.9

Client		Client Project #		Preservative		Parameter		Matrix		Comments	
AET		03-05510		I		PVIOC + HADCA		+ Naphthalene			
Project Name		Lab Project #		# of Containers		Matrix					
Daini Concepts (DC)				3 W		X					
Project Location/State		Lab PM		Date		Time					
Chilly, WI		Sandie F.		4/30/18		11:30					
Sampler		Sample ID		Date		Time					
Michael K. Neal		MW-1A		4/30/18		11:30		3 W		X	
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix					
1		MW-1A	4/30/18	11:30	3 W	X					
2		MW-3		10:30	3 W	X					
3		MW-3A		14:45	3 W	X					Strong Petrol. odor
4		MW-4A		14:15	3 W	X					
5		MW-4R		14:30	3 W	X					
6		MW-5		13:45	3 W	X					
7		MW-5A		14:00	3 W	X					
8		MW-6		10:15	3 W	X					
9		MW-6A		12:15	3 W	X					
10		MW-7		11:15	3 W	X					



500-144828 COC

Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days \_\_\_ 10 Days  15 Days \_\_\_ Other  
 Requested Due Date \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <i>[Signature]</i>	Company AET	Date 5-2-18	Time 15:00	Received By <i>[Signature]</i>	Company Fed X	Date	Time	Lab Courier
Relinquished By	Company	Date	Time	Received By <i>[Signature]</i>	Company TRAME	Date 05/03/18	Time 0910	Shipped FX STD
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

- Matrix Key
- WW - Wastewater
  - W - Water
  - S - Soil
  - SL - Sludge
  - MS - Miscellaneous
  - OL - Oil
  - A - Air
  - SE - Sediment
  - SO - Soil
  - L - Leachate
  - WI - Wipe
  - DW - Drinking Water
  - O - Other

Client Comments  
PECFA project

Lab Comments:

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
 Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional)  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# 18174003

## Chain of Custody Record

Lab Job #: 500-144828  
 Chain of Custody Number: \_\_\_\_\_  
 Page 2 of 2  
 Temperature °C of Cooler: -0.6 → 0.9

Client		Client Project #		Preservative		Parameter		Sample ID		Sampling		Matrix		Comments	
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Matrix	Matrix	Matrix	Matrix	Matrix	Matrix	Matrix	Matrix	Matrix
AET		03-05510		1		PECCA + 12 DCA + graph by loge + graph E.D.B		MW-7A		4-30-18		3 W X			
Dairi Concepts (DC)		Lab Project #						P2-7		11:45		3 W X			
Chili, WI		Lab Project #						MW-9		11:00		3 W X			
Michael K. Neal		Lab PM						MW-10		15:00		3 W X		Strong Petrol odor	
								MW-E		13:00		3 W X			
								MW-W		13:15		3 W X			
								CMW-1		12:00		3 W X			
								Trip Blnk		-		1 W X			

Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days \_\_\_ 10 Days X 15 Days \_\_\_ Other  
 Requested Due Date \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>[Signature]</u> Company AET Date 5-2-18 Time 15:00	Received By <u>Fed X</u> Company Date Time	Lab Courier _____
Relinquished By Company Date Time	Received By <u>Christina</u> Company TALM Date 05/03/18 Time 0910	Shipped <u>FX STD</u>
Relinquished By Company Date Time	Received By Company Date Time	Hand Delivered _____

Matrix Key  
 WW - Wastewater SE - Sediment  
 W - Water SO - Soil  
 S - Soil L - Leachate  
 SL - Sludge WI - Wipe  
 MS - Miscellaneous DW - Drinking Water  
 OL - Oil O - Other  
 A - Air

Client Comments  
PECCA project

Lab Comments:  
 \_\_\_\_\_

## Login Sample Receipt Checklist

Client: American Engineering Testing Inc.

Job Number: 500-144828-1

**Login Number: 144828****List Source: TestAmerica Chicago****List Number: 1****Creator: Sanchez, Ariel M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-148121-1  
Client Project/Site: Dairi Concepts (DC) - 03-05510

For:  
American Engineering Testing Inc.  
1837 Cty Hwy OO  
Chippewa Falls, Wisconsin 54729

Attn: Mr. Michael Neal



Authorized for release by:  
7/22/2018 4:43:11 PM

Sandie Fredrick, Project Manager II  
(920)261-1660  
sandie.fredrick@testamericainc.com

**REVIEWED**

**By mneal at 6:10 am, Jul 23, 2018**

### LINKS

Review your project results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Case Narrative

Client: American Engineering Testing Inc.  
Project/Site: Dairy Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

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**Job ID: 500-148121-1**

---

**Laboratory: TestAmerica Chicago**

### Narrative

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**Job Narrative**  
**500-148121-1**

### Comments

No additional comments.

### Receipt

The samples were received on 7/10/2018 9:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8° C.

### GC/MS VOA

Method(s) 8260B: The following sample was diluted due to the abundance of non-target analytes: MW-10 (500-148121-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-3A (500-148121-2) and MW-4R (500-148121-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: One surrogate recovery for the following sample was outside control limits: MW-4R (500-148121-4). Evidence of matrix interference is present. The sample was re-analyzed at a dilution to bring target compounds within the calibration range. The diluted analysis had all surrogate recoveries within limits therefor no further corrective action was needed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.





# Detection Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

## Client Sample ID: MW-1A

## Lab Sample ID: 500-148121-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	1.8		1.0	0.39	ug/L	1		8260B	Total/NA
Benzene	3.7		0.50	0.15	ug/L	1		8260B	Total/NA
Toluene	0.38	J	0.50	0.15	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-3A

## Lab Sample ID: 500-148121-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dibromoethane (EDB)	37		5.0	1.9	ug/L	5		8260B	Total/NA
Naphthalene	110		5.0	1.7	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	1800		50	18	ug/L	50		8260B	Total/NA
1,3,5-Trimethylbenzene - DL	550		50	13	ug/L	50		8260B	Total/NA
Benzene - DL	2100		25	7.3	ug/L	50		8260B	Total/NA
Ethylbenzene - DL	1500		25	9.2	ug/L	50		8260B	Total/NA
Toluene - DL	9500		25	7.6	ug/L	50		8260B	Total/NA
Xylenes, Total - DL	7900		50	11	ug/L	50		8260B	Total/NA

## Client Sample ID: MW-4A

## Lab Sample ID: 500-148121-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	37		1.0	0.36	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	28		1.0	0.25	ug/L	1		8260B	Total/NA
Benzene	110		0.50	0.15	ug/L	1		8260B	Total/NA
Ethylbenzene	57		0.50	0.18	ug/L	1		8260B	Total/NA
Naphthalene	19		1.0	0.34	ug/L	1		8260B	Total/NA
Toluene	9.1		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	82		1.0	0.22	ug/L	1		8260B	Total/NA

## Client Sample ID: MW-4R

## Lab Sample ID: 500-148121-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	300		1.0	0.29	ug/L	2		8260B	Total/NA
Naphthalene	14		2.0	0.67	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	1800		20	7.2	ug/L	20		8260B	Total/NA
1,3,5-Trimethylbenzene - DL	520		20	5.1	ug/L	20		8260B	Total/NA
Ethylbenzene - DL	1100		10	3.7	ug/L	20		8260B	Total/NA
Toluene - DL	740		10	3.0	ug/L	20		8260B	Total/NA
Xylenes, Total - DL	3700		20	4.4	ug/L	20		8260B	Total/NA

## Client Sample ID: MW-5A

## Lab Sample ID: 500-148121-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	48		0.50	0.15	ug/L	1		8260B	Total/NA
Naphthalene	140		1.0	0.34	ug/L	1		8260B	Total/NA
Toluene	46		0.50	0.15	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	690		10	3.6	ug/L	10		8260B	Total/NA
1,3,5-Trimethylbenzene - DL	220		10	2.5	ug/L	10		8260B	Total/NA
Ethylbenzene - DL	460		5.0	1.8	ug/L	10		8260B	Total/NA
Xylenes, Total - DL	890		10	2.2	ug/L	10		8260B	Total/NA

## Client Sample ID: MW-7

## Lab Sample ID: 500-148121-6

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

**Detection Summary**

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

**Client Sample ID: MW-7 (Continued)****Lab Sample ID: 500-148121-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	1.6		1.0	0.39	ug/L	1		8260B	Total/NA
Benzene	4.4		0.50	0.15	ug/L	1		8260B	Total/NA

**Client Sample ID: MW-10****Lab Sample ID: 500-148121-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1400		20	7.2	ug/L	20		8260B	Total/NA
1,3,5-Trimethylbenzene	420		20	5.1	ug/L	20		8260B	Total/NA
Benzene	340		10	2.9	ug/L	20		8260B	Total/NA
Ethylbenzene	1000		10	3.7	ug/L	20		8260B	Total/NA
Naphthalene	1100		20	6.7	ug/L	20		8260B	Total/NA
Toluene	1200		10	3.0	ug/L	20		8260B	Total/NA
Xylenes, Total	3000		20	4.4	ug/L	20		8260B	Total/NA

**Client Sample ID: Trip Blank****Lab Sample ID: 500-148121-8**

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Method Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Sample Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-148121-1	MW-1A	Water	07/09/18 09:30	07/10/18 09:05
500-148121-2	MW-3A	Water	07/09/18 11:15	07/10/18 09:05
500-148121-3	MW-4A	Water	07/09/18 10:45	07/10/18 09:05
500-148121-4	MW-4R	Water	07/09/18 11:00	07/10/18 09:05
500-148121-5	MW-5A	Water	07/09/18 10:30	07/10/18 09:05
500-148121-6	MW-7	Water	07/09/18 10:00	07/10/18 09:05
500-148121-7	MW-10	Water	07/09/18 11:30	07/10/18 09:05
500-148121-8	Trip Blank	Water	07/09/18 00:00	07/10/18 09:05

# Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

**Client Sample ID: MW-1A**  
**Date Collected: 07/09/18 09:30**  
**Date Received: 07/10/18 09:05**

**Lab Sample ID: 500-148121-1**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/19/18 14:50	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			07/19/18 14:50	1
<b>1,2-Dichloroethane</b>	<b>1.8</b>		1.0	0.39	ug/L			07/19/18 14:50	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/19/18 14:50	1
<b>Benzene</b>	<b>3.7</b>		0.50	0.15	ug/L			07/19/18 14:50	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/19/18 14:50	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/19/18 14:50	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/19/18 14:50	1
<b>Toluene</b>	<b>0.38 J</b>		0.50	0.15	ug/L			07/19/18 14:50	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/19/18 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		75 - 126		07/19/18 14:50	1
4-Bromofluorobenzene (Surr)	92		72 - 124		07/19/18 14:50	1
Dibromofluoromethane	93		75 - 120		07/19/18 14:50	1
Toluene-d8 (Surr)	94		75 - 120		07/19/18 14:50	1

**Client Sample ID: MW-3A**  
**Date Collected: 07/09/18 11:15**  
**Date Received: 07/10/18 09:05**

**Lab Sample ID: 500-148121-2**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2-Dibromoethane (EDB)</b>	<b>37</b>		5.0	1.9	ug/L			07/19/18 15:17	5
1,2-Dichloroethane	<2.0		5.0	2.0	ug/L			07/19/18 15:17	5
Methyl tert-butyl ether	<2.0		5.0	2.0	ug/L			07/19/18 15:17	5
<b>Naphthalene</b>	<b>110</b>		5.0	1.7	ug/L			07/19/18 15:17	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 126		07/19/18 15:17	5
4-Bromofluorobenzene (Surr)	117		72 - 124		07/19/18 15:17	5
Dibromofluoromethane	102		75 - 120		07/19/18 15:17	5
Toluene-d8 (Surr)	107		75 - 120		07/19/18 15:17	5

**Method: 8260B - Volatile Organic Compounds (GC/MS) - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>1800</b>		50	18	ug/L			07/19/18 15:44	50
<b>1,3,5-Trimethylbenzene</b>	<b>550</b>		50	13	ug/L			07/19/18 15:44	50
<b>Benzene</b>	<b>2100</b>		25	7.3	ug/L			07/19/18 15:44	50
<b>Ethylbenzene</b>	<b>1500</b>		25	9.2	ug/L			07/19/18 15:44	50
<b>Toluene</b>	<b>9500</b>		25	7.6	ug/L			07/19/18 15:44	50
<b>Xylenes, Total</b>	<b>7900</b>		50	11	ug/L			07/19/18 15:44	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 126		07/19/18 15:44	50
4-Bromofluorobenzene (Surr)	93		72 - 124		07/19/18 15:44	50
Dibromofluoromethane	93		75 - 120		07/19/18 15:44	50
Toluene-d8 (Surr)	94		75 - 120		07/19/18 15:44	50

## Client Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

## Client Sample ID: MW-4A

Date Collected: 07/09/18 10:45

Date Received: 07/10/18 09:05

## Lab Sample ID: 500-148121-3

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	37		1.0	0.36	ug/L			07/19/18 16:11	1
1,3,5-Trimethylbenzene	28		1.0	0.25	ug/L			07/19/18 16:11	1
Benzene	110		0.50	0.15	ug/L			07/19/18 16:11	1
Ethylbenzene	57		0.50	0.18	ug/L			07/19/18 16:11	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/19/18 16:11	1
Naphthalene	19		1.0	0.34	ug/L			07/19/18 16:11	1
Toluene	9.1		0.50	0.15	ug/L			07/19/18 16:11	1
Xylenes, Total	82		1.0	0.22	ug/L			07/19/18 16:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 126					07/19/18 16:11	1
4-Bromofluorobenzene (Surr)	93		72 - 124					07/19/18 16:11	1
Dibromofluoromethane	93		75 - 120					07/19/18 16:11	1
Toluene-d8 (Surr)	95		75 - 120					07/19/18 16:11	1

## Client Sample ID: MW-4R

Date Collected: 07/09/18 11:00

Date Received: 07/10/18 09:05

## Lab Sample ID: 500-148121-4

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	300		1.0	0.29	ug/L			07/19/18 16:38	2
Methyl tert-butyl ether	<0.79		2.0	0.79	ug/L			07/19/18 16:38	2
Naphthalene	14		2.0	0.67	ug/L			07/19/18 16:38	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 126					07/19/18 16:38	2
4-Bromofluorobenzene (Surr)	102		72 - 124					07/19/18 16:38	2
Dibromofluoromethane	102		75 - 120					07/19/18 16:38	2
Toluene-d8 (Surr)	123	X	75 - 120					07/19/18 16:38	2

## Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1800		20	7.2	ug/L			07/19/18 17:04	20
1,3,5-Trimethylbenzene	520		20	5.1	ug/L			07/19/18 17:04	20
Ethylbenzene	1100		10	3.7	ug/L			07/19/18 17:04	20
Toluene	740		10	3.0	ug/L			07/19/18 17:04	20
Xylenes, Total	3700		20	4.4	ug/L			07/19/18 17:04	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		75 - 126					07/19/18 17:04	20
4-Bromofluorobenzene (Surr)	91		72 - 124					07/19/18 17:04	20
Dibromofluoromethane	91		75 - 120					07/19/18 17:04	20
Toluene-d8 (Surr)	95		75 - 120					07/19/18 17:04	20

TestAmerica Chicago

### Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

**Client Sample ID: MW-5A**

**Lab Sample ID: 500-148121-5**

**Date Collected: 07/09/18 10:30**

**Matrix: Water**

**Date Received: 07/10/18 09:05**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>48</b>		0.50	0.15	ug/L			07/19/18 17:31	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/19/18 17:31	1
<b>Naphthalene</b>	<b>140</b>		1.0	0.34	ug/L			07/19/18 17:31	1
<b>Toluene</b>	<b>46</b>		0.50	0.15	ug/L			07/19/18 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		75 - 126					07/19/18 17:31	1
4-Bromofluorobenzene (Surr)	93		72 - 124					07/19/18 17:31	1
Dibromofluoromethane	93		75 - 120					07/19/18 17:31	1
Toluene-d8 (Surr)	95		75 - 120					07/19/18 17:31	1

**Method: 8260B - Volatile Organic Compounds (GC/MS) - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>690</b>		10	3.6	ug/L			07/19/18 17:58	10
<b>1,3,5-Trimethylbenzene</b>	<b>220</b>		10	2.5	ug/L			07/19/18 17:58	10
<b>Ethylbenzene</b>	<b>460</b>		5.0	1.8	ug/L			07/19/18 17:58	10
<b>Xylenes, Total</b>	<b>890</b>		10	2.2	ug/L			07/19/18 17:58	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 126					07/19/18 17:58	10
4-Bromofluorobenzene (Surr)	93		72 - 124					07/19/18 17:58	10
Dibromofluoromethane	94		75 - 120					07/19/18 17:58	10
Toluene-d8 (Surr)	94		75 - 120					07/19/18 17:58	10

**Client Sample ID: MW-7**

**Lab Sample ID: 500-148121-6**

**Date Collected: 07/09/18 10:00**

**Matrix: Water**

**Date Received: 07/10/18 09:05**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/20/18 11:31	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			07/20/18 11:31	1
<b>1,2-Dichloroethane</b>	<b>1.6</b>		1.0	0.39	ug/L			07/20/18 11:31	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/20/18 11:31	1
<b>Benzene</b>	<b>4.4</b>		0.50	0.15	ug/L			07/20/18 11:31	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/20/18 11:31	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/20/18 11:31	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/20/18 11:31	1
Toluene	<0.15		0.50	0.15	ug/L			07/20/18 11:31	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/20/18 11:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 126					07/20/18 11:31	1
4-Bromofluorobenzene (Surr)	91		72 - 124					07/20/18 11:31	1
Dibromofluoromethane	94		75 - 120					07/20/18 11:31	1
Toluene-d8 (Surr)	93		75 - 120					07/20/18 11:31	1

# Client Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairy Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

**Client Sample ID: MW-10**  
**Date Collected: 07/09/18 11:30**  
**Date Received: 07/10/18 09:05**

**Lab Sample ID: 500-148121-7**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>1400</b>		20	7.2	ug/L			07/19/18 19:16	20
1,2-Dibromoethane (EDB)	<7.7		20	7.7	ug/L			07/19/18 19:16	20
1,2-Dichloroethane	<7.8		20	7.8	ug/L			07/19/18 19:16	20
<b>1,3,5-Trimethylbenzene</b>	<b>420</b>		20	5.1	ug/L			07/19/18 19:16	20
<b>Benzene</b>	<b>340</b>		10	2.9	ug/L			07/19/18 19:16	20
<b>Ethylbenzene</b>	<b>1000</b>		10	3.7	ug/L			07/19/18 19:16	20
Methyl tert-butyl ether	<7.9		20	7.9	ug/L			07/19/18 19:16	20
<b>Naphthalene</b>	<b>1100</b>		20	6.7	ug/L			07/19/18 19:16	20
<b>Toluene</b>	<b>1200</b>		10	3.0	ug/L			07/19/18 19:16	20
<b>Xylenes, Total</b>	<b>3000</b>		20	4.4	ug/L			07/19/18 19:16	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 126					07/19/18 19:16	20
4-Bromofluorobenzene (Surr)	92		72 - 124					07/19/18 19:16	20
Dibromofluoromethane	91		75 - 120					07/19/18 19:16	20
Toluene-d8 (Surr)	96		75 - 120					07/19/18 19:16	20

**Client Sample ID: Trip Blank**  
**Date Collected: 07/09/18 00:00**  
**Date Received: 07/10/18 09:05**

**Lab Sample ID: 500-148121-8**  
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/19/18 10:51	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/19/18 10:51	1
Benzene	<0.15		0.50	0.15	ug/L			07/19/18 10:51	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/19/18 10:51	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/19/18 10:51	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/19/18 10:51	1
Toluene	<0.15		0.50	0.15	ug/L			07/19/18 10:51	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/19/18 10:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		75 - 126					07/19/18 10:51	1
4-Bromofluorobenzene (Surr)	93		72 - 124					07/19/18 10:51	1
Dibromofluoromethane	90		75 - 120					07/19/18 10:51	1
Toluene-d8 (Surr)	96		75 - 120					07/19/18 10:51	1



## Definitions/Glossary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

**QC Association Summary**

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

**GC/MS VOA****Analysis Batch: 441482**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148121-1	MW-1A	Total/NA	Water	8260B	
500-148121-2	MW-3A	Total/NA	Water	8260B	
500-148121-2 - DL	MW-3A	Total/NA	Water	8260B	
500-148121-3	MW-4A	Total/NA	Water	8260B	
500-148121-4	MW-4R	Total/NA	Water	8260B	
500-148121-4 - DL	MW-4R	Total/NA	Water	8260B	
500-148121-5	MW-5A	Total/NA	Water	8260B	
500-148121-5 - DL	MW-5A	Total/NA	Water	8260B	
500-148121-7	MW-10	Total/NA	Water	8260B	
500-148121-8	Trip Blank	Total/NA	Water	8260B	
MB 500-441482/7	Method Blank	Total/NA	Water	8260B	
LCS 500-441482/5	Lab Control Sample	Total/NA	Water	8260B	

**Analysis Batch: 441679**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-148121-6	MW-7	Total/NA	Water	8260B	
MB 500-441679/8	Method Blank	Total/NA	Water	8260B	
LCS 500-441679/6	Lab Control Sample	Total/NA	Water	8260B	

# Surrogate Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(75-126)	(72-124)	(75-120)	(75-120)
500-148121-1	MW-1A	92	92	93	94
500-148121-2	MW-3A	95	117	102	107
500-148121-2 - DL	MW-3A	91	93	93	94
500-148121-3	MW-4A	91	93	93	95
500-148121-4	MW-4R	95	102	102	123 X
500-148121-4 - DL	MW-4R	92	91	91	95
500-148121-5	MW-5A	93	93	93	95
500-148121-5 - DL	MW-5A	91	93	94	94
500-148121-6	MW-7	98	91	94	93
500-148121-7	MW-10	91	92	91	96
500-148121-8	Trip Blank	89	93	90	96
LCS 500-441482/5	Lab Control Sample	87	91	92	94
LCS 500-441679/6	Lab Control Sample	91	90	95	96
MB 500-441482/7	Method Blank	91	90	92	93
MB 500-441679/8	Method Blank	94	88	95	96

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

### QC Sample Results

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

#### Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-441482/7

Matrix: Water

Analysis Batch: 441482

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/19/18 10:24	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			07/19/18 10:24	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/19/18 10:24	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/19/18 10:24	1
Benzene	<0.15		0.50	0.15	ug/L			07/19/18 10:24	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/19/18 10:24	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/19/18 10:24	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/19/18 10:24	1
Toluene	<0.15		0.50	0.15	ug/L			07/19/18 10:24	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/19/18 10:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 126		07/19/18 10:24	1
4-Bromofluorobenzene (Surr)	90		72 - 124		07/19/18 10:24	1
Dibromofluoromethane	92		75 - 120		07/19/18 10:24	1
Toluene-d8 (Surr)	93		75 - 120		07/19/18 10:24	1

Lab Sample ID: LCS 500-441482/5

Matrix: Water

Analysis Batch: 441482

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	50.0	47.2		ug/L		94	70 - 123
1,2-Dibromoethane (EDB)	50.0	45.3		ug/L		91	70 - 125
1,2-Dichloroethane	50.0	42.7		ug/L		85	68 - 127
1,3,5-Trimethylbenzene	50.0	47.5		ug/L		95	70 - 123
Benzene	50.0	46.2		ug/L		92	70 - 120
Ethylbenzene	50.0	45.1		ug/L		90	70 - 120
Methyl tert-butyl ether	50.0	44.9		ug/L		90	70 - 120
Naphthalene	50.0	41.7		ug/L		83	59 - 130
Toluene	50.0	45.2		ug/L		90	70 - 125
Xylenes, Total	100	91.6		ug/L		92	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	87		75 - 126
4-Bromofluorobenzene (Surr)	91		72 - 124
Dibromofluoromethane	92		75 - 120
Toluene-d8 (Surr)	94		75 - 120

Lab Sample ID: MB 500-441679/8

Matrix: Water

Analysis Batch: 441679

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/20/18 10:11	1
1,2-Dibromoethane (EDB)	<0.39		1.0	0.39	ug/L			07/20/18 10:11	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/20/18 10:11	1

TestAmerica Chicago

## QC Sample Results

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-441679/8

Matrix: Water

Analysis Batch: 441679

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/20/18 10:11	1
Benzene	<0.15		0.50	0.15	ug/L			07/20/18 10:11	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/20/18 10:11	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/20/18 10:11	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/20/18 10:11	1
Toluene	<0.15		0.50	0.15	ug/L			07/20/18 10:11	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/20/18 10:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		07/20/18 10:11	1
4-Bromofluorobenzene (Surr)	88		72 - 124		07/20/18 10:11	1
Dibromofluoromethane	95		75 - 120		07/20/18 10:11	1
Toluene-d8 (Surr)	96		75 - 120		07/20/18 10:11	1

Lab Sample ID: LCS 500-441679/6

Matrix: Water

Analysis Batch: 441679

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	50.0	47.7		ug/L		95	70 - 123
1,2-Dibromoethane (EDB)	50.0	47.0		ug/L		94	70 - 125
1,2-Dichloroethane	50.0	46.7		ug/L		93	68 - 127
1,3,5-Trimethylbenzene	50.0	48.7		ug/L		97	70 - 123
Benzene	50.0	46.5		ug/L		93	70 - 120
Ethylbenzene	50.0	46.1		ug/L		92	70 - 120
Methyl tert-butyl ether	50.0	44.9		ug/L		90	70 - 120
Naphthalene	50.0	41.1		ug/L		82	59 - 130
Toluene	50.0	46.7		ug/L		93	70 - 125
Xylenes, Total	100	94.1		ug/L		94	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		75 - 126
4-Bromofluorobenzene (Surr)	90		72 - 124
Dibromofluoromethane	95		75 - 120
Toluene-d8 (Surr)	96		75 - 120

TestAmerica Chicago

# Lab Chronicle

Client: American Engineering Testing Inc.  
 Project/Site: Dairy Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

**Client Sample ID: MW-1A**

Date Collected: 07/09/18 09:30

Date Received: 07/10/18 09:05

**Lab Sample ID: 500-148121-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	441482	07/19/18 14:50	PMF	TAL CHI

**Client Sample ID: MW-3A**

Date Collected: 07/09/18 11:15

Date Received: 07/10/18 09:05

**Lab Sample ID: 500-148121-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	441482	07/19/18 15:17	PMF	TAL CHI
Total/NA	Analysis	8260B	DL	50	441482	07/19/18 15:44	PMF	TAL CHI

**Client Sample ID: MW-4A**

Date Collected: 07/09/18 10:45

Date Received: 07/10/18 09:05

**Lab Sample ID: 500-148121-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	441482	07/19/18 16:11	PMF	TAL CHI

**Client Sample ID: MW-4R**

Date Collected: 07/09/18 11:00

Date Received: 07/10/18 09:05

**Lab Sample ID: 500-148121-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	441482	07/19/18 16:38	PMF	TAL CHI
Total/NA	Analysis	8260B	DL	20	441482	07/19/18 17:04	PMF	TAL CHI

**Client Sample ID: MW-5A**

Date Collected: 07/09/18 10:30

Date Received: 07/10/18 09:05

**Lab Sample ID: 500-148121-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	441482	07/19/18 17:31	PMF	TAL CHI
Total/NA	Analysis	8260B	DL	10	441482	07/19/18 17:58	PMF	TAL CHI

**Client Sample ID: MW-7**

Date Collected: 07/09/18 10:00

Date Received: 07/10/18 09:05

**Lab Sample ID: 500-148121-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	441679	07/20/18 11:31	PMF	TAL CHI

# Lab Chronicle

Client: American Engineering Testing Inc.  
 Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

**Client Sample ID: MW-10**  
**Date Collected: 07/09/18 11:30**  
**Date Received: 07/10/18 09:05**

**Lab Sample ID: 500-148121-7**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	441482	07/19/18 19:16	PMF	TAL CHI

**Client Sample ID: Trip Blank**  
**Date Collected: 07/09/18 00:00**  
**Date Received: 07/10/18 09:05**

**Lab Sample ID: 500-148121-8**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	441482	07/19/18 10:51	PMF	TAL CHI

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



# Accreditation/Certification Summary

Client: American Engineering Testing Inc.  
Project/Site: Dairi Concepts (DC) - 03-05510

TestAmerica Job ID: 500-148121-1

## Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18 *

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.



THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 6046  
 Phone: 708.534.5200 Fax: 708.534.5



500-148121 COC

Report To (optional) \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

Bill To (optional) \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# 181 74003

## Chain of Custody Record

Lab Job #: 500-148121  
 Chain of Custody Number: \_\_\_\_\_  
 Page 1 of 1  
 Temperature °C of Cooler: 5.8

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key
AET		03-05510		1		1				
Project Name		Project Location/State		Lab Project #		Sampler		Lab PM		Comments
Dairi Concepts (DC)		CHIL, WI				Michael K. Neal		Sandie F.		
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix				
1		MW-1A	7-9-18	9:30	3	W	PVOC + Naphthalene		X	
2		MW-3A		11:15	3	W	PVOC + Naphthalene		X	
3		MW-4A		10:45	3	W	PVOC + Naphthalene		X	
4		MW-4R		11:00	3	W	PVOC + Naphthalene		X	
5		MW-5A		10:30	3	W	PVOC + Naphthalene		X	
6		MW-7		10:00	3	W	PVOC + Naphthalene		X	
7		MW-10		11:30	3	W	PVOC + Naphthalene		X	
8		Top Blank		-	1	W	PVOC + Naphthalene		X	

Turnaround Time Required (Business Days)  
 \_\_\_ 1 Day \_\_\_ 2 Days \_\_\_ 5 Days \_\_\_ 7 Days \_\_\_ 10 Days  15 Days \_\_\_ Other  
 Requested Due Date \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <u>[Signature]</u> Company: AET Date: 7-9-18 Time: 15:00	Received By: <u>[Signature]</u> Company: Fed Ex Date: 7/10/18 Time: 0905	Lab Courier: _____
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Shipped: <u>[Signature]</u>
Relinquished By: _____ Company: _____ Date: _____ Time: _____	Received By: _____ Company: _____ Date: _____ Time: _____	Hand Delivered: _____

Matrix Key  
 WW - Wastewater SE - Sediment  
 W - Water SO - Soil  
 S - Soil L - Leachate  
 SL - Sludge WI - Wipe  
 MS - Miscellaneous DW - Drinking Water  
 OL - Oil O - Other  
 A - Air

Client Comments: PCLFA project

Lab Comments: \_\_\_\_\_

## Login Sample Receipt Checklist

Client: American Engineering Testing Inc.

Job Number: 500-148121-1

**Login Number: 148121****List Source: TestAmerica Chicago****List Number: 1****Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

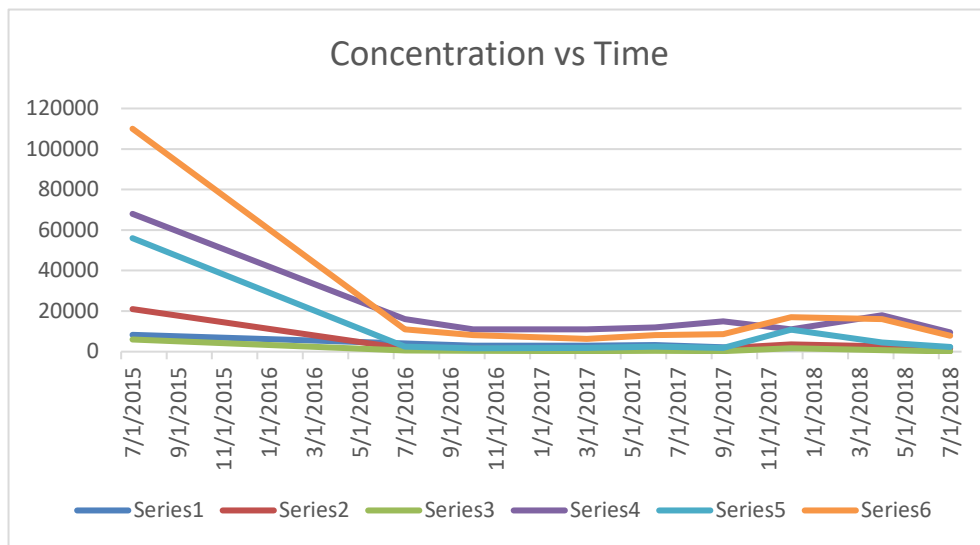
# Appendix D

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Concentration versus Time Graphs

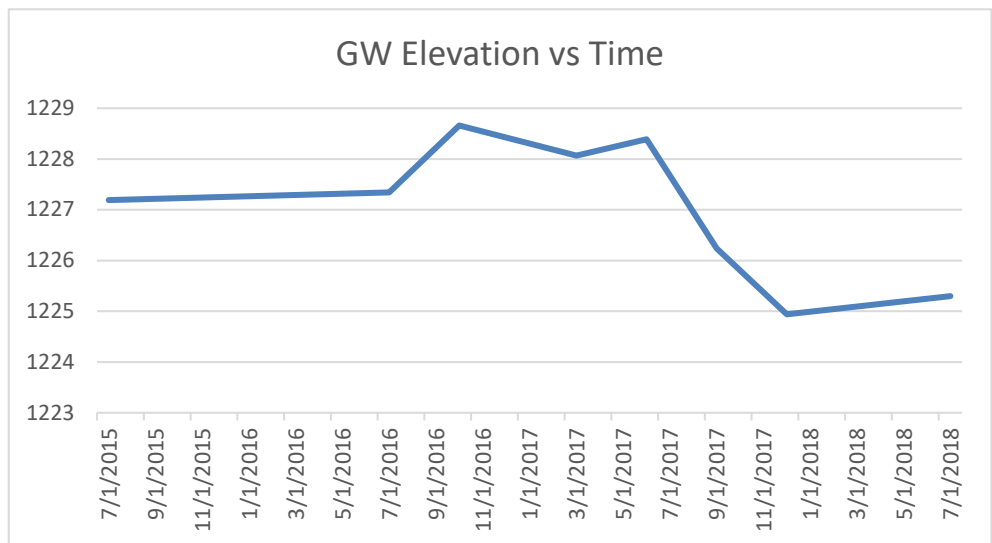
### DairiConcepts, Chili, WI - MW-3A - Post Remediation

Date	Series 1 Benzene	Series 2 Ethylbenzene	Series 3 Naphthalene	Series 4 Toluene	Series 5 Total TMBs	Series 6 Total Xylenes
7/7/2015	8300	21000	6000	68000	56000	110000
7/11/2016	4000	1600	530	16000	2470	11000
10/17/2016	3000	1500	400	11000	1670	8100
3/22/2017	2900	1200	260	11000	1790	6300
6/1/2017	3200	1600	450	12000	2430	8100
9/8/2017	2200	1700	340	15000	1840	8700
12/4/2017	1700	3600	1700	11000	10900	17000
4/30/2018	2900	2600	750	18000	4600	16000
7/9/2018	2100	1500	110	9500	2350	7900



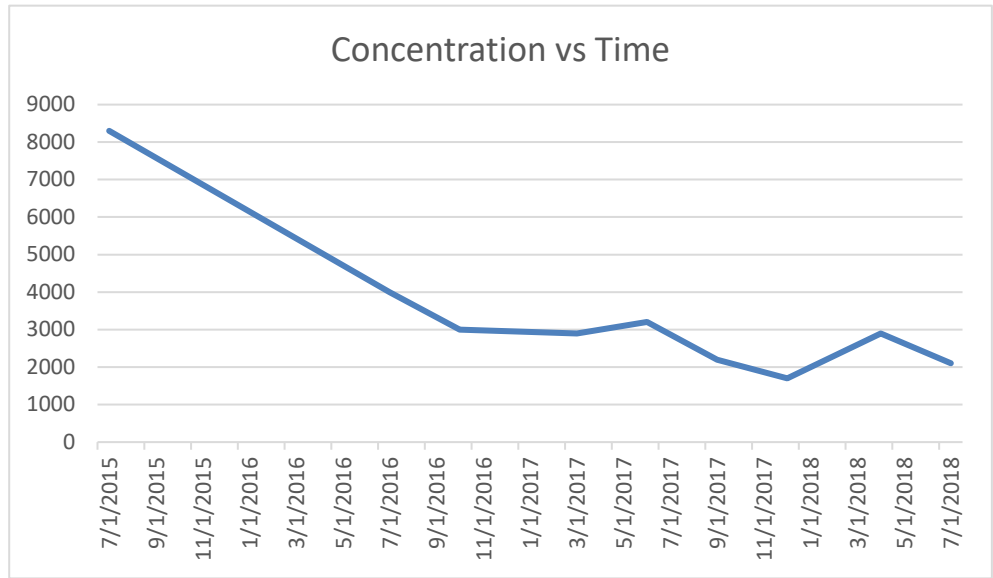
Series 1  
Groundwater Elevation

7/7/2015	1227.19
7/11/2016	1227.34
10/17/2016	1228.66
3/22/2017	1228.07
6/1/2017	1228.39
9/8/2017	1226.24
12/4/2017	1224.94
7/9/2018	1225.30

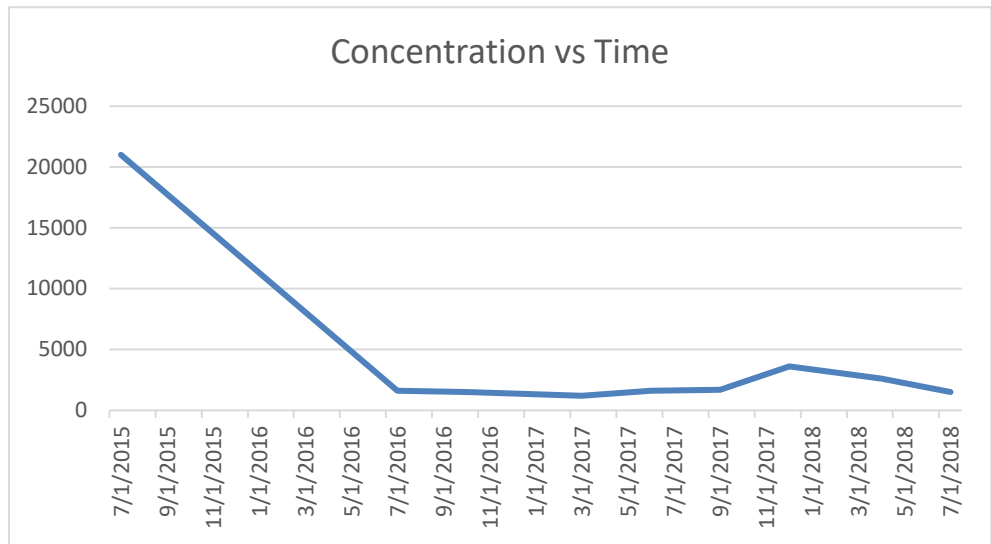


### DairiConcepts, Chili, WI - MW-3A - Post Remediation

Date	Series 1 Benzene
7/7/2015	8300
7/11/2016	4000
10/17/2016	3000
3/22/2017	2900
6/1/2017	3200
9/8/2017	2200
12/4/2017	1700
4/30/2018	2900
7/9/2018	2100

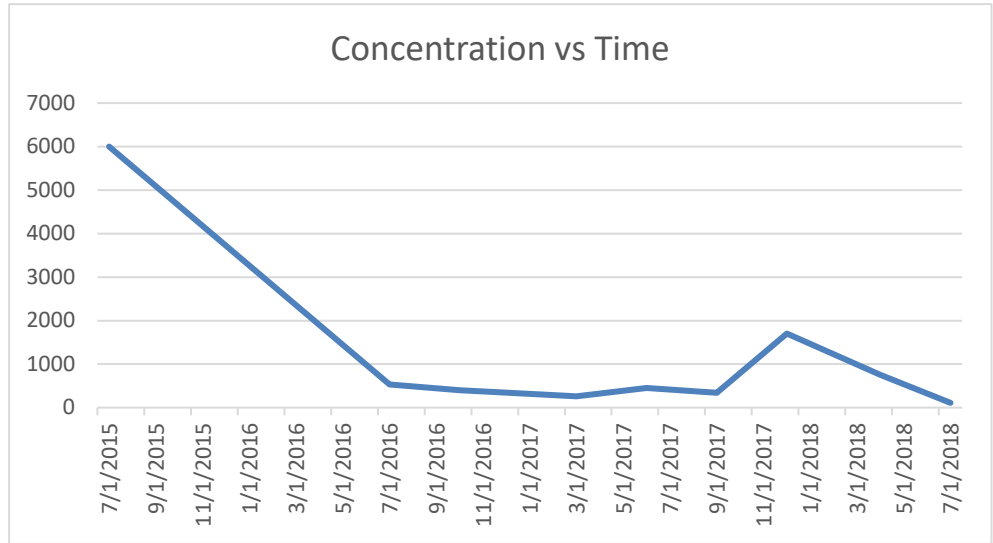


Date	Series 1 Ethylbenzene
7/7/2015	21000
7/11/2016	1600
10/17/2016	1500
3/22/2017	1200
6/1/2017	1600
9/8/2017	1700
12/4/2017	3600
4/30/2018	2600
7/9/2018	1500

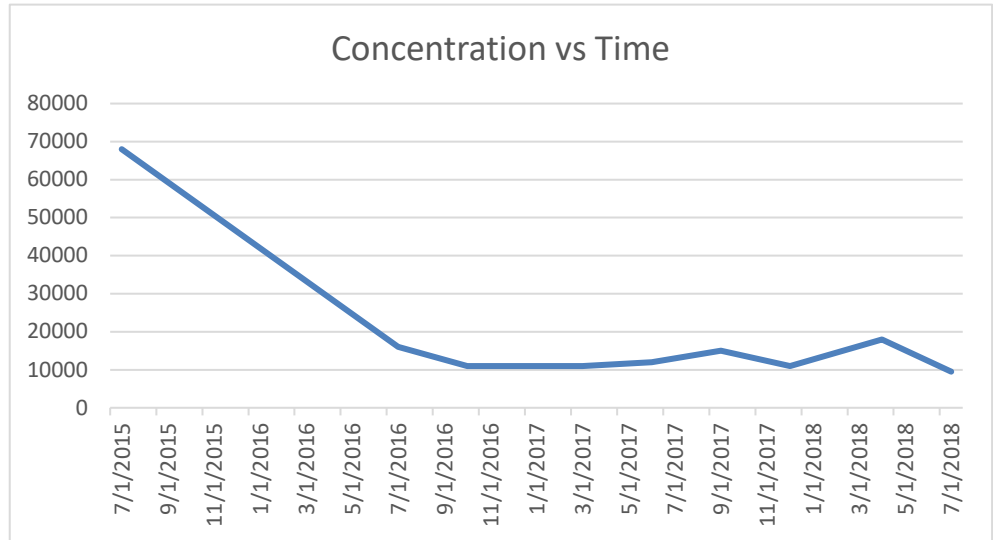


### DairiConcepts, Chili, WI - MW-3A - Post Remediation

Date	Series 1 Naphthalene
7/7/2015	6000
7/11/2016	530
10/17/2016	400
3/22/2017	260
6/1/2017	450
9/8/2017	340
12/4/2017	1700
4/30/2018	750
7/9/2018	110

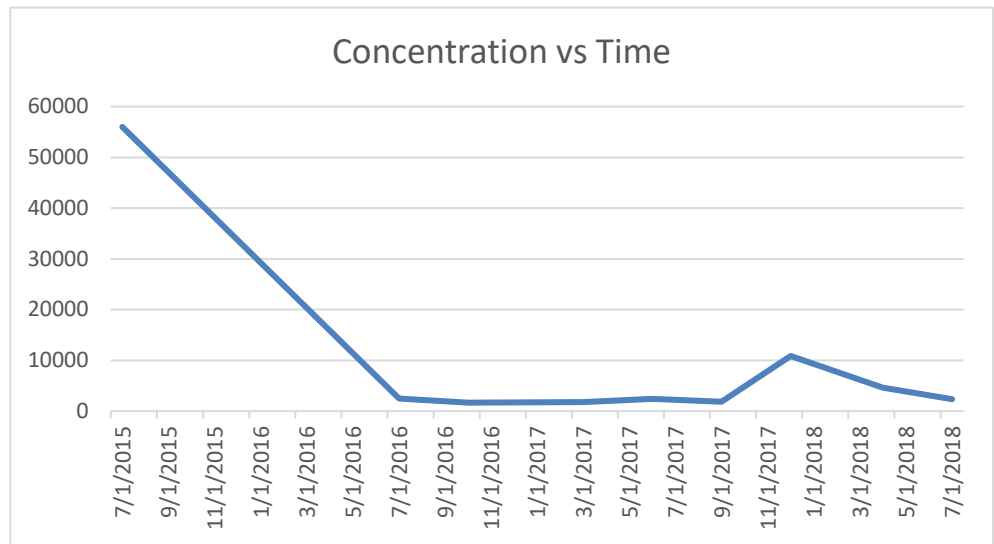


Date	Series 1 Toluene
7/7/2015	68000
7/11/2016	16000
10/17/2016	11000
3/22/2017	11000
6/1/2017	12000
9/8/2017	15000
12/4/2017	11000
4/30/2018	18000
7/9/2018	9500

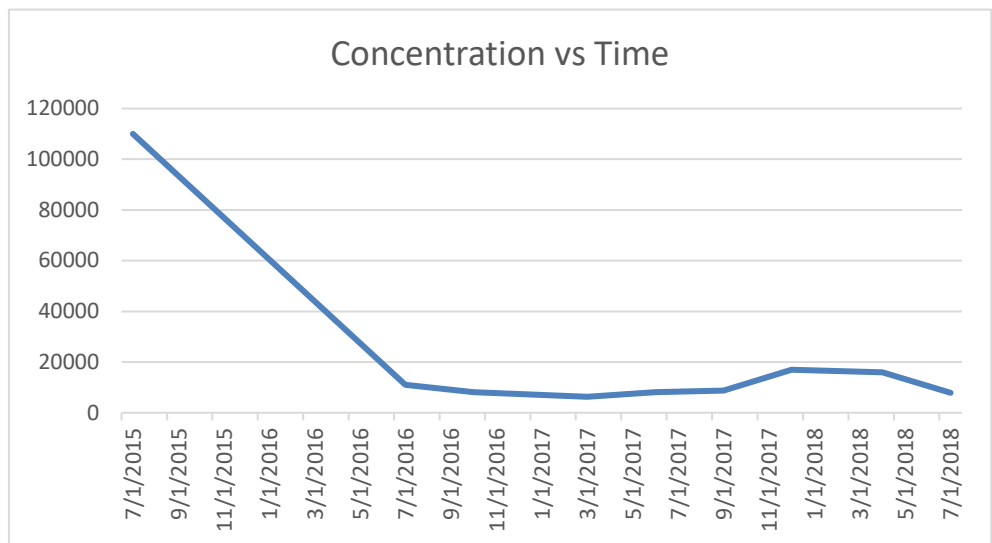


## DairiConcepts, Chili, WI - MW-3A - Post Remediation

Date	Series 1 Total TMBs
7/7/2015	56000
7/11/2016	2470
10/17/2016	1670
3/22/2017	1790
6/1/2017	2430
9/8/2017	1840
12/4/2017	10900
4/30/2018	4600
7/9/2018	2350

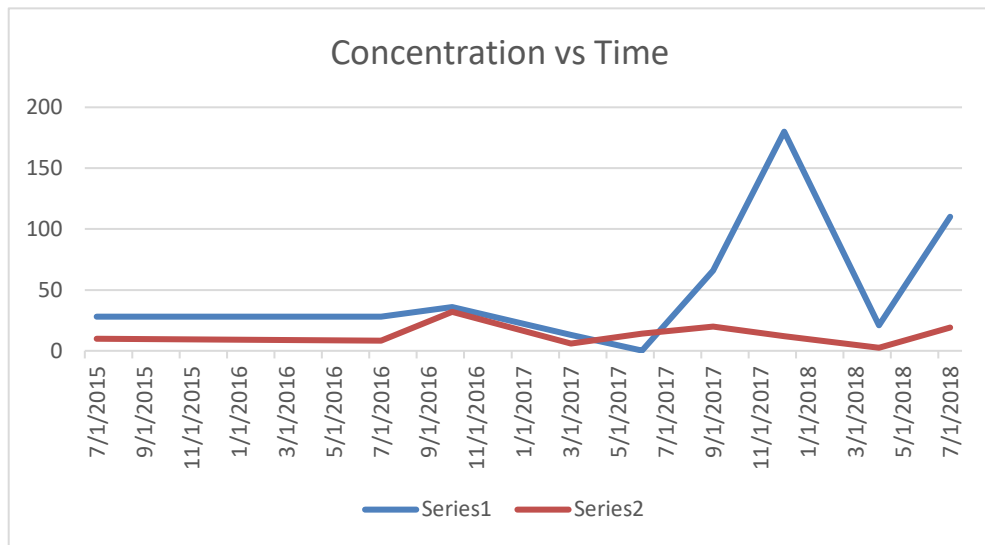


Date	Series 1 Total Xylenes
7/7/2015	110000
7/11/2016	11000
10/17/2016	8100
3/22/2017	6300
6/1/2017	8100
9/8/2017	8700
12/4/2017	17000
4/30/2018	16000
7/9/2018	7900

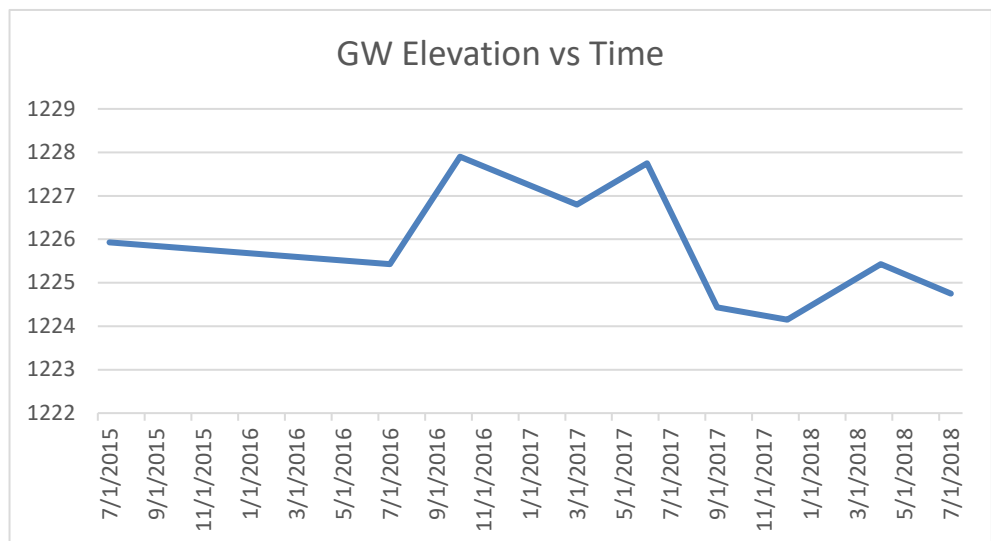


### DairiConcepts, Chili, WI - MW-4A - Post Remediation

Date	Series 1 Benzene	Series 2 Naphthalene
7/7/2015	28	10
7/11/2016	28	8.2
10/17/2016	36	32
3/22/2017	13	5.9
6/1/2017	0.18	14
9/8/2017	66	20
12/4/2017	180	12
4/30/2018	21	2.5
7/9/2018	110	19



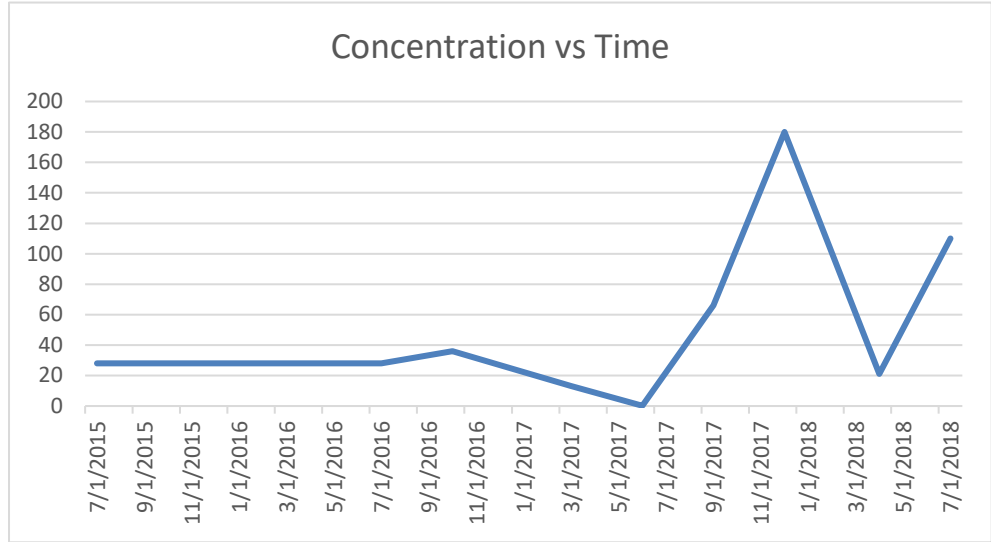
Date	Series 1 Groundwater Elevation
7/7/2015	1225.93
7/11/2016	1225.43
10/17/2016	1227.90
3/22/2017	1226.80
6/1/2017	1227.75
9/8/2017	1224.43
12/4/2017	1224.15
4/30/2018	1225.43
7/9/2018	1224.75



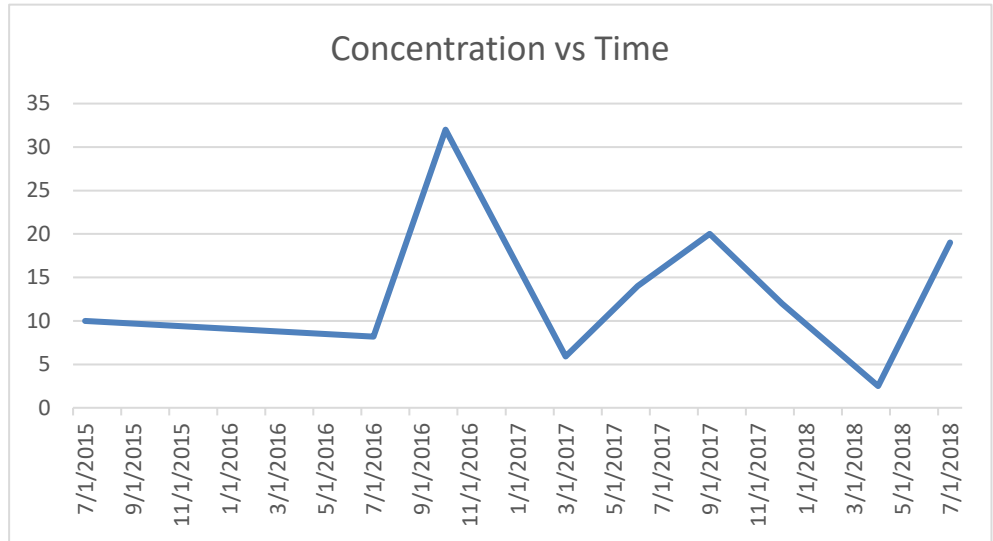


### DairiConcepts, Chili, WI - MW-4A - Post Remediation

Date	Series 1 Benzene
7/7/2015	28
7/11/2016	28
10/17/2016	36
3/22/2017	13
6/1/2017	0.18
9/8/2017	66
12/4/2017	180
4/30/2018	21
7/9/2018	110

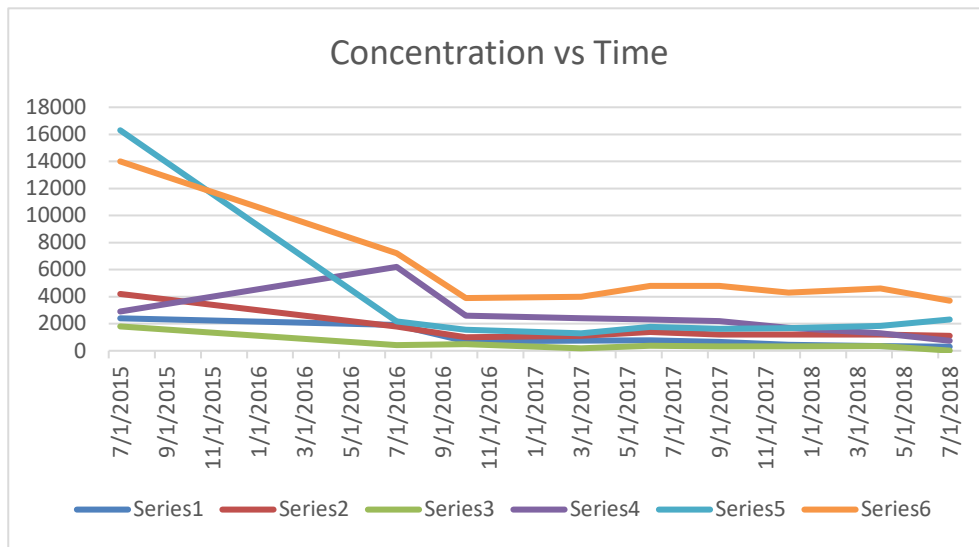


Date	Series 1 Naphthalene
7/7/2015	10
7/11/2016	8.2
10/17/2016	32
3/22/2017	5.9
6/1/2017	14
9/8/2017	20
12/4/2017	12
4/30/2018	2.5
7/9/2018	19



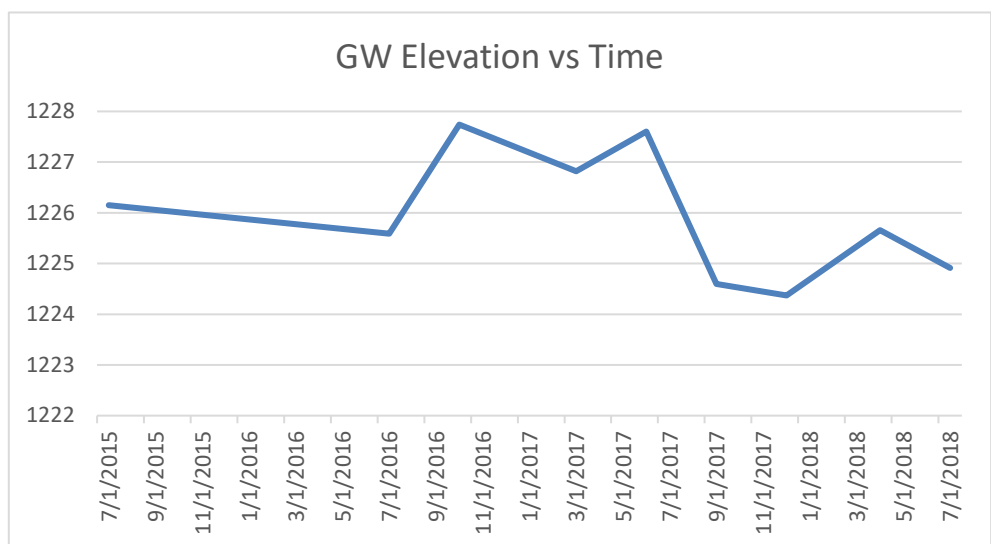
### DairiConcepts, Chili, WI - MW-4/4R - Post Remediation

Date	Series 1 Benzene	Series 2 Ethylbenzene	Series 2 Naphthalene	Series 4 Toluene	Series 5 Total TMBs	Series 6 Total Xylenes
7/7/2015	2400	4200	1800	2900	16300	14000
7/11/2016	1900	1800	430	6200	2180	7200
10/17/2016	700	1000	500	2600	1550	3900
3/22/2017	740	1100	190	2400	1290	4000
6/1/2017	780	1400	360	2300	1770	4800
9/8/2017	660	1200	320	2200	1620	4800
12/4/2017	450	1200	320	1700	1680	4300
4/30/2018	350	1200	340	1300	1850	4600
7/9/2018	300	1100	14	740	2320	3700



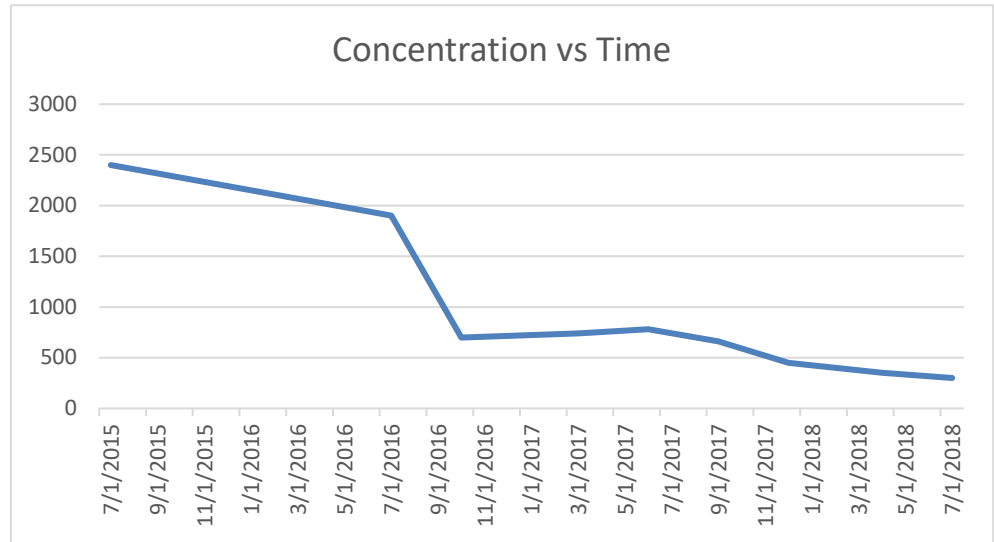
Date Series 1  
Groundwater Elevation

7/7/2015	1226.15
7/11/2016	1225.59
10/17/2016	1227.74
3/22/2017	1226.82
6/1/2017	1227.60
9/8/2017	1224.60
12/4/2017	1224.37
4/30/2018	1225.66
7/9/2018	1224.91

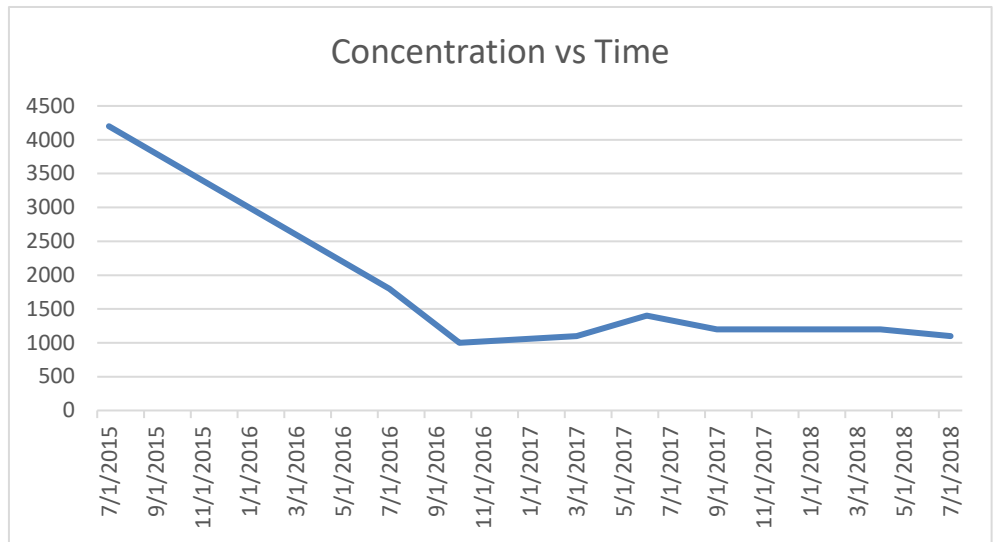


## DairiConcepts, Chili, WI - MW-4/4R - Post Remediation

Date	Series 1 Benzene
7/7/2015	2400
7/11/2016	1900
10/17/2016	700
3/22/2017	740
6/1/2017	780
9/8/2017	660
12/4/2017	450
4/30/2018	350
7/9/2018	300

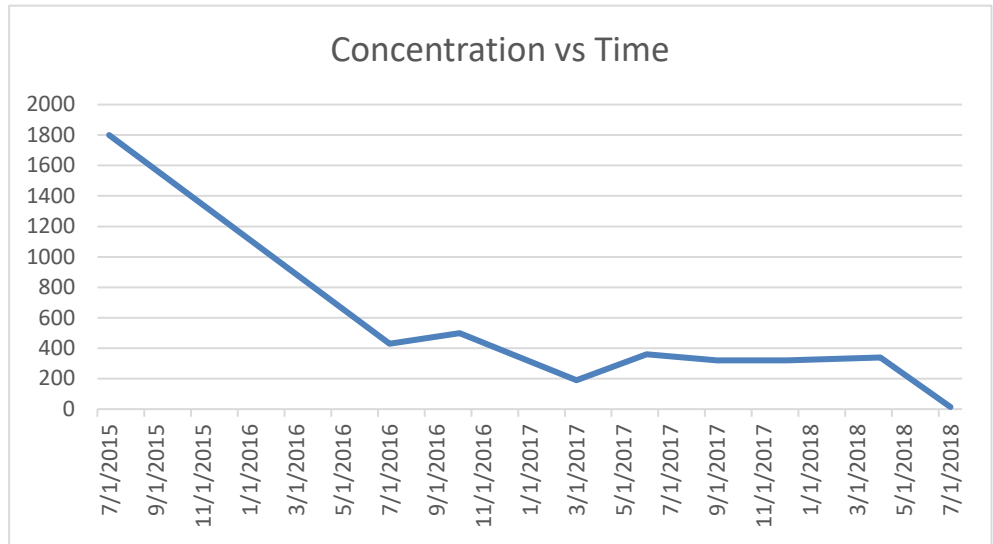


Date	Series 1 Ethylbenzene
7/7/2015	4200
7/11/2016	1800
10/17/2016	1000
3/22/2017	1100
6/1/2017	1400
9/8/2017	1200
12/4/2017	1200
4/30/2018	1200
7/9/2018	1100

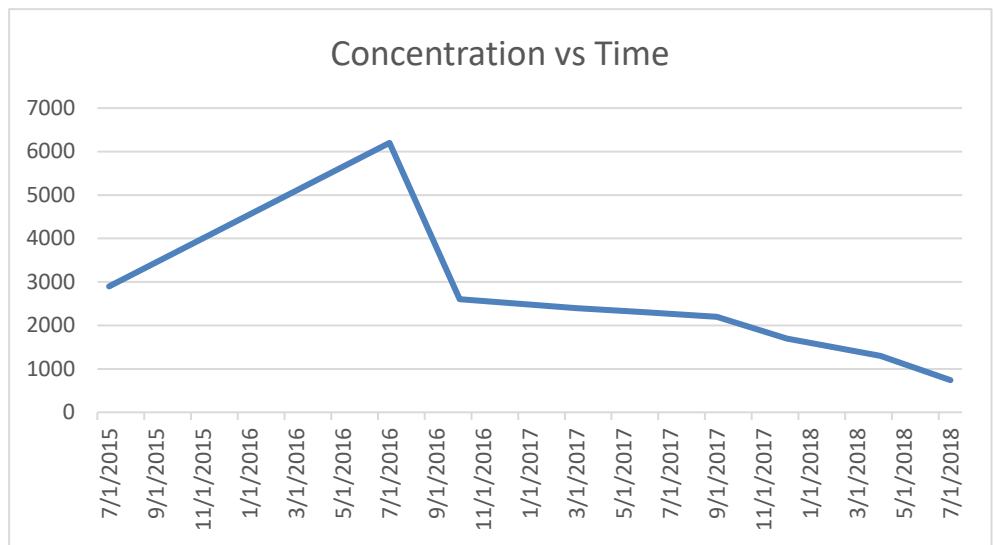


## DairiConcepts, Chili, WI - MW-4/4R - Post Remediation

Date	Series 1 Naphthalene
7/7/2015	1800
7/11/2016	430
10/17/2016	500
3/22/2017	190
6/1/2017	360
9/8/2017	320
12/4/2017	320
4/30/2018	340
7/9/2018	14

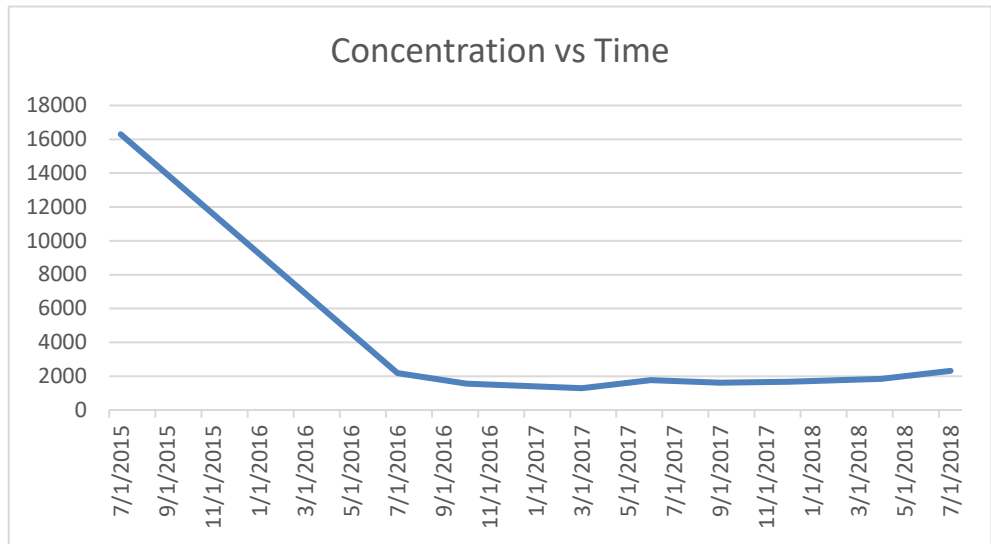


Date	Series 1 Toluene
7/7/2015	2900
7/11/2016	6200
10/17/2016	2600
3/22/2017	2400
6/1/2017	2300
9/8/2017	2200
12/4/2017	1700
4/30/2018	1300
7/9/2018	740

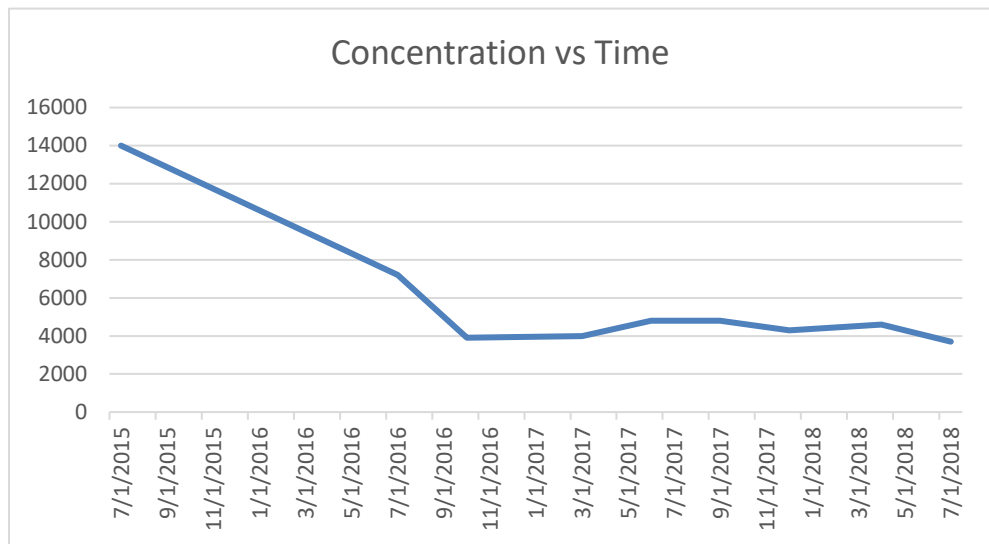


## DairiConcepts, Chili, WI - MW-4/4R - Post Remediation

Date	Series 1 Total TMBs
7/7/2015	16300
7/11/2016	2180
10/17/2016	1550
3/22/2017	1290
6/1/2017	1770
9/8/2017	1620
12/4/2017	1680
4/30/2018	1850
7/9/2018	2320

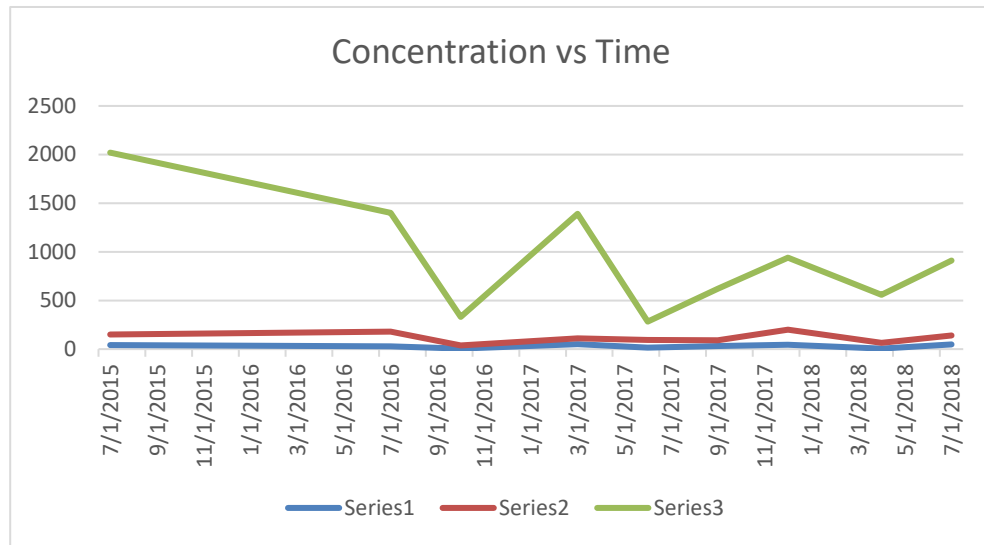


Date	Series 1 Total Xylenes
7/7/2015	14000
7/11/2016	7200
10/17/2016	3900
3/22/2017	4000
6/1/2017	4800
9/8/2017	4800
12/4/2017	4300
4/30/2018	4600
7/9/2018	3700



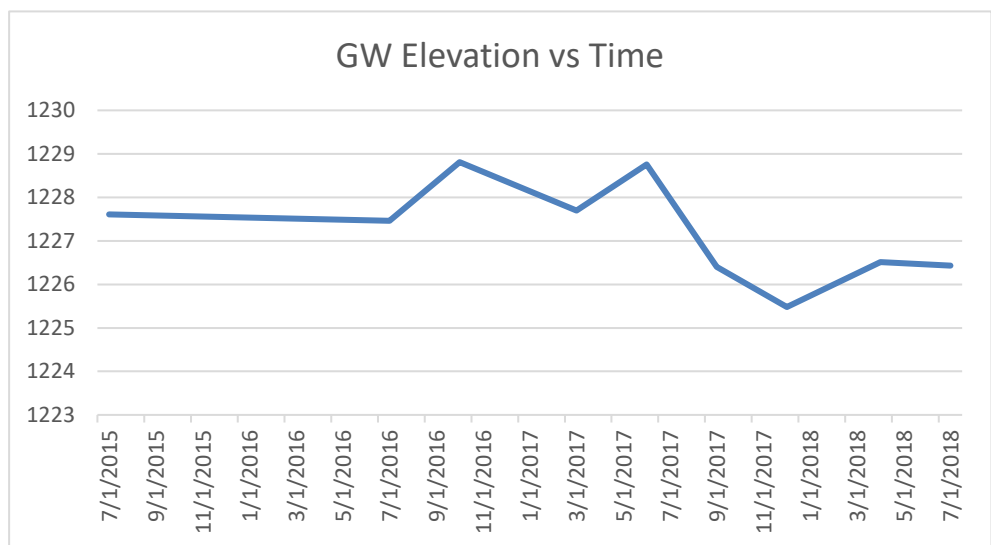
### DairiConcepts, Chili, WI - MW-5A - Post Remediation

Date	Series 1 Benzene	Series 2 Naphthalene	Series 3 TMB
7/7/2015	42	150	2020
7/11/2016	30	180	1400
10/17/2016	6	38	332
3/22/2017	51	110	1390
6/1/2017	16	96	283
9/8/2017	32	92	620
12/4/2017	46	200	940
4/30/2018	5.6	65	560
7/9/2018	48	140	910



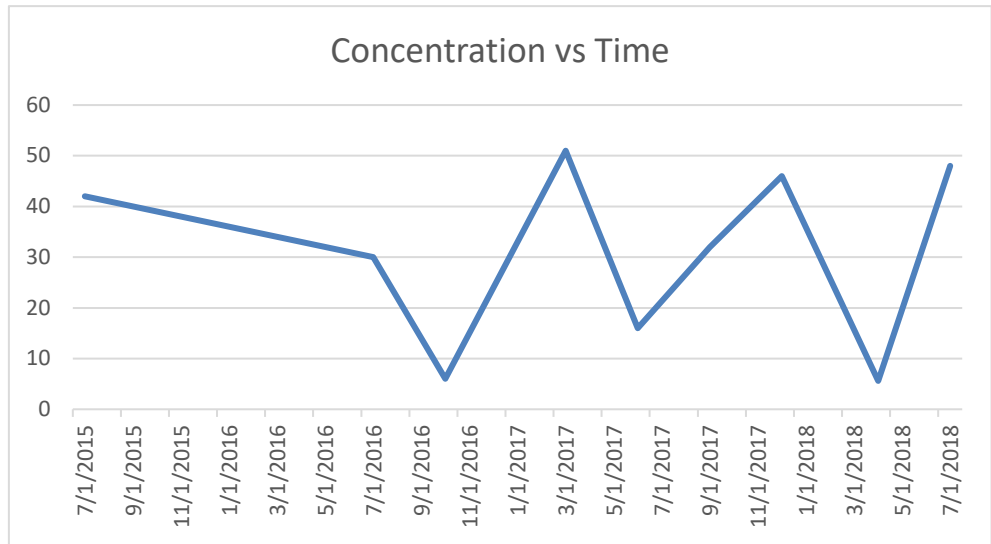
Date Series 1  
Groundwater Elevation

7/7/2015	1227.61
7/11/2016	1227.46
10/17/2016	1228.81
3/22/2017	1227.70
6/1/2017	1228.76
9/8/2017	1226.40
12/4/2017	1225.48
4/30/2018	1226.51
7/9/2018	1226.43



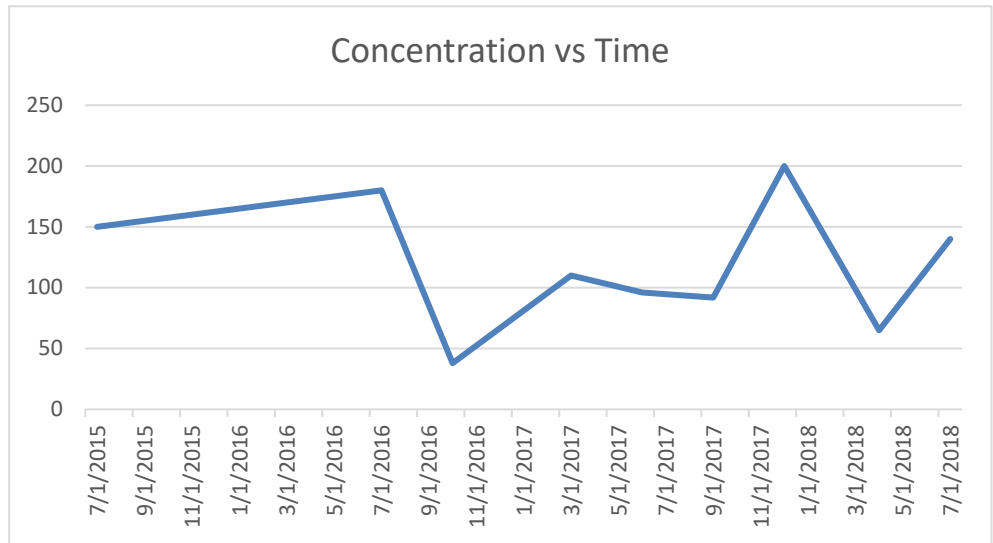
Date Series 1  
Benzene

7/7/2015	42
7/11/2016	30
10/17/2016	6
3/22/2017	51
6/1/2017	16
9/8/2017	32
12/4/2017	46
4/30/2018	5.6
7/9/2018	48



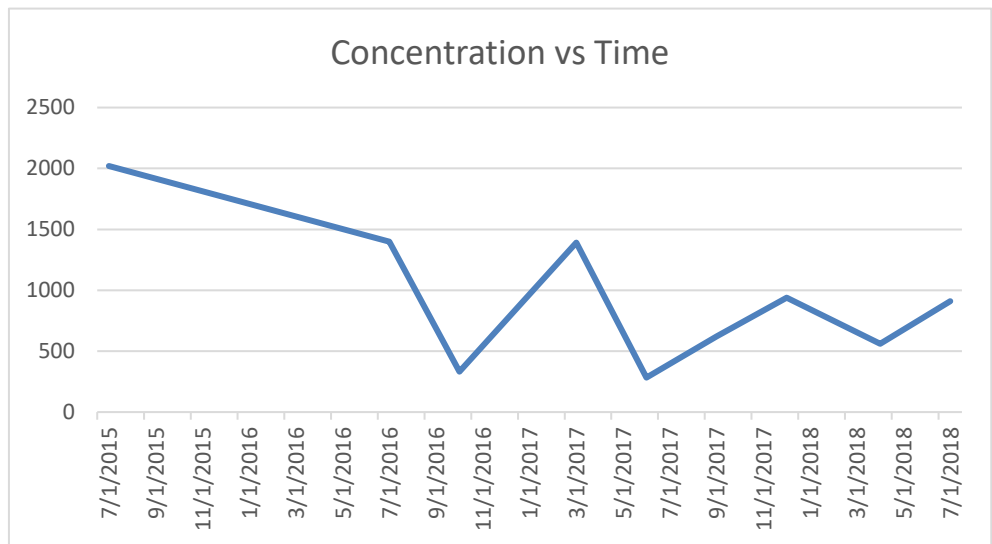
Date Series 1  
Naphthalene

7/7/2015	150
7/11/2016	180
10/17/2016	38
3/22/2017	110
6/1/2017	96
9/8/2017	92
12/4/2017	200
4/30/2018	65
7/9/2018	140



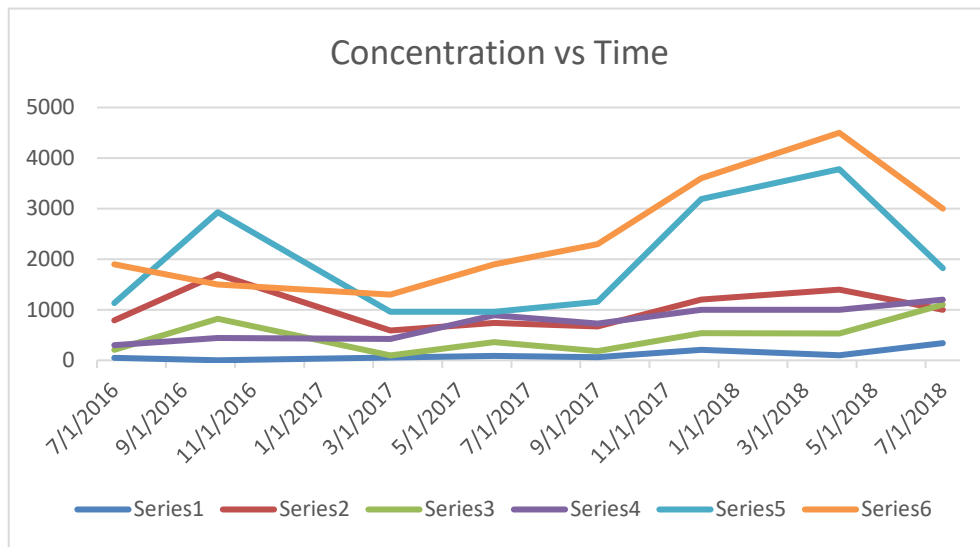
Date Series 1  
TMB

7/7/2015	2020
7/11/2016	1400
10/17/2016	332
3/22/2017	1390
6/1/2017	283
9/8/2017	620
12/4/2017	940
4/30/2018	560
7/9/2018	910



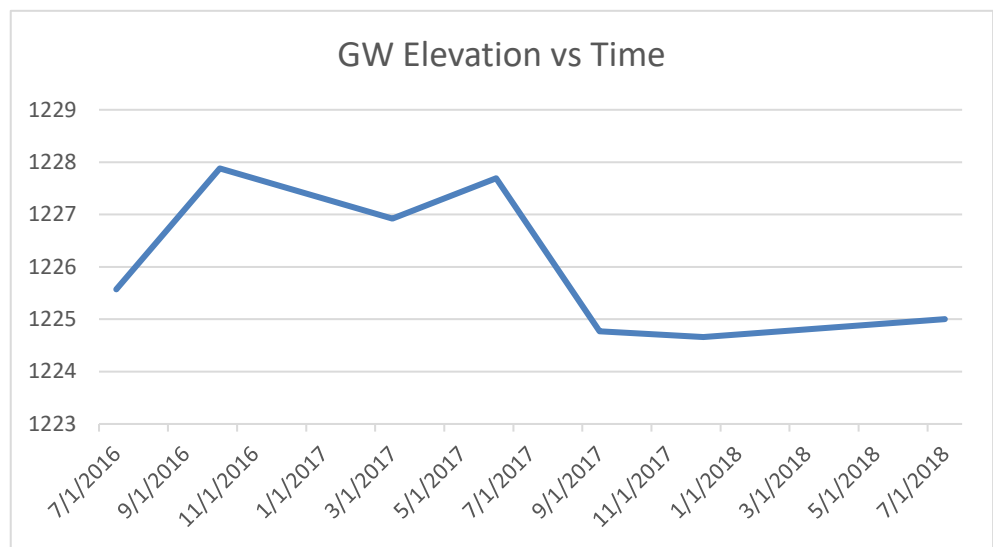
### DairiConcepts, Chili, WI - MW-10 - Post Remediation

Date	Series 1 Benzene	Series 2 Ethylbenzene	Series 3 Naphthalene	Series 4 Toluene	Series 5 TMBs	Series 6 Xylenes
7/11/2016	49	790	210	300	1130	1900
10/17/2016	1	1700	820	440	2930	1500
3/22/2017	54	590	97	420	960	1300
6/1/2017	87	740	360	890	960	1900
9/8/2017	64	670	180	730	1160	2300
12/4/2017	210	1200	540	1000	3190	3600
4/30/2018	100	1400	530	1000	3780	4500
7/9/2018	340	1000	1100	1200	1820	3000



Date Series 1  
Groundwater Elevation

7/11/2016	1225.57
10/17/2016	1227.88
3/22/2017	1226.92
6/1/2017	1227.69
9/8/2017	1224.77
12/4/2017	1224.66
7/9/2018	1225.00

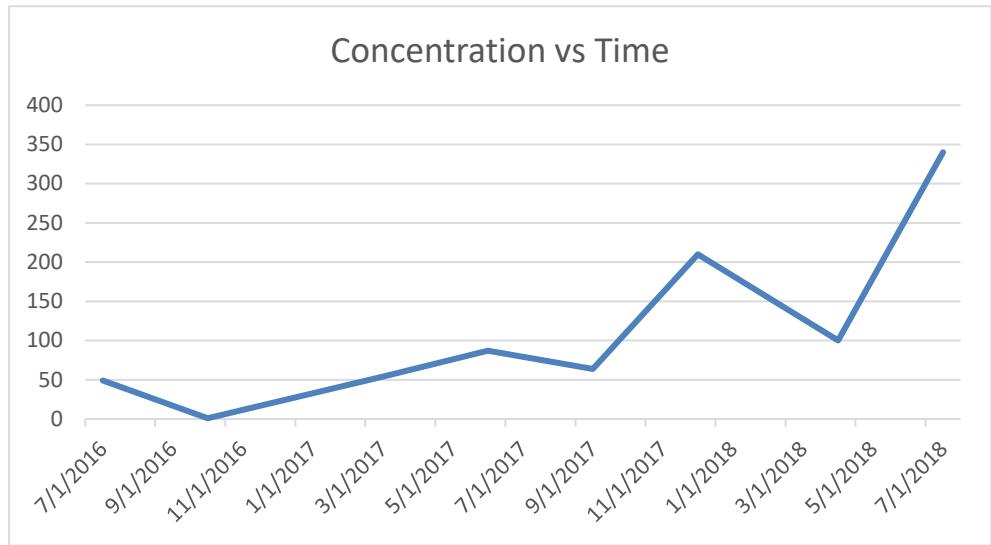




### DairiConcepts, Chili, WI - MW-10 - Post Remediation

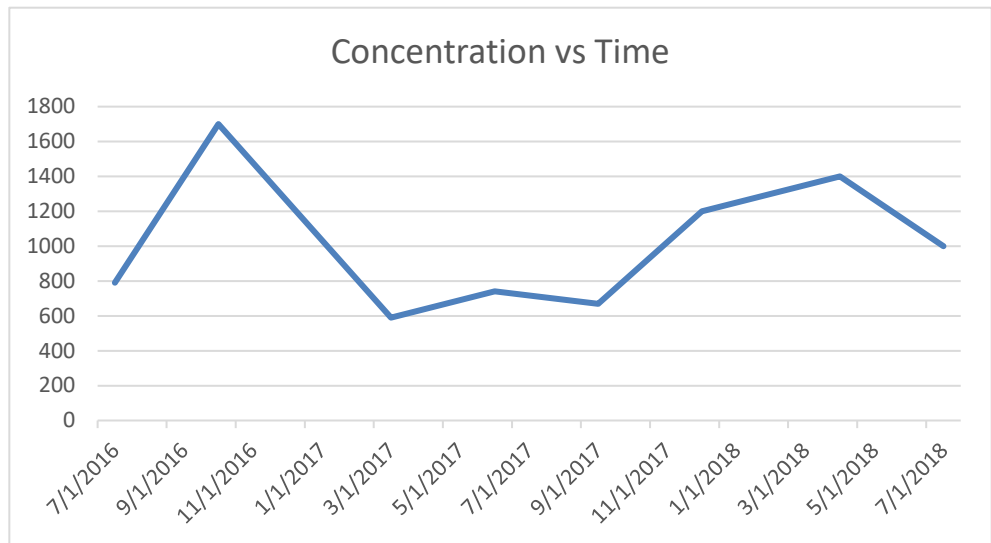
Date Series 1  
Benzene

7/11/2016	49
10/17/2016	1
3/22/2017	54
6/1/2017	87
9/8/2017	64
12/4/2017	210
4/30/2018	100
7/9/2018	340



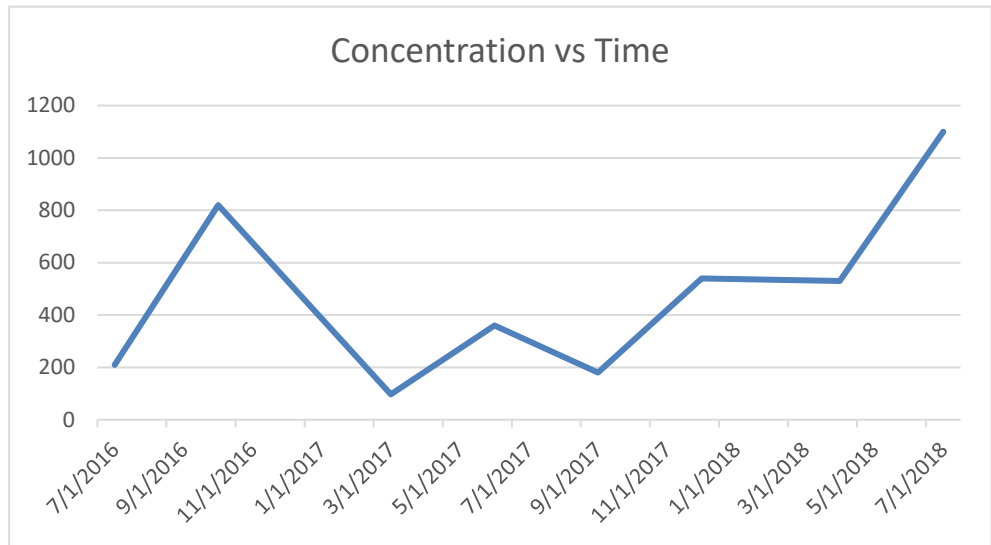
Date Series 1  
Ethylbenzene

7/11/2016	790
10/17/2016	1700
3/22/2017	590
6/1/2017	740
9/8/2017	670
12/4/2017	1200
4/30/2018	1400
7/9/2018	1000

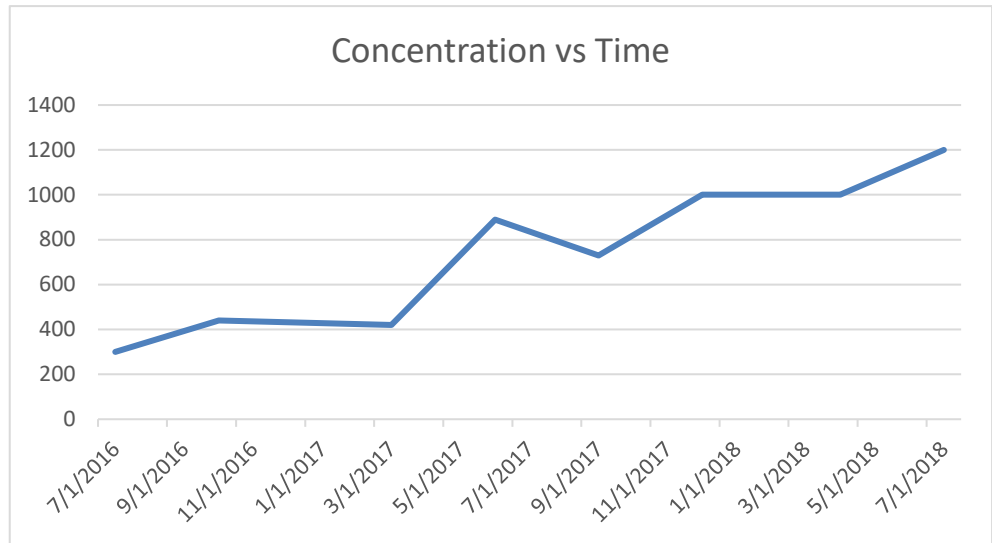


### DairiConcepts, Chili, WI - MW-10 - Post Remediation

Date	Series 1 Naphthalene
7/11/2016	210
10/17/2016	820
3/22/2017	97
6/1/2017	360
9/8/2017	180
12/4/2017	540
4/30/2018	530
7/9/2018	1100

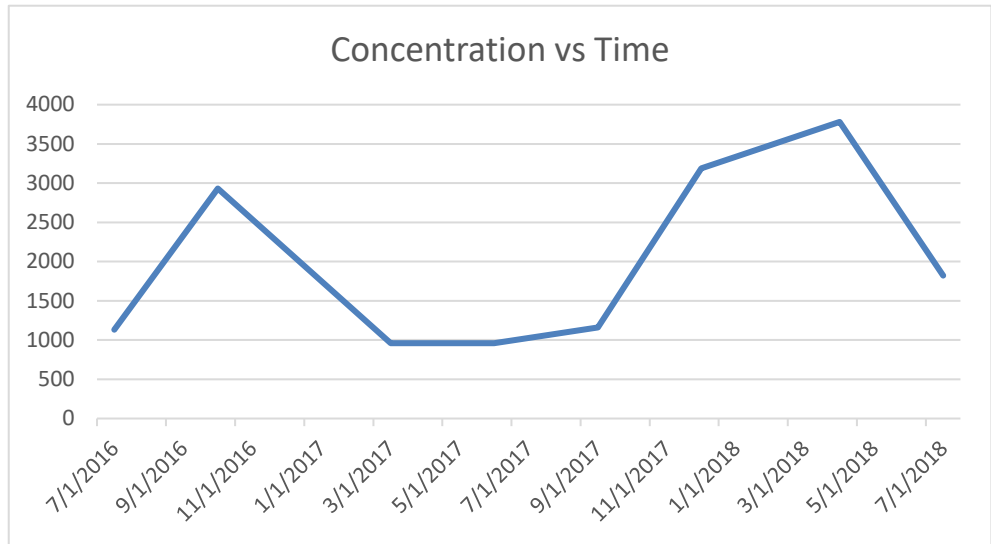


Date	Series 1 Toluene
7/11/2016	300
10/17/2016	440
3/22/2017	420
6/1/2017	890
9/8/2017	730
12/4/2017	1000
4/30/2018	1000
7/9/2018	1200



### DairiConcepts, Chili, WI - MW-10 - Post Remediation

Date	Series 1 TMBs
7/11/2016	1130
10/17/2016	2930
3/22/2017	960
6/1/2017	960
9/8/2017	1160
12/4/2017	3190
4/30/2018	3780
7/9/2018	1820



Date	Series 1 Xylenes
7/11/2016	1900
10/17/2016	1500
3/22/2017	1300
6/1/2017	1900
9/8/2017	2300
12/4/2017	3600
4/30/2018	4500
7/9/2018	3000

