

July 14, 2014

Mr. David Szymanski  
New York State Dept. of Environmental Conservation  
Division of Environmental Remediation  
270 Michigan Avenue  
Buffalo, New York 14203-2999

Re: Former Vac Air Alloys Site (NYSDEC Site No. 907016)  
300 Falconer Road, Frewsburg, New York 14738  
4<sup>th</sup> Annual Periodic Review Report (May 1, 2013 to April 30, 2014)

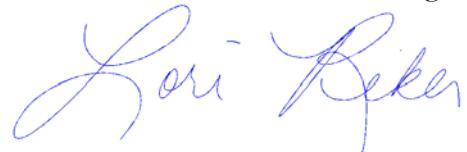
Dear Mr. Szymanski:

Please find attached the 4<sup>th</sup> annual Periodic Review Report (PRR) for the Former Vac Air Alloys Site. The report has been prepared consistent with NYSDEC's DER-10 Technical Guidance (May 2010), and covers the period of May 1, 2013 through April 30, 2014. This PRR incorporates the data presented in the January 27, 2014 Semi-Annual Environmental Monitoring and Inspection letter report.

Benchmark has uploaded to the NYSDEC's EQuIS database the Site monitoring data for the reporting period.

Please contact me if you have any questions regarding this submittal.

Sincerely,  
Benchmark Environmental Engineering & Science, PLLC



Lori E. Riker, P.E.  
Project Manager

Att.

cc: Mr. Martin Doster – NYSDEC Division of Environmental Remediation  
Ms. Scarlette Messier – NYS Department of Health  
Ms. Patty Lundin – SGK Ventures, LLC  
Mr. Timothy Stallkamp – SGK Ventures, LLC  
Mr. Thomas Forbes – Benchmark  
File: 0095-014-001

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# Periodic Review Report

May 1, 2013 through April 30, 2014

*Former Vac Air Alloys Site  
Inactive Hazardous Waste Site No. C907016  
Frewsburg, New York*

July 2014

0095-014-001

Prepared For:

SGK Ventures, LLC  
(f/k/a Keywell, LLC)

Prepared By:



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# **ANNUAL PERIODIC REVIEW REPORT**

## **MAY 1, 2013 TO APRIL 30, 2014**

### **FORMER VAC AIR ALLOYS SITE INACTIVE HAZARDOUS WASTE SITE NO. C907016 FREWSBURG, NEW YORK**

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July 2014

0095-014-001

Prepared for:

**SGK Ventures, LLC  
(f/k/a Keywell, LLC)**

Prepared By:



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**PERIODIC REVIEW REPORT**  
**MAY 1, 2013 TO APRIL 30, 2014**  
**Former Vac Air Alloys Site**

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## **1.0 INTRODUCTION**

Benchmark Environmental Engineering & Science, PLLC (Benchmark) has prepared this annual Periodic Review Report (PRR) on behalf of SGK Ventures, LLC (formerly known as Keywell, L.L.C.) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Inactive Hazardous Waste Site No. C907016, referred to as the Former Vac Air Alloys Site.

This PRR has been prepared in accordance with the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (Ref. 1). Appendix A includes the completed NYSDEC Institutional and Engineering Controls (IC/EC) Certification Form for the Site. This 4<sup>th</sup> annual PRR and the associated certification form have been completed for the May 1, 2013 to April 30, 2014 reporting period. The data presented in the January 27, 2014 Semi-Annual Environmental Monitoring and Inspection letter report has been incorporated into this annual PRR.

### **1.1 Background and Regulatory History**

SGK Ventures, LLC is located at 300 Falconer Street in the Town of Carroll immediately north of the Village of Frewsburg, New York (see Figure 1). The property is bounded by Conewango Creek to the north; open fields, wooded and low lying areas to the east; commercial and residential properties to the south; and Frewsburg-Falconer Road and the former Frewsburg Water District Supply Wells (Well 2A) to the west (see Figure 2). An unnamed, intermittent drainage way consisting of sections of buried culvert and open swale traverses the property and discharges to a low lying wetland area at the north end. The low lying area drains to Conewango Creek.

The property was formerly owned by Vac Air Alloys, which began metal processing operations at the Site in 1969. As part of the facility operations, trichloroethylene (TCE) was used to clean and degrease metals. Prior to 1969, the property was used for the manufacturing of wafer board. Keywell purchased the facility in 1987, filed a petition for reorganization under Chapter 11 of the bankruptcy laws in 2013, and underwent a name change on January 14, 2014 (to SGK Ventures, LLC). SGK Ventures, LLC currently processes stainless steel, titanium, and other high grade scrap metal.

As discussed in Section 2.0, remedial measures to address solvent releases by the former owner were undertaken by Keywell beginning in 1997.

## **1.2 Compliance and Recommendations**

The groundwater collection and treatment systems to address historic solvent release are operated and maintained by SGK Ventures, LLC in accordance with the May 2011 “Post-Remedial Operation, Maintenance, & Monitoring (OM&M) Plan.” Monthly effluent discharge sampling is performed as a component of that work. As further described herein, the collection and treatment system remain protective of public health and the environment, and no significant compliance issues have arisen related to the post-remedial measures undertaken to date with the exception of minor exceedances of the effluent volatile organic compound (VOC) limitations as discussed in Section 4.2.1. In response, SGK Ventures, LLC has increased the frequency at which the air stripper trays are pressure washed as described in Section 3.2. No additional changes to the collection and treatment system operation are recommended at this time.

## 2.0 SITE OVERVIEW

The remedy for the Former Vac Air Alloys Site was specified in the Record of Decision (Ref. 2) and the Evaluation of North Soil Area Remedial Alternatives Report (Ref. 3). Remedial construction activities began in June 1997 and were substantially completed in January 1998. The remedial work was performed in compliance with the requirements set forth in the fully executed NYSDEC Order on Consent, Index #B9-0333-90-05 (Ref. 4), and in accordance with the NYSDEC-approved Final Remedial Design Report (Ref. 5).

### 2.1 Remedial Measures

As described in the Final Remedial Construction Report (Ref. 6), the active remedial system at the Site includes: a groundwater collection system consisting of 18 groundwater extraction wells; and a groundwater treatment system consisting of a phase separator, two bag filters, and an air stripper with treated effluent discharge to the surface water of Conewango Creek. Groundwater treatment system startup/shakedown began in late December 1997.

Engineering controls (ECs) at the Site include a vibrated beam barrier wall along the downgradient boundary of the North Soil Area; a storm sewer (Stormceptor) along the west side of the Main Building to capture runoff and mitigate stormwater impact due to infiltration of from potentially contaminated groundwater; a bedding drain and sump located on the downstream side of the outfall bedding to collect potentially impacted bedding groundwater; and asphalt pavement over the areas north and west of the Main Building to reduce recharge and collect stormwater runoff from the areas used to store scrap metal turnings.

Institutional controls (ICs) at the Site consist of a deed restriction to require vapor mitigation or investigation prior to construction of office space; and a long-term groundwater monitoring program to monitor and evaluate the effectiveness of the remedy.

Current operation, maintenance, and monitoring activities being performed to maintain the long-term operation of the various components included in the Remedial Action are described in the May 2011 Post-Remedial Operation, Maintenance & Monitoring (OM&M) Plan (Ref. 7).

## **2.2 Remedial Objectives**

The objectives of the Site remedial actions are to:

- Create an inward hydraulic gradient between Conewango Creek and the Site, to the extent possible, given the changes in stage in Conewango Creek.
- Prevent migration of contaminated groundwater in the Water Table Aquifer to surface water bodies and the deeper Frewsburg Aquifer.
- Remove contaminants from the extracted groundwater to levels acceptable for discharge to Conewango Creek.

As illustrated in the following sections, all three Site remedial action objectives (RAOs) were generally met during the 2013/2014 reporting period. Elevated VOC concentrations were identified in monitoring wells MW-2 and MW-14 during the reporting period; however, VOCs have been consistently detected in these wells as discussed in Section 3.2.

## 3.0 OPERATION, MONITORING, AND MAINTENANCE COMPLIANCE

The 2011 OM&M Plan provides details related to the groundwater monitoring network as well as the collection and treatment system, including the extraction wells, bag filters, transfer pump, phase separator, air stripper, and discharge effluent monitoring.

### 3.1 Groundwater Extraction System

As shown on Figure 2, the groundwater extraction system network consists of 12 extraction wells located along the downgradient perimeter of the Site, and six extraction wells located within the Central Soil Area. Extraction wells EW-5 and EW-12 contain groundwater level transmitters that are used to provide elevation monitoring to assist in flow regulation to the groundwater treatment system. The average groundwater elevation is used to adjust the flow set point. SGK Ventures, LLC also performs a routine pumping program at monitoring wells MW-2 and MW-14 as described below.

#### *3.1.1 Groundwater Extraction from MW-2*

Following its review of the 2003 Annual Report, the NYSDEC expressed concern over the persistence of VOCs in groundwater samples collected from monitoring well MW-2. Pumping of MW-2 began December 7, 2004, and consists of pumping the well dry for up to five consecutive days in a month as water levels and/or groundwater recovery in the well are sufficient to allow pumping.

To determine the mass of VOCs removed via this effort, SGK Ventures, LLC collects a monthly sample of the extracted groundwater and submits it for analysis of target compound list (TCL) VOCs via EPA Method 8260. As shown on Table 1, no groundwater was extracted from MW-2 between May 1, 2012 and April 30, 2013. The recharge at MW-2 is slower than the pump used so the well runs dry after approximately three well volumes (typically 1.5 gallons). Figure 3 graphically presents the analytical data for this reporting period. Appendix B includes the laboratory data packages (provided on CD).

#### *3.1.2 Groundwater Extraction from MW-14*

In October 2007, SGK Ventures collected groundwater samples from the extraction wells nearest to MW-14 (EW-2 and EW-3) to determine whether elevated concentrations of TCE and DCE in MW-14 existed nearby. The concentrations of TCE in wells EW-2 and

EW-3 were less than 50 percent of the concentration of TCE in MW-14. Therefore, SGK Ventures voluntarily initiated a manual groundwater pumping program at monitoring well MW-14 in November 2007 that consists of pumping the well dry for up to five consecutive days in a month as water levels and/or groundwater recovery in the well are sufficient to allow pumping.

To determine the mass of VOCs removed via this effort, SGK Ventures collects a monthly sample of the extracted groundwater and submits it for analysis of TCL VOCs via EPA Method 8260B. As shown on Table 1, approximately 1,305 gallons of groundwater were extracted from MW-14 with an estimated 0.00017 pounds of VOCs captured between May 1, 2013 and April 30, 2014. Figure 4 graphically presents the analytical data for this reporting period. Appendix B includes the laboratory data packages (provided on CD).

### **3.2 Groundwater Treatment System**

Groundwater treatment system OM&M activities include routine and non-routine maintenance of the treatment system equipment and monthly compliance effluent discharge monitoring. Influent samples are also collected semi-annually to monitor trends in influent concentrations and verify treatment system efficiency. Routine maintenance completed during this monitoring period included changing the treatment system bag filters and cleaning the air stripper trays. A log sheet documenting these activities is maintained within the groundwater treatment system building. Monthly monitoring performed on the groundwater treatment system indicates it is achieving the design criteria for the Site.

In addition to routine maintenance work, the following non-routine maintenance activities were undertaken during the reporting period:

- 04/10/13 – Cleaned the air stripper trays with high pressure washer. The system was shut down for 1 hour; total maintenance time was 3 hours and 45 minutes.
- 07/10/13 – System was found off due to pump malfunction. Pump was primed and the system was restarted.
- 07/17/13 – System was found off due to pump malfunction. Performed high pressure washing of the air stripper trays, phase separator, and piping. Groundwater pump was rebuilt and reinstalled. The system was shut down for a total of 192 hours; total maintenance time was 32 hours.

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- 10/9/13 – System was found off due to pump malfunction. Pump was primed and the system was restarted.
- 10/14/13 – System was found off due to pump malfunction. Pump was primed and the system was restarted.
- 10/16/13 – System was found off due to pump malfunction. Performed cleaning of the air stripper trays. The system was shut down for 45 hours; total maintenance time was 12 hours.
- 10/28/13 – System was found off due to pump malfunction. Pulled and cleaned 10 check valves in the extraction wells. Pump was primed and the system was restarted. The system was shut down for 12.5 days; total maintenance time was 76 hours.
- 02/20/14 – Cleaned the air stripper trays with high pressure washer. The system was shut down for 4 hours; total maintenance time was 3.5 hours.
- 04/30/14 – Cleaned the air stripper trays with high pressure washer. Resampled effluent. The system was shut down for 5 hours; total maintenance time was 4 hours.

## 4.0 POST-REMEDIAL MONITORING COMPLIANCE

The 2011 OM&M Plan contains the Post-Remedial Monitoring Plan used to determine the effectiveness and performance of the remedial systems. The components of the monitoring program include:

- Weekly groundwater treatment system inspection
- Monthly treatment system effluent monitoring
- Semi-annual treatment system influent monitoring
- Semi-annual groundwater and surface water hydraulic monitoring (spring and fall)
- Semi-annual groundwater quality monitoring (spring and fall)
- Annual seep inspection (fall) and sampling (if present)

Specific components of the Post-Remedial Monitoring Plan are described below. Appendix B includes an electronic copy of the analytical data reports for all sampling described in this section. Groundwater monitoring well data from the November 2013 and April 2014 sampling events has been uploaded to NYSDEC's Environmental Quality Information System (EQuIS) database.

### 4.1 Groundwater Treatment System

Groundwater is extracted from the well network using a small vacuum pump located within the treatment building where it is treated via phase separation, filtration, and air stripping. The treated effluent is discharged to the low lying wet area adjacent to Conewango Creek. Monthly effluent compliance and semi-annual influent performance samples are collected.

#### *4.1.1 Inspection*

SGK Ventures, LLC inspects the treatment system on a daily basis and completes a weekly inspection report. Completed reports are maintained in a binder in the treatment building. Any problems noted result in corrective action as discussed in Section 3.3.

#### *4.1.2 Treatment System Effluent Monitoring*

Effluent samples and flow measurements are collected on a monthly basis in accordance with the NYSDEC Effluent Limitations and Monitoring Requirements provided

as Attachment 2 of the Post-Remedial OM&M Plan. Effluent samples are analyzed for the following parameters:

- TCL VOCs (monthly)
- pH range (weekly)
- Oil & grease (monthly)
- Total aluminum, iron, and zinc (monthly)

Table 2 presents a summary of the effluent results for this reporting period compared to the NYSDEC Effluent Limits. With the exception of the iron concentration detected in October 2013 and the pH measured in February 2014, the total metal concentrations; oil & grease; and pH results met the effluent limitations. Table 2A presents a summary of the individual VOC results for the effluent samples. In December 2013 and April 2014, effluent results indicate minor exceedances of the 5 ug/L effluent limitation for individual VOCs and the total VOC effluent limitation of 10 ug/L. The sample collected in December 2013 was assumed to be an anomaly and the system effluent was resampled on December 30, 2013 to verify the VOC concentrations. To address the exceedances detected in April 2014, SGK Ventures, LLC power washed the air stripper trays to remove residual deposits around the aeration holes. The effluent was resampled on April 30, 2014 and the results indicated no exceedances of the individual or total VOC effluent limitations.

#### ***4.1.3 Treatment System Influent Monitoring***

The 2011 OM&M Plan requires the collection of treatment system influent monitoring; however, sampling was inadvertently missed during the reporting period. An updated sampling schedule has been drafted to include this sampling for the next reporting period.

#### ***4.1.4 Semi-Annual Groundwater Quality Monitoring***

Post-remedial sampling of all groundwater monitoring wells was performed in April 2014. Monitoring of a subset of the well network was performed in November 2013. Table 3 summarizes the results of the sampling with a comparison to NYSDEC Class GA groundwater quality standards and guidance values (GWQS/GV) per the Technical and Operational Guidance Series (T.O.G.S.) 1.1.1. In general, these sampling results are consistent with historical concentrations.

As shown on Table 3, VOCs were not detected above the laboratory reporting limits in shallow (Water Table Aquifer) monitoring wells MW-1, MW-5 through MW-8, MW-10, and MW-12 and deep (Frewsburg Aquifer) monitoring wells MW-4D and MW-5D. The presence of VOCs in shallow monitoring well MW-4 and the lack of VOCs in its deep monitoring well pair MW-4D indicates that contaminated groundwater is not migrating from the shallow Water Table Aquifer to the deeper Frewsburg Aquifer.

As illustrated on Table 3, concentrations of cis-1,2 dichloroethene (cis-1,2-DCE) and TCE in the remainder of the wells exceeded GWQS/GVs, with the exception that the concentration of TCE in MW-2 which did not exceed its GWQS/GV in November 2013. Elevated concentrations of vinyl chloride in wells MW-2 and MW-9R indicate contaminant degradation as vinyl chloride is a breakdown product of cis-1,2-DCE.

Chloroform results qualified with a “B” as the associated method blank also contained chloroform at a reportable level.

Quality control samples were collected and analyzed for each of the two monitoring events, with the following conclusion:

- A 5,000 dilution factor was used for the sample collected from MW-2 in November 2013 due to the abundance of target analytes, specifically the high concentration of cis-1,2-DCE and vinyl chloride. As a result, TCE is reported as non-detect (ND); however, it could be present at a concentration of up to 5,000 µg/L, which was the reported method detection limit (MDL).
- The blind duplicate samples from MW-12 (11/20/13) and MW-11R (4/22/14) show good correlation.
- The trip blanks for the November 2013 and April 2014 sampling events contained methylene chloride at concentrations of 2.5 µg/L and 2.0 µg/L, respectively.
- The method blanks for the November 2013 sampling event contained approximate concentrations of chloroform (0.469 µg/L, 0.581 µg/L, and 0.366 µg/L).

The laboratory data has been qualified as necessary based on the above quality control sample results.

## **4.2 Groundwater and Surface Water Hydraulic Monitoring**

Water level measurements were recorded for all monitoring wells, piezometers, and in Conewango Creek during the November 2013 and April 2014 groundwater sampling events. The water levels in extraction wells EW-1 through EW-18 were also recorded in April 2014. Figure 5 is the isopotential map created using the April 2014 groundwater elevation data. As illustrated, the groundwater extraction system creates an inward hydraulic gradient between Conewango Creek and the Site. The direction of natural groundwater flow is north toward Conewango Creek when the extraction system is not in operation.

## **4.3 Seep Inspection**

SGK Ventures, LLC performed a seep inspection on November 21, 2013 in support of the barrier wall evaluation as more fully discussed in Section 5.1.1; no seeps were observed.

## 5.0 ENGINEERING AND INSTITUTIONAL CONTROL COMPLIANCE

Several engineering controls (ECs) and institutional controls (ICs) are to be maintained as a requirement of the Order on Consent for the Site.

### 5.1 Engineering Controls

The Site is subject to the ECs described in the following sections.

#### 5.1.1 *Barrier Wall*

As shown on Figure 2, the barrier wall was constructed along the northern boundary of the Site to prevent migration of impacted groundwater in the Water Table Aquifer from the North Soil Area to Conewango Creek. The effectiveness of the barrier wall is determined based on the results of seep inspections performed along the Creek embankment and the hydraulic and water quality monitoring data from monitoring wells and/or piezometers located within and outside the barrier wall. Monitoring well MW-2 and piezometer PZ-3 are both located hydraulically downgradient of the barrier wall.

Seep inspections were conducted quarterly during the first year of treatment system operation and semi-annually thereafter. No seeps have been identified since system start-up in 1998. It was demonstrated previously that fluctuations in the water table elevation at MW-2 and PZ-3 are related to seasonal conditions and not to changes in the operating parameters of the treatment system. The absence of a response in the water table outside the barrier wall to groundwater pumping within the barrier wall indicates that the slurry wall is an effective hydraulic barrier.

In accordance with the 2011 OM&M Plan, a seep inspection was performed in November 2013 (dry weather). No seeps were observed indicating that the barrier wall remains effective in preventing groundwater migration along its length.

#### 5.1.2 *Asphalt Cover System*

A heavy traffic asphaltic pavement pad was installed north of the Main Building where the stainless steel turnings are stored. Runoff to the turnings pad is collected in a trench drain and directed to the existing oil/water separator prior to discharge to Conewango Creek via Outfall 001 under SPDES Permit No. 0171832.

The integrity of the asphalt pavement was maintained during the reporting period.

### ***5.1.3 Perimeter Fencing***

Based on regular inspections of the Site, the fencing around the property boundary continues to prevent trespassers from entering the Site.

### ***5.1.4 Stormceptor System***

Due to possible infiltration of impacted groundwater, the former 36-inch diameter storm sewer that traversed the center of the Site was excavated and replaced with a 28-inch diameter near watertight HDPE storm sewer. Sewer bedding plugs were constructed near the sewer inlet and outfall to prevent groundwater migration through the bedding and discharge to the low lying wet area. The bedding plugs extend approximately two feet in each direction beyond the existing pipe bedding that was reused to bed the new pipe. A bedding drain and sump are located on the downstream side of the outfall bedding (upgradient of the plug) to collect impacted bedding groundwater. Water collected in the sump is transferred to the groundwater treatment system by a submersible sump pump, which normally pumps at a constant rate of approximately 5 gpm.

SGK Ventures, LLC performed quarterly inspections of the storm sewer piping. Excess sediment is scheduled for removal in the third quarter 2014 (July-September).

## **5.2 Institutional Controls**

### ***5.2.1 Deed Restriction***

The Site is subject to a deed restriction filed with the Chautauqua County Clerk office in 1997 and amended in 2011. The amended restriction specifies that:

- If the Property is changed by the addition of a separate building to be used solely as an office, then a Department-approved soil vapor investigation must be conducted at such building unless an approvable vapor intrusion mitigation system is installed in the new structure in the first instance.
- If the Property is used for any other purpose than industrial, a Department approved soil vapor investigation must be conducted at the Property, unless an approvable soil vapor mitigation system is installed at the Property in the first instance in connection with such change of use.

This amended Declaration is and shall be deemed a covenant that shall run with the land, be binding upon all future owners of the Property, and provide that the owner and its

successors and assigns consent to its enforcement by the Department and hereby covenants not to contest the authority of the Department to seek enforcement. Any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department has consented to the termination of such covenants and restrictions that said conveyance is subject to the already recorded and this amended Declaration of Covenants and Restrictions.

### **5.3 Site Inspection**

A Site inspection was conducted by Ms. Lori E. Riker, P.E., of Benchmark on November 19, 2013. The NYSDEC PRR Institutional and Engineering Controls (IC/EC) Certification Form was referenced during the inspection. Appendix A includes the certified IC/EC form. At the time of the inspection, the Site was in compliance with the IC/ECs.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

### 6.1 Conclusions

During the reporting period, SGK Ventures, LLC was in compliance with the 2011 OM&M Plan. No changes have been made to the use of the Site. The IC/ECs remain in effect. Components of the post-closure requirements have achieved the RAOs for the Site as follows:

- An inward hydraulic gradient between Conewango Creek and the Site is created through operation of the groundwater extraction system.
- Isopotential mapping indicates that the barrier wall in combination with groundwater extraction remains effective in controlling contaminant migration and creating an inward hydraulic gradient along its length.
- Migration of contaminated groundwater in the Water Table Aquifer to the deeper Frewsburg Aquifer through operation of the groundwater extraction system as well as the presence of the clay confining layer that separates the aquifers.
- Contaminants from the extracted groundwater are generally removed to levels acceptable for discharge by the air stripper treatment system.

### 6.2 Recommendations

The following minor recommended corrective actions should be undertaken to assure OM&M Plan compliance and continued reliability of the groundwater monitoring data:

- Modifications made to the groundwater treatment system maintenance frequency in 2013/2014 will be maintained to ensure continued effluent compliance. Specifically, SGK Ventures, LLC personnel will automatically change out or thoroughly clean the air stripper trays at least quarterly or more often as needed, and adjust the blower damper as necessary to maintain adequate air flow. The effectiveness of this maintenance was demonstrated via implementation in 2013/2014.
- The current remedial measures for MW-2 and MW-14 involve periodic manual extraction of groundwater, as these wells are located between the barrier wall and Conewango Creek. While manual groundwater extraction has provided some contaminant capture from these areas, it does not appear to be sufficient to adequately trend groundwater concentrations toward levels that would be considered protective of the environment based on their proximity to the Creek and absence of further downgradient barrier. Accordingly, enhancement of the

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remedial program as outlined in Section 6.5 of the July 2012 Periodic Review Report is recommended to address these locations.

- The groundwater treatment system influent sampling was inadvertently missed during the reporting period. SGK Ventures, LLC has modified the sampling schedule to collect of the required samples during the next reporting period.

## **7.0 DECLARATION/LIMITATION**

Benchmark Environmental Engineering & Science, PLLC personnel conducted the annual Site inspection for Inactive Hazardous Waste Site No. C907016, located in Frewsburg, New York, according to generally accepted practices. This report complies with the scope of work provided to SGK Ventures, LLC by Benchmark Environmental Engineering & Science, PLLC.

This report has been prepared for the exclusive use of SGK Ventures, LLC. The contents of this report are limited to information available at the time of the Site inspection. The findings herein may be relied upon only at the discretion of SGK Ventures, LLC. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of Benchmark Environmental Engineering & Science, PLLC.

## **8.0 REFERENCES**

1. New York State Department of Environmental Conservation. May 3, 2010. *DER-10/Technical Guidance for Site Investigation and Remediation*.
2. New York State Department of Environmental Conservation. March 1996. *Record of Decision, Vac Air Alloys Inactive Hazardous Waste Site, Town of Carroll, Chautauqua County, New York, Site No. 907016*.
3. Conestoga-Rovers & Associates. May 1996. *Evaluation of North Soil Area Remedial Alternatives, Vac Air Alloys Division, Frewsburg, New York*.
4. New York State Department of Environmental Conservation. September 1996. *Order on Consent, Index #B9-0333-90-05*.
5. Conestoga-Rovers & Associates. June 1997. *Final Remedial Design Report, Vac Air Alloys Site, Frewsburg, New York, NYSDEC Site No. 907016*.
6. Conestoga-Rovers & Associates. July 1998. *Final Remedial Construction Report, Vac Air Alloys Site, Frewsburg, New York, NYSDEC Site No. 907016*.
7. Benchmark Environmental Engineering & Science, PLLC. May 2011. *Post-Remedial Operation, Maintenance & Monitoring (OM&M) Plan, Former Vac Air Alloys Site, Frewsburg, New York, Inactive Hazardous Waste Site No. C907016*.

## **TABLES**

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MW-2 AND MW-14

ANNUAL PERIODIC REVIEW REPORT (MAY 1, 2013 TO APRIL 30, 2014)

FORMER VAC AIR ALLOYS SITE  
FREWSBURG, NEW YORK

**MW-2**

Date	VOC Concentrations (ug/L)		Groundwater Extracted		Weight of VOCs (mg)	
	VC	cis-1,2-DCE	(gallons)	(liters)	VC	cis-1,2-DCE
5/8/2013	51,000	140,000	0	0	0	0
6/19/2013	13,000	61,000	0	0	0	0
7/15/2013	16,000	100,000	0	0	0	0
8/12/2013	30,000	150,000	0	0	0	0
9/12/2013	51,000	210,000	0	0	0	0
10/16/2013	18,000	100,000	0	0	0	0
11/13/2013	18,000	75,000	0	0	0	0
12/11/2013	13,000	56,000	0	0	0	0
1/14/2014	8,000	53,000	0	0	0	0
2/19/2014	35,000	120,000	0	0	0	0
3/20/2014	18,000	110,000	0	0	0	0
4/10/2014	33,000	150,000	0	0	0	0
<b>Reporting Period Subtotal</b>		0	0	0.0	0	
Total Weight of VOCs =			0	mg		
			0.00000	pounds		

**MW-14**

Date	VOC Concentrations (ug/L)		Groundwater Extracted		Weight of VOCs (mg)	
	TCE	cis-1,2-DCE	(gallons)	(liters)	TCE	cis-1,2-DCE
5/8/2013	19,000	2,200	115	435	8.3	1.0
6/19/2013	13,000	2,300	110	416	5.4	1.0
7/15/2013	11,000	2,000	113	428	5	1
8/13/2013	9,300	3,900	114	432	4	2
9/12/2013	6,400	3,900	108	409	3	2
10/16/2013	3,100	6,800	112	424	1	3
11/13/2013	13,000	4,100	108	409	5.3	1.7
12/11/2013	10,000	2,900	98	371	4	1
1/14/2014	13,000	4,000	96	363	5	1
2/19/2014	17,000	3,800	108	409	7.0	2
3/20/2014	15,000	3,500	115	435	7	2
4/10/2014	16,000	3,700	108	409	7	2
<b>Reporting Period Subtotal</b>			1,305	4,940	60	18
Total Weight of VOCs =			0.00017	mg pounds	78	



TABLE 2

## SUMMARY OF TREATMENT SYSTEM EFFLUENT DATA AND LIMITATIONS

ANNUAL PERIODIC REVIEW REPORT (MAY 1, 2013 TO APRIL 30, 2014)

FORMER VAC AIR ALLOYS SITE  
FREWSBURG, NEW YORK

Parameter	Units	Effluent Limits (Daily Max.)	5/8/2013	6/19/2013	7/15/2013	8/12/2013	9/12/2013	10/16/2013	11/13/2013	12/11/2013	12/30/2013 <sup>1</sup>	1/14/2014	2/19/2014	3/20/2014	4/10/2014	4/30/2014 <sup>1</sup>
VOCs	ug/L	<b>10</b>	0.85 J	ND	ND	3.9	3.7	0.37 J	<b>45.46</b>	3.8	3.86	6.61	2.46	<b>164.73</b>	0.66	
Oil & Grease	mg/L	<b>15</b>	1.6 J	ND	ND	ND	2.2 J	2.2 J	2.7 J,B	NA	2.5 J,B	2.0 J,B	2.9 J,B	2.2 J	NA	
Aluminum	ug/L	<b>2,700</b>	77 J	40 J	86 J	ND	150 J	16 J	17 J	NA	ND	25 J	ND	ND	NA	
Iron	ug/L	<b>2,000</b>	440	280	410	410	130 B	<b>14,000 B</b>	1,200	600	NA	160	15 J	14 J	ND	NA
Zinc	ug/L	<b>400</b>	10 J	82 B	98 B	140	9.5 J,B	31 B	81	28	NA	62 B	75 B	24 B	71	NA
pH	S.U.	<b>6.0-9.0</b>	7.66	7.97	7.85	8.54	8.02	7.35	8.11	8.19	NA	8.04	<b>5.95</b>	7.56	7.52	NA
Flow (Daily Max for	gpm	--	1.6	2.2	2.3	4.8	4.2	5.4	7.9	1.6		1.4	1.7	2.4	1.8	
	gpd	<b>50,000</b>	2,304	3,168	3,312	6,912	6,048	7,776	11,376	2,304		2,016	2,448	3,456	2,592	

## Notes:

1. Treatment system effluent resampled and analyzed for VOC's only due to elevated results from prior event.

## Acronyms:

- J = Estimated result; less than reporting limit  
B = Analyte also detected in the method blank  
ND = Not detected about the reporting limit  
NA = Not analyzed

**BOLD** = Exceedance of effluent limitation



**TABLE 2A**  
**SUMMARY OF TREATMENT SYSTEM EFFLUENT VOC ANALYTICAL RESULTS**

**ANNUAL PERIODIC REVIEW REPORT (MAY 1, 2013 TO APRIL 30, 2014)**

**FORMER VAC AIR ALLOYS SITE  
FREWSBURG, NEW YORK**

Sample Date	Effluent Concentration (ug/L)													
	TCE	PCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Bromoform	BDCM	Chloroform	CDBM	DCBM	1,1-DCE	Acetone	Methylene Chloride	TOTAL
5/8/2013	0.17 J	ND	ND	0.44 J	ND	ND	ND	0.24 J	ND	ND	ND	ND	ND	0.9
6/19/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0
7/15/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0
8/12/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0
9/12/2013	ND	ND	ND	ND	ND	2.7	ND	ND	1.2	ND	ND	ND	ND	3.9
10/16/2013	ND	ND	ND	ND	ND	2.6	ND	ND	1.10 J	ND	ND	ND	ND	3.7
11/13/2013	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37
12/11/2013	13	ND	9.2	0.33 J	14	6.6	ND	ND	1.8	0.53 J	ND	ND	ND	45.46
12/30/2013	ND	ND	ND	ND	ND	2.6	ND	ND	1.2	ND	ND	ND	ND	3.8
1/14/2014	ND	ND	ND	ND	ND	2.4	ND	ND	1.2	0.26 J	ND	ND	ND	3.9
2/19/2014	0.21 J	ND	ND	ND	ND	4.2	ND	0.18 J	1.4	0.62 J	ND	ND	ND	6.6
3/20/2014	ND	ND	ND	ND	ND	1.3	ND	ND	0.83 J	0.33 J	ND	ND	ND	2.5
4/10/2014	28	ND	94	1.4	29	8.7	ND	ND	2.40 J	0.52 J	0.71 J	ND	ND	164.73
4/30/2014	0.66 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.66

Note: April 30, 2014 sample was collected following cleaning of the treatment system to address elevated VOC concentrations detected in the prior sample.

**Acronyms:**

B = Parameter also detected in method or trip blank

J = Estimated result, less than reporting limit

ND = Analyte not detected above method detection limit

BDCM = Bromodichloromethane

CDBM = Chlorodibromomethane

DCBM = Dichlorobromomethane

TCE = Trichloroethene

PCE = Tetrachloroethene

**BOLD**  
**BOLD**

= Individual VOC concentration exceeds effluent limitation of 5 ug/L.  
= Total VOC concentration exceeds effluent limitation of 10 ug/L.



**TABLE 3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**

ANNUAL PERIODIC REVIEW REPORT (MAY 1, 2013 TO APRIL 30, 2014)

**FORMER VAC AIR ALLOYS SITE  
FREWSBURG, NEW YORK**

TCL VOC Parameters <sup>1</sup>	GWQS/GV <sup>2</sup> (ug/L)	MW 1		MW 2		MW 3		MW 4		MW-4D	MW 5	MW-5D	MW 6	MW 7	MW 8
		4/21/2014	11/19/2013	4/21/2014	11/19/2013	4/21/2014	11/19/2013	4/21/2014	4/22/2014	4/21/2014	4/21/2014	4/21/2014	4/22/2014	4/21/2014	4/21/2014
Chloroform	7	ND<1.0	1,200 J,B	ND<500	73 J,B	ND<250	260 J,B	ND<1,000	ND<1.0						
Methylene chloride	5	ND<1.0	ND<5,000	970 J	ND<250	53 J	ND<1,000	550 J	ND<1.0						
cis-1,2 Dichloroethene	5	ND<1.0	87,000	71,000	1,200	1,800	2,800	5,300	ND<1.0						
trans-1,2-Dichloroethene	5	ND<1.0	ND<5,000	85 J	ND<250	ND<250	ND<1,000	ND<1,000	ND<1.0						
Trichloroethene	5	0.20 J	ND<5,000	140 J	4,200	6,100	27,000	25,000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	0.14 J	0.15 J
Vinyl chloride	2	ND<1.0	22,000	12,000	ND<250	ND<250	ND<1,000	ND<1,000	ND<1.0						

TCL VOC Parameters <sup>1</sup>	GWQS/GV <sup>2</sup> (ug/L)	MW 9R		MW 10		MW 11R			MW 12			MW 13		MW 14	
		11/19/2013	4/22/2014	4/21/2014	11/19/2013	4/22/2014	Duplicate <sup>3</sup>	11/20/2013	Duplicate <sup>3</sup>	4/21/2014	11/20/2013	4/21/2014	11/19/2013	4/21/2014	
Chloroform	7	150 J,B	ND<200	ND<1.0	780 J,B	ND<100	ND<100	ND<1.0	ND<1.0	ND<1.0	160 J,B	ND<200	350 J,B	ND<1,000	
Methylene chloride	5	ND<500	220	ND<1.0	ND<2,000	130	110	ND<1.0	ND<1.0	ND<1.0	ND<250	270	ND<1,000	1,300	
cis-1,2 Dichloroethene	5	4,000	3,300	ND<1.0	4,300	1,000	990	ND<1.0	ND<1.0	ND<1.0	1,100	2,100	3,900	2,700	
trans-1,2-Dichloroethene	5	ND<500	39 J	ND<1.0	ND<2,000	ND<100	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<250	ND<200	ND<1,000	ND<1,000	
Trichloroethene	5	5,300	2,800	ND<1.0	33,000	2,000	2,000	0.27 J	ND<1.0	0.26 J	2,500	2,500	14,000	15,000	
Vinyl chloride	2	450 J	360	ND<1.0	ND<2,000	ND<100	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<250	ND<200	ND<1,000	ND<1,000	

**Notes:**

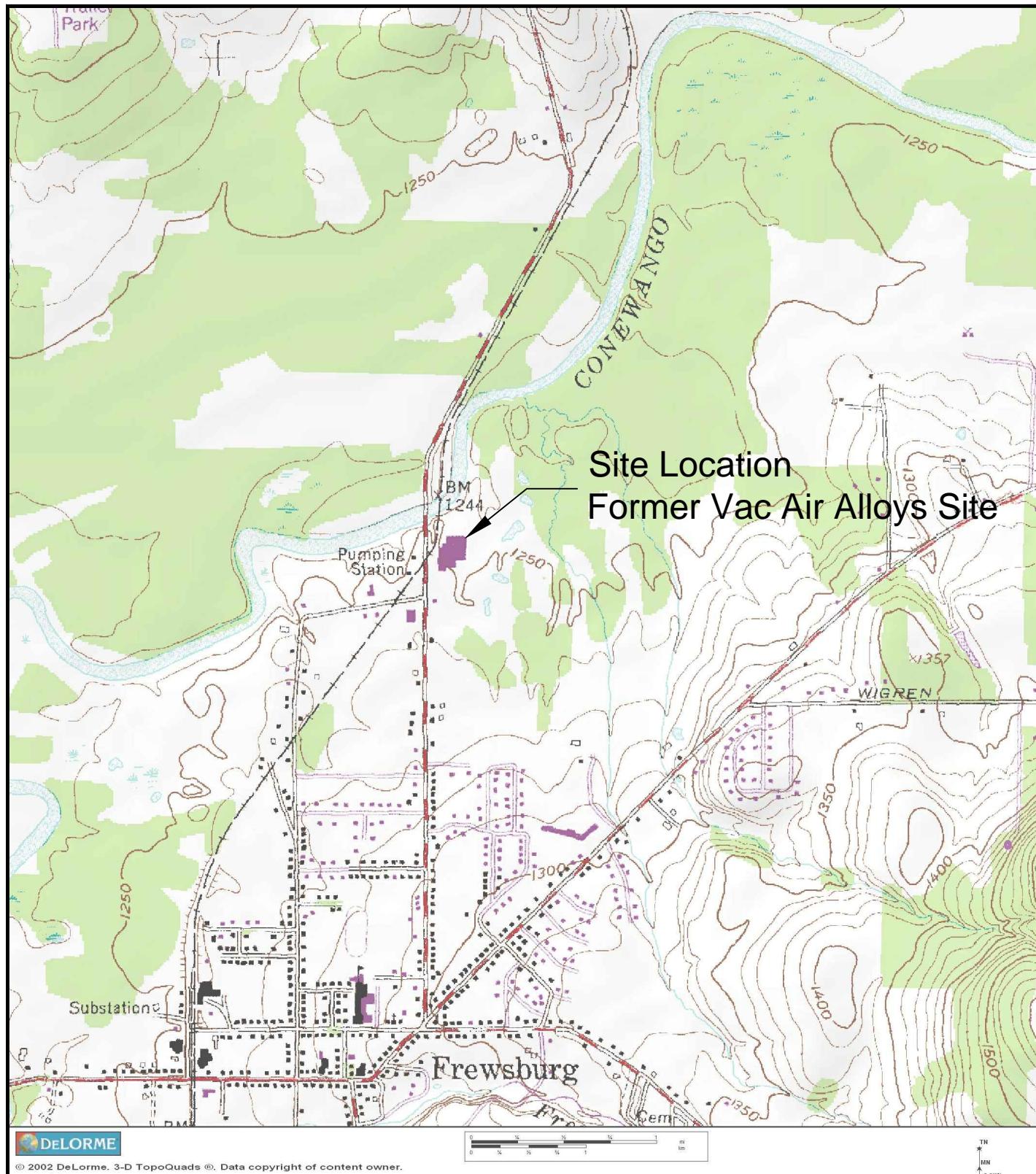
- All concentrations are reported in the units of ug/L.
- NYSDEC Class GA Groundwater Quality Standards and Guidance Values per Technical & Operational Guidance Series (TOGS 1.1.1).
- MW-11R and MW-12 blind duplicates collected on 4/22/14 and 11/20/13, respectively.

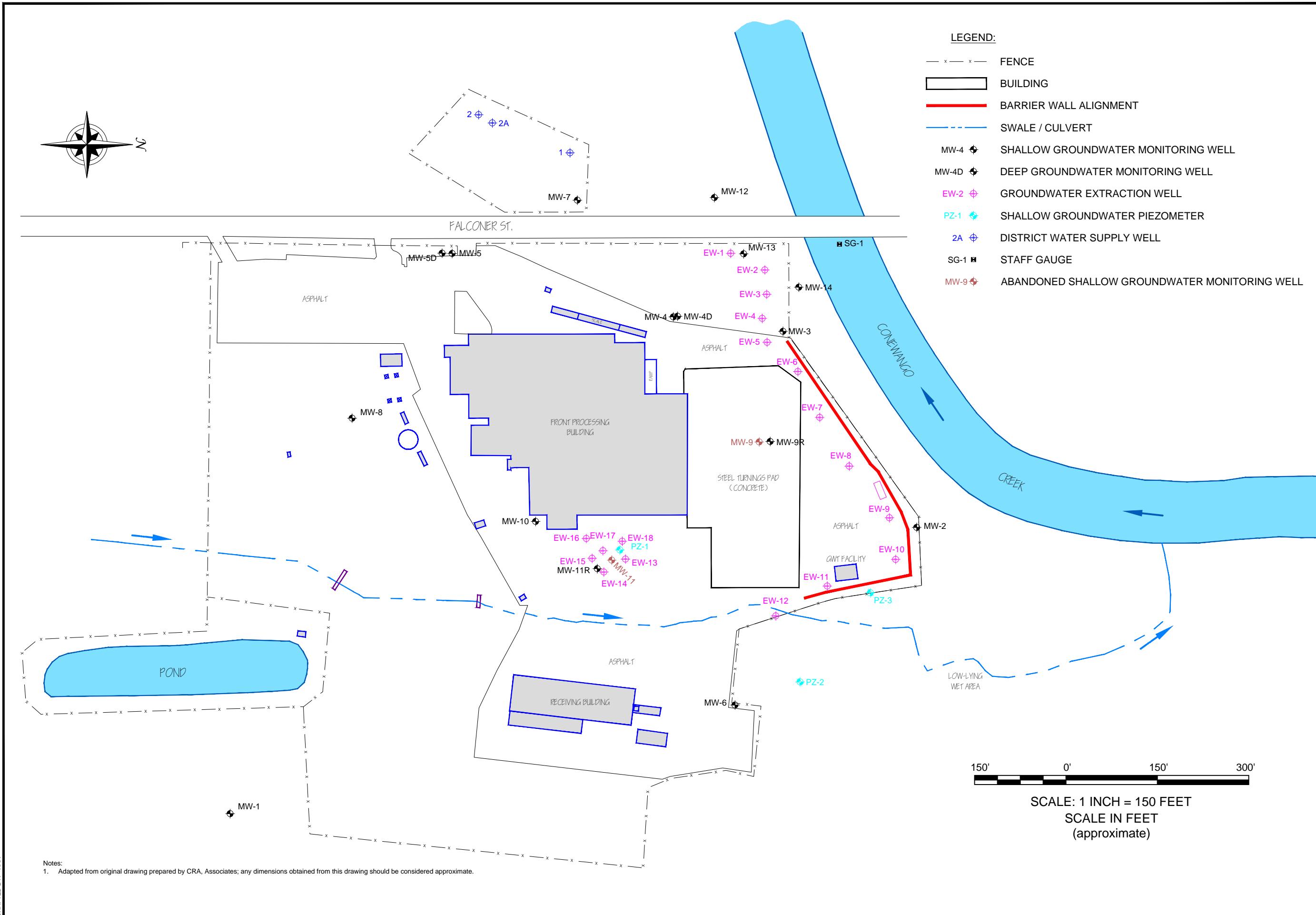
**Acronyms:**

- ND<2.5 = Parameter not detected above the Method Detection Limit (MDL) of 2.5 ug/L.
- J = Estimated value; result is less than the Reporting Limit but greater than or equal to the MDL.
- B = The associated method blank or trip blank contains the target analyte at a reportable level.
- TCL VOC = Target compound list volatile organic compound

## **FIGURES**

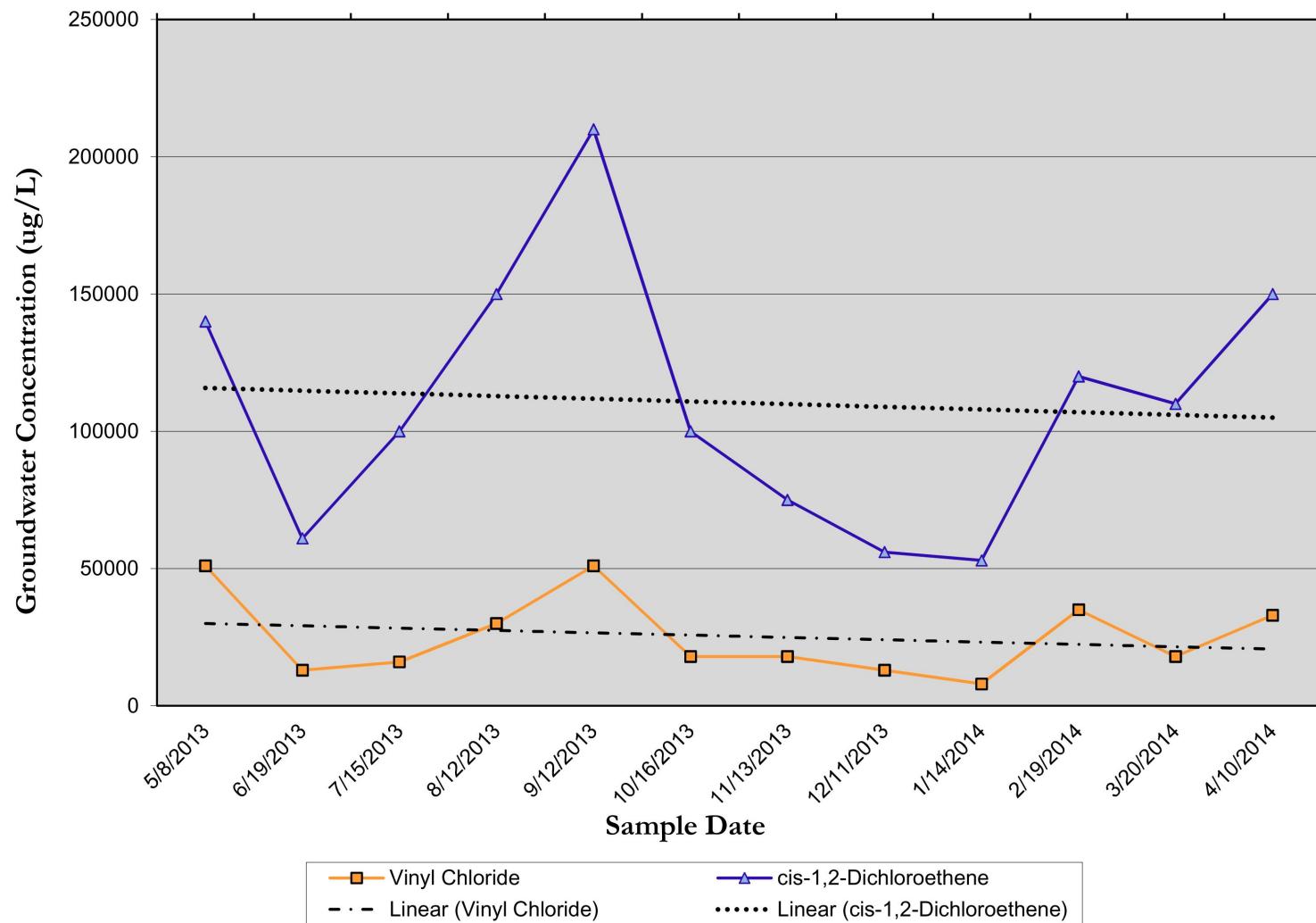
**FIGURE 1**



**FIGURE 2**

BENCHMARK ENVIRONMENTAL SCIENCE, PLLC  
2558 HAMBURG TURNPIKE  
SUITE 300  
BUFFALO, NY 14218  
(716) 856-0599

JOB NO.: 0095-014-001



2558 HAMBURG TURNPIKE  
SUITE 300  
BUFFALO, NY 14218  
(716) 856-0599

PROJECT NO.: 0095-014-001

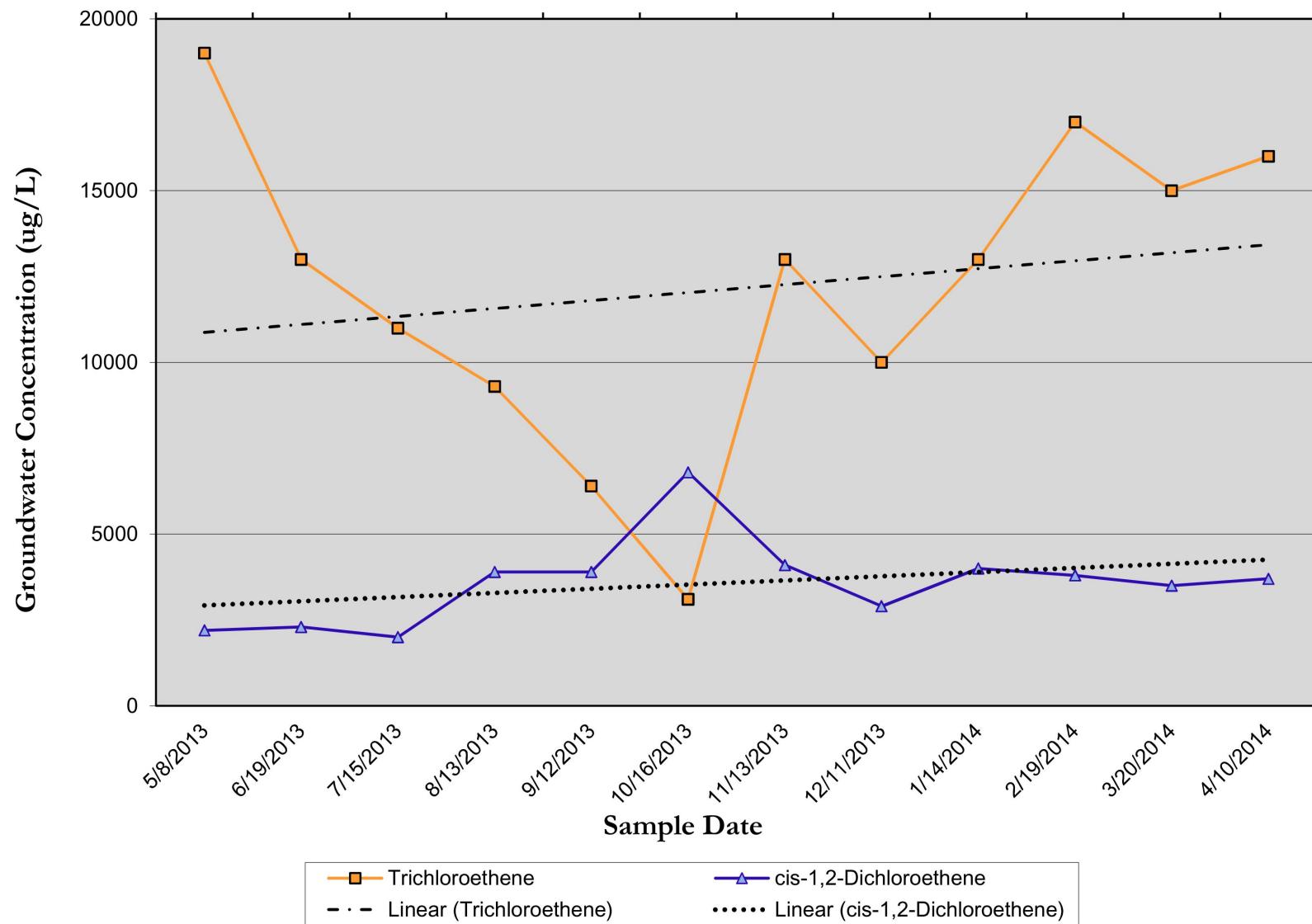
DATE: JUNE 2014

DRAFTED BY: HAA

## MW-2 GROUNDWATER CONCENTRATIONS VS. TIME

PERIODIC REVIEW REPORT  
FORMER VAC AIR ALLOYS SITE  
SITE NO. C907016  
FREWSBURG, NEW YORK  
PREPARED FOR  
SGK VENTURES, LLC

FIGURE 3



2558 HAMBURG TURNPIKE  
SUITE 300  
BUFFALO, NY 14218  
(716) 856-0599

PROJECT NO.: 0095-014-001

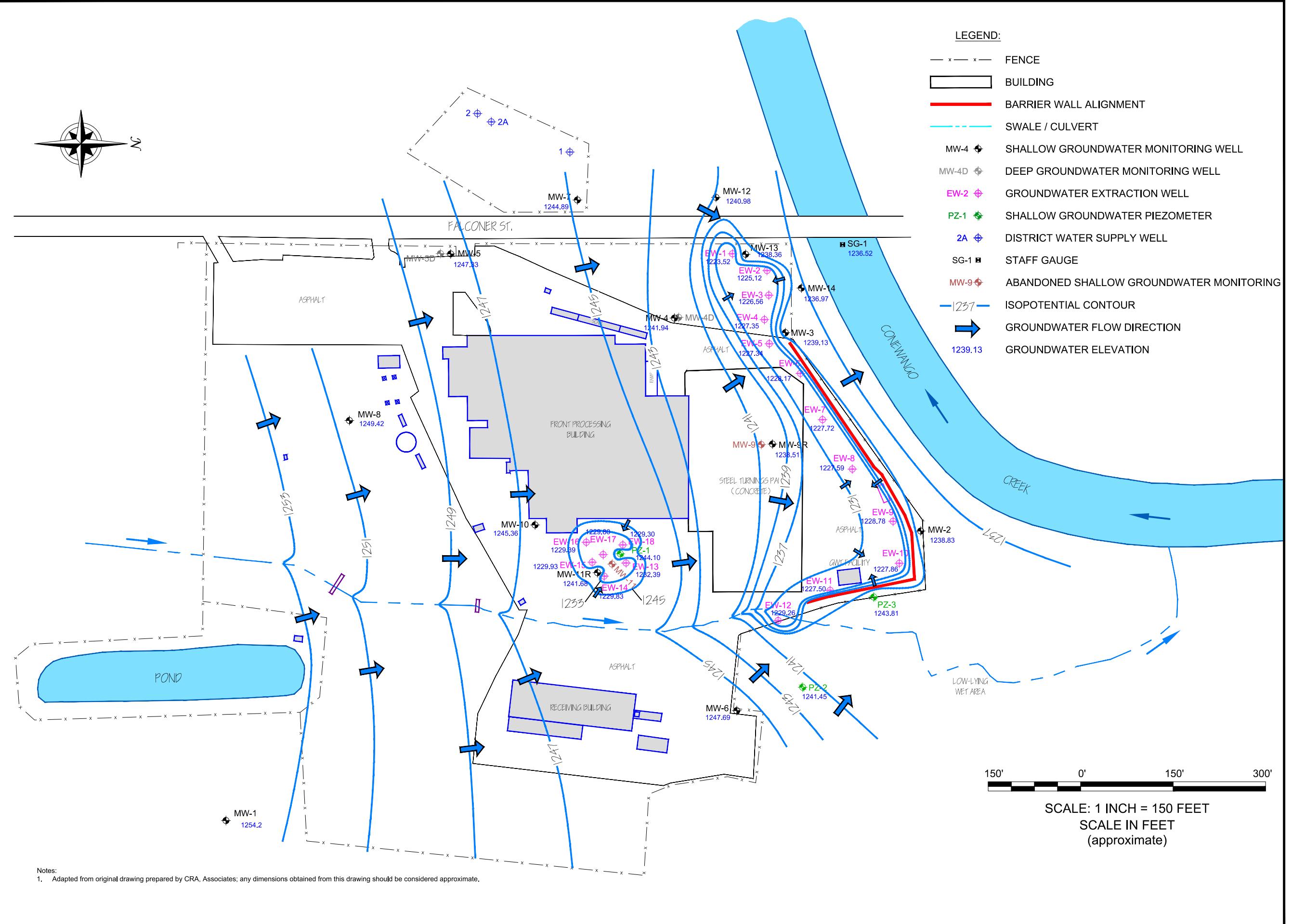
DATE: JUNE 2014

DRAFTED BY: HAA

## MW-14 GROUNDWATER CONCENTRATIONS VS. TIME

PERIODIC REVIEW REPORT  
FORMER VAC AIR ALLOYS SITE  
SITE NO. C907016  
FREWSBURG, NEW YORK  
PREPARED FOR  
SGK VENTURES, LLC

FIGURE 4

**FIGURE 5**

**BENCHMARK**  
ENVIRONMENTAL  
ENGINEERING &  
SCIENCE, PLLC

2558 HAMBURG TURNPIKE  
SUITE 300  
BUFFALO, NY 14218  
(716) 856-0589

JOB NO.: 0095-014-001

## SHALLOW GROUNDWATER ISOPOTENTIAL MAP FOR APRIL 2014

SEMI-ANNUAL ENVIRONMENTAL MONITORING AND INSPECTION

FORMER VAC AIR ALLOYS SITE  
SITE NO. C907016  
FREWSBURG, NEW YORK

PREPARED FOR  
SGK VENTURES, LLC

## **APPENDIX A**

### **NYSDEC INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM**



**Enclosure 1**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



	<b>Site Details</b>	<b>Box 1</b>
<b>Site No.</b>	<b>907016</b>	
SGK Ventures, LLC Former Vac Air Alloys Site		
<b>Site Name</b>	<b>Keywell L.L.C. Vac Air Division</b>	
300		
Site Address:	Falconer Road	Zip Code: 14738
City/Town:	Carroll	
County:	Chautauqua	
Site Acreage:	15.0	
Reporting Period: <del>to May 31, 2011</del> May 1, 2013 to April 30, 2014		
YES      NO		
1. Is the information above correct?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b>		
5. Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Box 2</b>		
YES      NO		
6. Is the current site use consistent with the use(s) listed below? Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM.</b>		
<b>A Corrective Measures Work Plan must be submitted along with this form to address these issues.</b>		

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

**Description of Institutional Controls**

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
1-1-18	Keywell, LLC	Monitoring Plan O&M Plan
1-1-19.1	Keywell, LLC	Monitoring Plan O&M Plan
1-1-19.2	Keywell, LLC	Monitoring Plan O&M Plan
1-1-20	Keywell, LLC	Monitoring Plan O&M Plan
1-1-42.2.4	Keywell, LLC	Monitoring Plan O&M Plan

**Description of Engineering Controls**

<u>Parcel</u>	<u>Engineering Control</u>
1-1-18	Cover System Groundwater Containment Pump & Treat Subsurface Barriers
1-1-19.1	Cover System Fencing/Access Control Pump & Treat Subsurface Barriers
1-1-19.2	Cover System Fencing/Access Control Pump & Treat Subsurface Barriers
1-1-20	Cover System Fencing/Access Control Pump & Treat Subsurface Barriers
1-1-42.2.4	Cover System Fencing/Access Control Pump & Treat Subsurface Barriers

**Control Description for Site No. 907016****Parcel: 1-1-18**

IC: Legacy Restrictions: ROD; Long-term OM&M Plan.

EC: Groundwater control via downgradient barrier wall and pump and treat system. Paved cap covering active plant areas. Storm water control with sediment catch basins prior to discharge to Conewango Creek.

**Parcel: 1-1-19.1**

IC: Legacy Restrictions: ROD; Long-term OM&M Plan.

EC: Groundwater control via downgradient barrier wall and pump and treat system. Paved cap covering active plant areas. Storm water control with sediment catch basins prior to discharge to Conewango Creek.

## Control Description for Site No. 907016

### **Parcel: 1-1-19.2**

IC: Legacy Restrictions: ROD; Long-term OM&M Plan.

EC: Groundwater control via downgradient barrier wall and pump and treat system. Paved cap covering active plant areas. Storm water control with sediment catch basins prior to discharge to Conewango Creek.

### **Parcel: 1-1-20**

IC: Legacy Restrictions: ROD; Long-term OM&M Plan.

EC: Groundwater control via downgradient barrier wall and pump and treat system. Paved cap covering active plant areas. Storm water control with sediment catch basins prior to discharge to Conewango Creek.

### **Parcel: 1-1-42.2.4**

IC: Legacy Restrictions: ROD; Long-term OM&M Plan.

EC: Groundwater control via downgradient barrier wall and pump and treat system. Paved cap covering active plant areas. Storm water control with sediment catch basins prior to discharge to Conewango Creek.

### **Parcel: 1-1-8.2**

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES      NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES      NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

---

Signature of Owner, Remedial Party or Designated Representative

---

Date

IC CERTIFICATIONS  
SITE NO. 907016

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 2 and/or 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

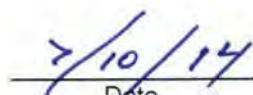
I Timothy B. Stalkamp at 11900 South Cottage Grove Avenue, Chicago, IL 60628,  
print name print business address

am certifying as Chief Restructuring Officer (Owner, SGK Ventures, LLC) (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.



Signature of Owner or Remedial Party Rendering Certification



Date

IC/EC CERTIFICATIONS

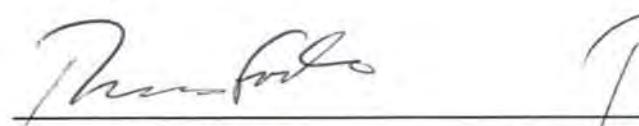
Box 7

Professional Engineer Signature

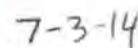
I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Thomas H. Forbes, P.E. at 2558 Hamburg Turnpike, Buffalo, NY 14218,  
print name print business address

am certifying as a Professional Engineer for the Owner (SGK Ventures, LLC)  
(Owner or Remedial Party)

  
Signature of Professional Engineer, for the Owner or  
Remedial Party, Rendering Certification

Stamp  
(Required for PE)

  
Date

---

## **APPENDIX B**

---

### **ANALYTICAL DATA REPORTS**

## APPENDIX B1

### ANALYTICAL DATA REPORTS

#### MONTHLY MW-2, MW-14, AND EFFLUENT

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-21082-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

5/30/2013 12:12:00 PM

David Dunlap, Laboratory Technical Director

dave.dunlap@testamericainc.com

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

### Job ID: 180-21082-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-21082-1

#### Receipt

The samples were received on 5/9/2013 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

#### GC/MS VOA

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-21082-1) and MW14 (180-21082-2). Elevated reporting limits (RLs) are provided.

The trip blank had trans-1,2-dichloroethene detected above the reporting limit. As this was noted during review of the final report, past the holding time, the results were reported.

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

## Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

### 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.
E	Result exceeded calibration range.
B	Compound was found in the blank and sample.

#### Metals

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.

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-21082-1	MW2	Water	05/08/13 07:00	05/09/13 08:45
180-21082-2	MW14	Water	05/08/13 08:00	05/09/13 08:45
180-21082-3	EFFLUENT	Water	05/08/13 10:30	05/09/13 08:45
180-21082-4	T/B	Water	05/08/13 00:00	05/09/13 08:45

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TestAmerica Pittsburgh

## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664A	HEM and SGT-HEM	1664A	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

## Lab Chronicle

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

**Client Sample ID: MW2**

Date Collected: 05/08/13 07:00

Date Received: 05/09/13 08:45

**Lab Sample ID: 180-21082-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP5		1000	5 mL	5 mL	72379	05/20/13 22:33	JR	TAL PIT
Total/NA	Analysis	8260B Instrument ID: HP5	DL	10000	5 mL	5 mL	72379	05/20/13 15:16	JR	TAL PIT

**Client Sample ID: MW14**

Date Collected: 05/08/13 08:00

Date Received: 05/09/13 08:45

**Lab Sample ID: 180-21082-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP5		1000	5 mL	5 mL	72379	05/20/13 15:40	JR	TAL PIT

**Client Sample ID: EFFLUENT**

Date Collected: 05/08/13 10:30

Date Received: 05/09/13 08:45

**Lab Sample ID: 180-21082-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP5		1	5 mL	5 mL	72379	05/20/13 16:04	JR	TAL PIT
Total Recoverable	Prep	200.7			50 mL	50 mL	71605	05/13/13 10:07	CH	TAL PIT
Total Recoverable	Analysis	200.7 Instrument ID: Q		1			71871	05/15/13 09:58	RG	TAL PIT
Total/NA	Analysis	SM 4500 H+ B Instrument ID: NOEQUIP		1		50 mL	72075	05/16/13 16:28	CR	TAL PIT
Total/NA	Analysis	1664A Instrument ID: NOEQUIP		1			72989	05/25/13 11:46	JWM	TAL PIT
Total/NA	Prep	1664A			970 mL	1000 mL	72980	05/25/13 11:46	JWM	TAL PIT

**Client Sample ID: T/B**

Date Collected: 05/08/13 00:00

Date Received: 05/09/13 08:45

**Lab Sample ID: 180-21082-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP5		1	5 mL	5 mL	72379	05/20/13 16:28	JR	TAL PIT

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CH = Caitlyn Haluck

JWM = Jeremiah McLaughlin

Batch Type: Analysis

CR = Carl Reagle

JR = Jessica Ryan

JWM = Jeremiah McLaughlin

RG = Rob Good

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# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

**Client Sample ID: MW2**

Date Collected: 05/08/13 07:00

Date Received: 05/09/13 08:45

**Lab Sample ID: 180-21082-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			05/20/13 22:33	1000
Benzene	ND		1000	110	ug/L			05/20/13 22:33	1000
Bromoform	ND		1000	190	ug/L			05/20/13 22:33	1000
Bromomethane	ND		1000	310	ug/L			05/20/13 22:33	1000
2-Butanone	ND		5000	550	ug/L			05/20/13 22:33	1000
Carbon disulfide	ND		1000	210	ug/L			05/20/13 22:33	1000
Carbon tetrachloride	ND		1000	140	ug/L			05/20/13 22:33	1000
Chlorobenzene	ND		1000	140	ug/L			05/20/13 22:33	1000
Chlorodibromomethane	ND		1000	140	ug/L			05/20/13 22:33	1000
Chloroethane	ND		1000	210	ug/L			05/20/13 22:33	1000
Chloroform	ND		1000	170	ug/L			05/20/13 22:33	1000
Chloromethane	ND		1000	280	ug/L			05/20/13 22:33	1000
<b>cis-1,2-Dichloroethene</b>	<b>110000</b>	<b>E</b>	1000	240	ug/L			05/20/13 22:33	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			05/20/13 22:33	1000
Dichlorobromomethane	ND		1000	130	ug/L			05/20/13 22:33	1000
1,1-Dichloroethane	ND		1000	120	ug/L			05/20/13 22:33	1000
1,2-Dichloroethane	ND		1000	210	ug/L			05/20/13 22:33	1000
<b>1,1-Dichloroethene</b>	<b>310</b>	<b>J</b>	1000	300	ug/L			05/20/13 22:33	1000
1,2-Dichloropropane	ND		1000	95	ug/L			05/20/13 22:33	1000
Ethylbenzene	ND		1000	230	ug/L			05/20/13 22:33	1000
2-Hexanone	ND		5000	160	ug/L			05/20/13 22:33	1000
<b>Methylene Chloride</b>	<b>970</b>	<b>J B</b>	1000	130	ug/L			05/20/13 22:33	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			05/20/13 22:33	1000
Styrene	ND		1000	97	ug/L			05/20/13 22:33	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			05/20/13 22:33	1000
Tetrachloroethene	ND		1000	150	ug/L			05/20/13 22:33	1000
Toluene	ND		1000	150	ug/L			05/20/13 22:33	1000
<b>trans-1,2-Dichloroethene</b>	<b>200</b>	<b>J</b>	1000	170	ug/L			05/20/13 22:33	1000
trans-1,3-Dichloropropene	ND		1000	150	ug/L			05/20/13 22:33	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			05/20/13 22:33	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			05/20/13 22:33	1000
<b>Trichloroethene</b>	<b>270</b>	<b>J</b>	1000	140	ug/L			05/20/13 22:33	1000
<b>Vinyl chloride</b>	<b>31000</b>		1000	230	ug/L			05/20/13 22:33	1000
Xylenes, Total	ND		3000	490	ug/L			05/20/13 22:33	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	90		70 - 118					05/20/13 22:33	1000
Dibromofluoromethane (Surr)	112		70 - 128					05/20/13 22:33	1000
1,2-Dichloroethane-d4 (Surr)	104		64 - 135					05/20/13 22:33	1000
Toluene-d8 (Surr)	96		71 - 118					05/20/13 22:33	1000

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50000	25000	ug/L			05/20/13 15:16	10000
Benzene	ND		10000	1100	ug/L			05/20/13 15:16	10000
Bromoform	ND		10000	1900	ug/L			05/20/13 15:16	10000
Bromomethane	ND		10000	3100	ug/L			05/20/13 15:16	10000
2-Butanone	ND		50000	5500	ug/L			05/20/13 15:16	10000
Carbon disulfide	ND		10000	2100	ug/L			05/20/13 15:16	10000
Carbon tetrachloride	ND		10000	1400	ug/L			05/20/13 15:16	10000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

**Client Sample ID: MW2**

**Date Collected: 05/08/13 07:00**

**Date Received: 05/09/13 08:45**

**Lab Sample ID: 180-21082-1**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds by GC/MS (Low Level) - DL (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		10000	1400	ug/L			05/20/13 15:16	10000
Chlorodibromomethane	ND		10000	1400	ug/L			05/20/13 15:16	10000
Chloroethane	ND		10000	2100	ug/L			05/20/13 15:16	10000
Chloroform	ND		10000	1700	ug/L			05/20/13 15:16	10000
Chloromethane	ND		10000	2800	ug/L			05/20/13 15:16	10000
<b>cis-1,2-Dichloroethene</b>	<b>140000</b>		10000	2400	ug/L			05/20/13 15:16	10000
cis-1,3-Dichloropropene	ND		10000	1900	ug/L			05/20/13 15:16	10000
Dichlorobromomethane	ND		10000	1300	ug/L			05/20/13 15:16	10000
1,1-Dichloroethane	ND		10000	1200	ug/L			05/20/13 15:16	10000
1,2-Dichloroethane	ND		10000	2100	ug/L			05/20/13 15:16	10000
1,1-Dichloroethene	ND		10000	3000	ug/L			05/20/13 15:16	10000
1,2-Dichloropropane	ND		10000	950	ug/L			05/20/13 15:16	10000
Ethylbenzene	ND		10000	2300	ug/L			05/20/13 15:16	10000
2-Hexanone	ND		50000	1600	ug/L			05/20/13 15:16	10000
<b>Methylene Chloride</b>	<b>8200 J B</b>		10000	1300	ug/L			05/20/13 15:16	10000
4-Methyl-2-pentanone	ND		50000	5300	ug/L			05/20/13 15:16	10000
Styrene	ND		10000	970	ug/L			05/20/13 15:16	10000
1,1,2,2-Tetrachloroethane	ND		10000	2000	ug/L			05/20/13 15:16	10000
Tetrachloroethene	ND		10000	1500	ug/L			05/20/13 15:16	10000
Toluene	ND		10000	1500	ug/L			05/20/13 15:16	10000
trans-1,2-Dichloroethene	ND		10000	1700	ug/L			05/20/13 15:16	10000
trans-1,3-Dichloropropene	ND		10000	1500	ug/L			05/20/13 15:16	10000
1,1,1-Trichloroethane	ND		10000	2900	ug/L			05/20/13 15:16	10000
1,1,2-Trichloroethane	ND		10000	2000	ug/L			05/20/13 15:16	10000
Trichloroethene	ND		10000	1400	ug/L			05/20/13 15:16	10000
<b>Vinyl chloride</b>	<b>51000</b>		10000	2300	ug/L			05/20/13 15:16	10000
Xylenes, Total	ND		30000	4900	ug/L			05/20/13 15:16	10000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 118		05/20/13 15:16	10000
Dibromofluoromethane (Surr)	110		70 - 128		05/20/13 15:16	10000
1,2-Dichloroethane-d4 (Surr)	101		64 - 135		05/20/13 15:16	10000
Toluene-d8 (Surr)	101		71 - 118		05/20/13 15:16	10000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

**Client Sample ID: MW14**

**Lab Sample ID: 180-21082-2**

Date Collected: 05/08/13 08:00

Matrix: Water

Date Received: 05/09/13 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			05/20/13 15:40	1000
Benzene	ND		1000	110	ug/L			05/20/13 15:40	1000
Bromoform	ND		1000	190	ug/L			05/20/13 15:40	1000
Bromomethane	ND		1000	310	ug/L			05/20/13 15:40	1000
2-Butanone	ND		5000	550	ug/L			05/20/13 15:40	1000
Carbon disulfide	ND		1000	210	ug/L			05/20/13 15:40	1000
Carbon tetrachloride	ND		1000	140	ug/L			05/20/13 15:40	1000
Chlorobenzene	ND		1000	140	ug/L			05/20/13 15:40	1000
Chlorodibromomethane	ND		1000	140	ug/L			05/20/13 15:40	1000
Chloroethane	ND		1000	210	ug/L			05/20/13 15:40	1000
Chloroform	ND		1000	170	ug/L			05/20/13 15:40	1000
Chloromethane	ND		1000	280	ug/L			05/20/13 15:40	1000
<b>cis-1,2-Dichloroethene</b>	<b>2200</b>		1000	240	ug/L			05/20/13 15:40	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			05/20/13 15:40	1000
Dichlorobromomethane	ND		1000	130	ug/L			05/20/13 15:40	1000
1,1-Dichloroethane	ND		1000	120	ug/L			05/20/13 15:40	1000
1,2-Dichloroethane	ND		1000	210	ug/L			05/20/13 15:40	1000
1,1-Dichloroethene	ND		1000	300	ug/L			05/20/13 15:40	1000
1,2-Dichloropropane	ND		1000	95	ug/L			05/20/13 15:40	1000
Ethylbenzene	ND		1000	230	ug/L			05/20/13 15:40	1000
2-Hexanone	ND		5000	160	ug/L			05/20/13 15:40	1000
<b>Methylene Chloride</b>	<b>800 JB</b>		1000	130	ug/L			05/20/13 15:40	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			05/20/13 15:40	1000
Styrene	ND		1000	97	ug/L			05/20/13 15:40	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			05/20/13 15:40	1000
Tetrachloroethene	ND		1000	150	ug/L			05/20/13 15:40	1000
Toluene	ND		1000	150	ug/L			05/20/13 15:40	1000
trans-1,2-Dichloroethene	ND		1000	170	ug/L			05/20/13 15:40	1000
trans-1,3-Dichloropropene	ND		1000	150	ug/L			05/20/13 15:40	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			05/20/13 15:40	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			05/20/13 15:40	1000
<b>Trichloroethene</b>	<b>19000</b>		1000	140	ug/L			05/20/13 15:40	1000
Vinyl chloride	ND		1000	230	ug/L			05/20/13 15:40	1000
Xylenes, Total	ND		3000	490	ug/L			05/20/13 15:40	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	86		70 - 118					05/20/13 15:40	1000
Dibromofluoromethane (Surr)	119		70 - 128					05/20/13 15:40	1000
1,2-Dichloroethane-d4 (Surr)	105		64 - 135					05/20/13 15:40	1000
Toluene-d8 (Surr)	99		71 - 118					05/20/13 15:40	1000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

## Client Sample ID: EFFLUENT

Date Collected: 05/08/13 10:30

Date Received: 05/09/13 08:45

## Lab Sample ID: 180-21082-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			05/20/13 16:04	1
Benzene	ND		1.0	0.11	ug/L			05/20/13 16:04	1
Bromoform	ND		1.0	0.19	ug/L			05/20/13 16:04	1
Bromomethane	ND		1.0	0.31	ug/L			05/20/13 16:04	1
2-Butanone	ND		5.0	0.55	ug/L			05/20/13 16:04	1
Carbon disulfide	ND		1.0	0.21	ug/L			05/20/13 16:04	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			05/20/13 16:04	1
Chlorobenzene	ND		1.0	0.14	ug/L			05/20/13 16:04	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			05/20/13 16:04	1
Chloroethane	ND		1.0	0.21	ug/L			05/20/13 16:04	1
<b>Chloroform</b>	<b>0.24 J</b>		1.0	0.17	ug/L			05/20/13 16:04	1
Chloromethane	ND		1.0	0.28	ug/L			05/20/13 16:04	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			05/20/13 16:04	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			05/20/13 16:04	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			05/20/13 16:04	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			05/20/13 16:04	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/20/13 16:04	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			05/20/13 16:04	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			05/20/13 16:04	1
Ethylbenzene	ND		1.0	0.23	ug/L			05/20/13 16:04	1
2-Hexanone	ND		5.0	0.16	ug/L			05/20/13 16:04	1
Methylene Chloride	ND		1.0	0.13	ug/L			05/20/13 16:04	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			05/20/13 16:04	1
Styrene	ND		1.0	0.097	ug/L			05/20/13 16:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			05/20/13 16:04	1
Tetrachloroethene	ND		1.0	0.15	ug/L			05/20/13 16:04	1
Toluene	ND		1.0	0.15	ug/L			05/20/13 16:04	1
<b>trans-1,2-Dichloroethene</b>	<b>0.44 J</b>		1.0	0.17	ug/L			05/20/13 16:04	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			05/20/13 16:04	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			05/20/13 16:04	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			05/20/13 16:04	1
<b>Trichloroethene</b>	<b>0.17 J</b>		1.0	0.14	ug/L			05/20/13 16:04	1
Vinyl chloride	ND		1.0	0.23	ug/L			05/20/13 16:04	1
Xylenes, Total	ND		3.0	0.49	ug/L			05/20/13 16:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	89			70 - 118				05/20/13 16:04	1
Dibromofluoromethane (Surr)	118			70 - 128				05/20/13 16:04	1
1,2-Dichloroethane-d4 (Surr)	113			64 - 135				05/20/13 16:04	1
Toluene-d8 (Surr)	97			71 - 118				05/20/13 16:04	1

### Method: 200.7 - Metals (Custom List) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aluminum</b>	<b>77 J</b>		200	16	ug/L		05/13/13 10:07	05/15/13 09:58	1
<b>Iron</b>	<b>440</b>		100	8.5	ug/L		05/13/13 10:07	05/15/13 09:58	1
<b>Zinc</b>	<b>10 J</b>		20	1.0	ug/L		05/13/13 10:07	05/15/13 09:58	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>HEM (Oil and Grease)</b>	<b>1.6 J</b>		5.2	1.5	mg/L		05/25/13 11:46	05/25/13 11:46	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

**Client Sample ID: EFFLUENT**  
**Date Collected: 05/08/13 10:30**  
**Date Received: 05/09/13 08:45**

**Lab Sample ID: 180-21082-3**  
**Matrix: Water**

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.66	HF	0.100	0.100	SU			05/16/13 16:28	1

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

**Client Sample ID: T/B**

Date Collected: 05/08/13 00:00

Date Received: 05/09/13 08:45

**Lab Sample ID: 180-21082-4**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			05/20/13 16:28	1
Benzene	ND		1.0	0.11	ug/L			05/20/13 16:28	1
Bromoform	ND		1.0	0.19	ug/L			05/20/13 16:28	1
Bromomethane	ND		1.0	0.31	ug/L			05/20/13 16:28	1
2-Butanone	ND		5.0	0.55	ug/L			05/20/13 16:28	1
Carbon disulfide	ND		1.0	0.21	ug/L			05/20/13 16:28	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			05/20/13 16:28	1
Chlorobenzene	ND		1.0	0.14	ug/L			05/20/13 16:28	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			05/20/13 16:28	1
Chloroethane	ND		1.0	0.21	ug/L			05/20/13 16:28	1
Chloroform	ND		1.0	0.17	ug/L			05/20/13 16:28	1
Chloromethane	ND		1.0	0.28	ug/L			05/20/13 16:28	1
<b>cis-1,2-Dichloroethene</b>	<b>0.27 J</b>		1.0	0.24	ug/L			05/20/13 16:28	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			05/20/13 16:28	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			05/20/13 16:28	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			05/20/13 16:28	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/20/13 16:28	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			05/20/13 16:28	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			05/20/13 16:28	1
Ethylbenzene	ND		1.0	0.23	ug/L			05/20/13 16:28	1
2-Hexanone	ND		5.0	0.16	ug/L			05/20/13 16:28	1
<b>Methylene Chloride</b>	<b>0.95 JB</b>		1.0	0.13	ug/L			05/20/13 16:28	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			05/20/13 16:28	1
Styrene	ND		1.0	0.097	ug/L			05/20/13 16:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			05/20/13 16:28	1
Tetrachloroethene	ND		1.0	0.15	ug/L			05/20/13 16:28	1
Toluene	ND		1.0	0.15	ug/L			05/20/13 16:28	1
<b>trans-1,2-Dichloroethene</b>	<b>10</b>		1.0	0.17	ug/L			05/20/13 16:28	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			05/20/13 16:28	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			05/20/13 16:28	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			05/20/13 16:28	1
Trichloroethene	ND		1.0	0.14	ug/L			05/20/13 16:28	1
Vinyl chloride	ND		1.0	0.23	ug/L			05/20/13 16:28	1
Xylenes, Total	ND		3.0	0.49	ug/L			05/20/13 16:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	86		70 - 118				05/20/13 16:28	1	
Dibromofluoromethane (Surr)	115		70 - 128				05/20/13 16:28	1	
1,2-Dichloroethane-d4 (Surr)	109		64 - 135				05/20/13 16:28	1	
Toluene-d8 (Surr)	97		71 - 118				05/20/13 16:28	1	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

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

**Lab Sample ID:** MB 180-72379/3

**Matrix:** Water

**Analysis Batch:** 72379

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Acetone	ND				5.0	2.5	ug/L			05/20/13 12:14	1
Benzene	ND				1.0	0.11	ug/L			05/20/13 12:14	1
Bromoform	ND				1.0	0.19	ug/L			05/20/13 12:14	1
Bromomethane	ND				1.0	0.31	ug/L			05/20/13 12:14	1
2-Butanone	ND				5.0	0.55	ug/L			05/20/13 12:14	1
Carbon disulfide	ND				1.0	0.21	ug/L			05/20/13 12:14	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			05/20/13 12:14	1
Chlorobenzene	ND				1.0	0.14	ug/L			05/20/13 12:14	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			05/20/13 12:14	1
Chloroethane	ND				1.0	0.21	ug/L			05/20/13 12:14	1
Chloroform	ND				1.0	0.17	ug/L			05/20/13 12:14	1
Chloromethane	ND				1.0	0.28	ug/L			05/20/13 12:14	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			05/20/13 12:14	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			05/20/13 12:14	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			05/20/13 12:14	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			05/20/13 12:14	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			05/20/13 12:14	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			05/20/13 12:14	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			05/20/13 12:14	1
Ethylbenzene	ND				1.0	0.23	ug/L			05/20/13 12:14	1
2-Hexanone	ND				5.0	0.16	ug/L			05/20/13 12:14	1
Methylene Chloride	0.162	J			1.0	0.13	ug/L			05/20/13 12:14	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			05/20/13 12:14	1
Styrene	ND				1.0	0.097	ug/L			05/20/13 12:14	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			05/20/13 12:14	1
Tetrachloroethene	ND				1.0	0.15	ug/L			05/20/13 12:14	1
Toluene	ND				1.0	0.15	ug/L			05/20/13 12:14	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			05/20/13 12:14	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			05/20/13 12:14	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			05/20/13 12:14	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			05/20/13 12:14	1
Trichloroethene	ND				1.0	0.14	ug/L			05/20/13 12:14	1
Vinyl chloride	ND				1.0	0.23	ug/L			05/20/13 12:14	1
Xylenes, Total	ND				3.0	0.49	ug/L			05/20/13 12:14	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	93		70 - 118				05/20/13 12:14	1
Dibromofluoromethane (Surr)	115		70 - 128				05/20/13 12:14	1
1,2-Dichloroethane-d4 (Surr)	104		64 - 135				05/20/13 12:14	1
Toluene-d8 (Surr)	96		71 - 118				05/20/13 12:14	1

**Lab Sample ID:** LCS 180-72379/6

**Matrix:** Water

**Analysis Batch:** 72379

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Acetone	10.0	8.47		ug/L		85	22 - 150
Benzene	10.0	9.21		ug/L		92	80 - 120

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

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

Lab Sample ID: LCS 180-72379/6

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 72379

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Bromoform	10.0	11.3		ug/L		113	46 - 150
Bromomethane	10.0	11.6		ug/L		116	33 - 150
2-Butanone	10.0	7.13		ug/L		71	39 - 138
Carbon disulfide	10.0	10.1		ug/L		101	54 - 132
Carbon tetrachloride	10.0	10.9		ug/L		109	55 - 150
Chlorobenzene	10.0	9.78		ug/L		98	80 - 120
Chlorodibromomethane	10.0	10.8		ug/L		108	60 - 140
Chloroethane	10.0	12.7		ug/L		127	36 - 142
Chloroform	10.0	10.3		ug/L		103	72 - 127
Chloromethane	10.0	12.5		ug/L		125	50 - 139
cis-1,2-Dichloroethene	10.0	9.39		ug/L		94	70 - 120
cis-1,3-Dichloropropene	10.0	9.29		ug/L		93	66 - 120
Dichlorobromomethane	10.0	10.3		ug/L		103	66 - 130
1,1-Dichloroethane	10.0	9.51		ug/L		95	73 - 126
1,2-Dichloroethane	10.0	11.2		ug/L		112	68 - 132
1,1-Dichloroethene	10.0	10.1		ug/L		101	65 - 136
1,2-Dichloropropane	10.0	9.61		ug/L		96	76 - 124
Ethylbenzene	10.0	8.97		ug/L		90	72 - 126
2-Hexanone	10.0	5.89		ug/L		59	25 - 132
Methylene Chloride	10.0	10.2		ug/L		102	63 - 129
4-Methyl-2-pentanone	10.0	6.18		ug/L		62	45 - 145
Styrene	10.0	9.87		ug/L		99	71 - 127
1,1,2,2-Tetrachloroethane	10.0	8.80		ug/L		88	62 - 125
Tetrachloroethene	10.0	8.65		ug/L		87	70 - 135
Toluene	10.0	9.20		ug/L		92	80 - 123
trans-1,2-Dichloroethene	10.0	9.75		ug/L		98	73 - 126
trans-1,3-Dichloropropene	10.0	8.38		ug/L		84	65 - 125
1,1,1-Trichloroethane	10.0	10.6		ug/L		106	63 - 133
1,1,2-Trichloroethane	10.0	10.0		ug/L		100	77 - 127
Trichloroethene	10.0	10.3		ug/L		103	73 - 120
Vinyl chloride	10.0	11.0		ug/L		110	53 - 138
Xylenes, Total	30.0	27.3		ug/L		91	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	103		70 - 118
Dibromofluoromethane (Surr)	120		70 - 128
1,2-Dichloroethane-d4 (Surr)	111		64 - 135
Toluene-d8 (Surr)	98		71 - 118

## Method: 200.7 - Metals (Custom List)

Lab Sample ID: MB 180-71605/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total Recoverable

Analysis Batch: 71871

Prep Batch: 71605

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		200	16	ug/L		05/13/13 10:07	05/15/13 09:48	1
Iron	ND		100	8.5	ug/L		05/13/13 10:07	05/15/13 09:48	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

## Method: 200.7 - Metals (Custom List) (Continued)

**Lab Sample ID:** MB 180-71605/1-A

**Matrix:** Water

**Analysis Batch:** 71871

**Client Sample ID:** Method Blank

**Prep Type:** Total Recoverable

**Prep Batch:** 71605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		20	1.0	ug/L		05/13/13 10:07	05/15/13 09:48	1

**Lab Sample ID:** LCS 180-71605/2-A

**Matrix:** Water

**Analysis Batch:** 71871

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total Recoverable

**Prep Batch:** 71605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aluminum	2000	2030		ug/L		102	85 - 115
Iron	1000	1010		ug/L		101	85 - 115
Zinc	500	505		ug/L		101	85 - 115

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID:** MB 180-72980/1-A

**Client Sample ID:** Method Blank

**Matrix:** Water

**Analysis Batch:** 72989

**Prep Type:** Total/NA

**Prep Batch:** 72980

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.0	1.5	mg/L		05/25/13 11:46	05/25/13 11:46	1

**Lab Sample ID:** LCS 180-72980/2-A

**Client Sample ID:** Lab Control Sample

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 72989

**Prep Batch:** 72980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
HEM (Oil and Grease)	40.0	32.2		mg/L		81	78 - 114

**Lab Sample ID:** LCSD 180-72980/3-A

**Client Sample ID:** Lab Control Sample Dup

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 72989

**Prep Batch:** 72980

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	RPD	Limit
HEM (Oil and Grease)	40.0	32.1		mg/L		80	78 - 114	0	18

## Method: SM 4500 H+ B - pH

**Lab Sample ID:** LCS 180-72075/1

**Client Sample ID:** Lab Control Sample

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 72075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
pH	7.00	6.950		SU		99	99 - 101

**Lab Sample ID:** 180-21082-3 DU

**Client Sample ID:** EFFLUENT

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 72075

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	Limit
pH	7.66	HF	7.780		SU			2	2

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-21082-1

## GC/MS VOA

### Analysis Batch: 72379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21082-1	MW2	Total/NA	Water	8260B	
180-21082-1 - DL	MW2	Total/NA	Water	8260B	
180-21082-2	MW14	Total/NA	Water	8260B	
180-21082-3	EFFLUENT	Total/NA	Water	8260B	
180-21082-4	T/B	Total/NA	Water	8260B	
LCS 180-72379/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-72379/3	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 71605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21082-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-71605/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-71605/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 71871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21082-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-71605/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-71605/1-A	Method Blank	Total Recoverable	Water	200.7	

## General Chemistry

### Analysis Batch: 72075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21082-3	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
180-21082-3 DU	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-72075/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 72980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21082-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-72980/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-72980/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-72980/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 72989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-21082-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-72980/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-72980/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-72980/1-A	Method Blank	Total/NA	Water	1664A	

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

**TestAmerica Pittsburgh**  
301 Alpha Drive RIDC Park  
Pittsburgh, PA 15238  
Phone (412) 963-7058 Fax (412) 963-2468

**Chain of Custody Record**
**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

Sample ID: **180-21082**  
Phone: **(724) 369-0700**

Lab PM: **Dunlap, David A.**  
E-Mail: **dave.dunlap@testamericainc.com**

COC No: **180-9201-31.1**  
Page: **Page 1 of 1**

<b>Client Information</b>	
Client Contact:	Patty Lundin
Company:	Keywell LLC
Address:	300 Falconer Road
City:	Frewsburg
State, Zip:	NY, 14738
Phone:	
Email:	plundin@keywell.com
Project Name:	Keywell, Frewsburg
Site:	

Due Date Requested:	
TAT Requested (days):	
PO#:	
Purchase Order not required	
WO#:	
Project #:	
18006934	
SSDN#:	

Analysis Requested	
Field Filtered Sample (Yes or No):	
Perform LIMS/MSD (Yes or No):	
8260B_LL - TCL 3.2 - Low Level	
SIM4500_H+ - pH	
200.7 - ICP Metals (Al,Fe,Zn)	
1664A - HEM (Oil and Grease)	

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=oxygen, B=air)	Preservation Code	A	N	D	S	Total Number of containers	Special Instructions/Note:
MW2	5/8/13	7:00	G	W	NN3					3	
MW4	5/8/13	8:30	G	W	NN3					3	
EFFLUENT	5/8/13	10:30	G	W	NN3	1	1	2		6	
TB										2	



180-21082 Chain of Custody

Possible Hazard Identification	
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable
<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B
<input type="checkbox"/> Unknown	<input type="checkbox"/> Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client     Disposal By Lab     Archive For \_\_\_\_\_ Months

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
<b>Huck Becker</b>	<b>5/8/13</b>	<b>2:00 pm</b>	<b>1</b>
Deliverable Requested: I, II, III, IV, Other (specify)			

Relinquished by:	Date/time:	Received by:	Date/time:
<b>Huck Becker</b>			
Relinquished by:	Date/time:	Received by:	Date/time:

Custody Seals Intact:	Custody Seal No.:
Δ Yes	Δ No
Cooler Temperature(s) °C and Other Remarks:	

## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-21082-1

**Login Number: 21082**

**List Source: TestAmerica Pittsburgh**

**List Number: 1**

**Creator: Kovitch, Christina M**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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	
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.	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").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-22376-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

7/11/2013 3:08:22 PM

David Dunlap, Laboratory Technical Director

dave.dunlap@testamericainc.com

### LINKS

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results through

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The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

### Job ID: 180-22376-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-22376-1

#### Receipt

The samples were received on 6/20/2013 8:45 AM; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.9° C.

#### GC/MS VOA

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-22376-1) and MW14 (180-22376-2). Elevated reporting limits (RLs) are provided.

#### Metals

Method 200.7 Rev 4.4: The serial dilution performed for the following sample was above the control limits for zinc: EFFLUENT (180-22376-3).

#### General Chemistry

No analytical or quality issues were noted.

## Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

#### Metals

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.
B	Compound was found in the blank and sample.

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

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## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13 *
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-13 *
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13 *
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-22376-1	MW2	Water	06/19/13 07:00	06/20/13 08:45
180-22376-2	MW14	Water	06/19/13 08:00	06/20/13 08:45
180-22376-3	EFFLUENT	Water	06/19/13 09:30	06/20/13 08:45
180-22376-4	T/B	Water	06/19/13 00:00	06/20/13 08:45

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## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664A	HEM and SGT-HEM	1664A	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

### Client Sample ID: MW2

Date Collected: 06/19/13 07:00  
Date Received: 06/20/13 08:45

Lab Sample ID: 180-22376-1  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	76066	06/27/13 23:20	JER	TAL PIT
		Instrument ID: HP5								
Total/NA	Analysis	8260B		500	5 mL	5 mL	76179	06/28/13 22:46	JER	TAL PIT
		Instrument ID: HP5								

### Client Sample ID: MW14

Date Collected: 06/19/13 08:00  
Date Received: 06/20/13 08:45

Lab Sample ID: 180-22376-2  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	5 mL	5 mL	76179	06/28/13 19:34	JER	TAL PIT
		Instrument ID: HP5								

### Client Sample ID: EFFLUENT

Date Collected: 06/19/13 09:30  
Date Received: 06/20/13 08:45

Lab Sample ID: 180-22376-3  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	76179	06/28/13 19:59	JER	TAL PIT
		Instrument ID: HP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	75868	06/26/13 10:34	CEH	TAL PIT
Total Recoverable	Analysis	200.7		1			76073	06/27/13 12:16	RJG	TAL PIT
		Instrument ID: T								
Total/NA	Analysis	SM 4500 H+ B		1		50 mL	75528	06/22/13 18:15	CMR	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	1664A		1			76399	07/01/13 10:54	JWM	TAL PIT
Total/NA	Prep	1664A			880 mL	1000 mL	76288	07/01/13 10:54	JWM	TAL PIT

### Client Sample ID: T/B

Date Collected: 06/19/13 00:00  
Date Received: 06/20/13 08:45

Lab Sample ID: 180-22376-4  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	76066	06/28/13 00:33	JER	TAL PIT
		Instrument ID: HP5								

#### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CEH = Caitlyn Haluck

JWM = Jeremiah McLaughlin

Batch Type: Analysis

CMR = Carl Reagle

JER = Jessica Ryan

JWM = Jeremiah McLaughlin

RJG = Rob Good

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# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

**Client Sample ID: MW2**

Date Collected: 06/19/13 07:00

Date Received: 06/20/13 08:45

**Lab Sample ID: 180-22376-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			06/28/13 22:46	500
Benzene	ND		500	53	ug/L			06/28/13 22:46	500
Bromoform	ND		500	96	ug/L			06/28/13 22:46	500
Bromomethane	ND		500	160	ug/L			06/28/13 22:46	500
2-Butanone	ND		2500	270	ug/L			06/28/13 22:46	500
Carbon disulfide	ND		500	110	ug/L			06/28/13 22:46	500
Carbon tetrachloride	ND		500	68	ug/L			06/28/13 22:46	500
Chlorobenzene	ND		500	68	ug/L			06/28/13 22:46	500
Chlorodibromomethane	ND		500	68	ug/L			06/28/13 22:46	500
Chloroethane	ND		500	110	ug/L			06/28/13 22:46	500
Chloroform	ND		500	85	ug/L			06/28/13 22:46	500
Chloromethane	ND		500	140	ug/L			06/28/13 22:46	500
<b>cis-1,2-Dichloroethene</b>	<b>350000</b>	<b>E</b>	500	120	ug/L			06/28/13 22:46	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			06/28/13 22:46	500
Dichlorobromomethane	ND		500	65	ug/L			06/28/13 22:46	500
1,1-Dichloroethane	ND		500	58	ug/L			06/28/13 22:46	500
1,2-Dichloroethane	ND		500	110	ug/L			06/28/13 22:46	500
<b>1,1-Dichloroethene</b>	<b>1500</b>		500	150	ug/L			06/28/13 22:46	500
1,2-Dichloropropane	ND		500	47	ug/L			06/28/13 22:46	500
Ethylbenzene	ND		500	110	ug/L			06/28/13 22:46	500
2-Hexanone	ND		2500	80	ug/L			06/28/13 22:46	500
<b>Methylene Chloride</b>	<b>89</b>	<b>J</b>	500	63	ug/L			06/28/13 22:46	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			06/28/13 22:46	500
Styrene	ND		500	48	ug/L			06/28/13 22:46	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			06/28/13 22:46	500
Tetrachloroethene	ND		500	74	ug/L			06/28/13 22:46	500
Toluene	ND		500	75	ug/L			06/28/13 22:46	500
<b>trans-1,2-Dichloroethene</b>	<b>1100</b>		500	85	ug/L			06/28/13 22:46	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			06/28/13 22:46	500
1,1,1-Trichloroethane	ND		500	140	ug/L			06/28/13 22:46	500
1,1,2-Trichloroethane	ND		500	100	ug/L			06/28/13 22:46	500
<b>Trichloroethene</b>	<b>170</b>	<b>J</b>	500	72	ug/L			06/28/13 22:46	500
<b>Vinyl chloride</b>	<b>91000</b>	<b>E</b>	500	110	ug/L			06/28/13 22:46	500
Xylenes, Total	ND		1500	240	ug/L			06/28/13 22:46	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	90			70 - 118				06/28/13 22:46	500
Dibromofluoromethane (Surr)	115			70 - 128				06/28/13 22:46	500
1,2-Dichloroethane-d4 (Surr)	131			64 - 135				06/28/13 22:46	500
Toluene-d8 (Surr)	104			71 - 118				06/28/13 22:46	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			06/27/13 23:20	5000
Benzene	ND		5000	530	ug/L			06/27/13 23:20	5000
Bromoform	ND		5000	960	ug/L			06/27/13 23:20	5000
Bromomethane	ND		5000	1600	ug/L			06/27/13 23:20	5000
2-Butanone	ND		25000	2700	ug/L			06/27/13 23:20	5000
Carbon disulfide	ND		5000	1100	ug/L			06/27/13 23:20	5000
Carbon tetrachloride	ND		5000	680	ug/L			06/27/13 23:20	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

**Client Sample ID: MW2**

**Date Collected: 06/19/13 07:00**

**Date Received: 06/20/13 08:45**

**Lab Sample ID: 180-22376-1**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds by GC/MS (Low Level) - DL (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5000	680	ug/L			06/27/13 23:20	5000
Chlorodibromomethane	ND		5000	680	ug/L			06/27/13 23:20	5000
Chloroethane	ND		5000	1100	ug/L			06/27/13 23:20	5000
Chloroform	ND		5000	850	ug/L			06/27/13 23:20	5000
Chloromethane	ND		5000	1400	ug/L			06/27/13 23:20	5000
<b>cis-1,2-Dichloroethene</b>	<b>61000</b>		5000	1200	ug/L			06/27/13 23:20	5000
cis-1,3-Dichloropropene	ND		5000	930	ug/L			06/27/13 23:20	5000
Dichlorobromomethane	ND		5000	650	ug/L			06/27/13 23:20	5000
1,1-Dichloroethane	ND		5000	580	ug/L			06/27/13 23:20	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			06/27/13 23:20	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			06/27/13 23:20	5000
1,2-Dichloropropane	ND		5000	470	ug/L			06/27/13 23:20	5000
Ethylbenzene	ND		5000	1100	ug/L			06/27/13 23:20	5000
2-Hexanone	ND		25000	800	ug/L			06/27/13 23:20	5000
<b>Methylene Chloride</b>	<b>1600</b>	<b>J B</b>	5000	630	ug/L			06/27/13 23:20	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			06/27/13 23:20	5000
Styrene	ND		5000	480	ug/L			06/27/13 23:20	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			06/27/13 23:20	5000
Tetrachloroethene	ND		5000	740	ug/L			06/27/13 23:20	5000
Toluene	ND		5000	750	ug/L			06/27/13 23:20	5000
trans-1,2-Dichloroethene	ND		5000	850	ug/L			06/27/13 23:20	5000
trans-1,3-Dichloropropene	ND		5000	740	ug/L			06/27/13 23:20	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			06/27/13 23:20	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			06/27/13 23:20	5000
Trichloroethene	ND		5000	720	ug/L			06/27/13 23:20	5000
<b>Vinyl chloride</b>	<b>13000</b>		5000	1100	ug/L			06/27/13 23:20	5000
Xylenes, Total	ND		15000	2400	ug/L			06/27/13 23:20	5000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101			70 - 118				06/27/13 23:20	5000
Dibromofluoromethane (Surr)	118			70 - 128				06/27/13 23:20	5000
1,2-Dichloroethane-d4 (Surr)	123			64 - 135				06/27/13 23:20	5000
Toluene-d8 (Surr)	98			71 - 118				06/27/13 23:20	5000

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

**Client Sample ID: MW14**

Date Collected: 06/19/13 08:00

Date Received: 06/20/13 08:45

**Lab Sample ID: 180-22376-2**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			06/28/13 19:34	500
Benzene	ND		500	53	ug/L			06/28/13 19:34	500
Bromoform	ND		500	96	ug/L			06/28/13 19:34	500
Bromomethane	ND		500	160	ug/L			06/28/13 19:34	500
2-Butanone	ND		2500	270	ug/L			06/28/13 19:34	500
Carbon disulfide	ND		500	110	ug/L			06/28/13 19:34	500
Carbon tetrachloride	ND		500	68	ug/L			06/28/13 19:34	500
Chlorobenzene	ND		500	68	ug/L			06/28/13 19:34	500
Chlorodibromomethane	ND		500	68	ug/L			06/28/13 19:34	500
Chloroethane	ND		500	110	ug/L			06/28/13 19:34	500
Chloroform	ND		500	85	ug/L			06/28/13 19:34	500
Chloromethane	ND		500	140	ug/L			06/28/13 19:34	500
<b>cis-1,2-Dichloroethene</b>	<b>2300</b>		500	120	ug/L			06/28/13 19:34	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			06/28/13 19:34	500
Dichlorobromomethane	ND		500	65	ug/L			06/28/13 19:34	500
1,1-Dichloroethane	ND		500	58	ug/L			06/28/13 19:34	500
1,2-Dichloroethane	ND		500	110	ug/L			06/28/13 19:34	500
1,1-Dichloroethene	ND		500	150	ug/L			06/28/13 19:34	500
1,2-Dichloropropane	ND		500	47	ug/L			06/28/13 19:34	500
Ethylbenzene	ND		500	110	ug/L			06/28/13 19:34	500
2-Hexanone	ND		2500	80	ug/L			06/28/13 19:34	500
Methylene Chloride	ND		500	63	ug/L			06/28/13 19:34	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			06/28/13 19:34	500
Styrene	ND		500	48	ug/L			06/28/13 19:34	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			06/28/13 19:34	500
Tetrachloroethene	ND		500	74	ug/L			06/28/13 19:34	500
Toluene	ND		500	75	ug/L			06/28/13 19:34	500
trans-1,2-Dichloroethene	ND		500	85	ug/L			06/28/13 19:34	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			06/28/13 19:34	500
1,1,1-Trichloroethane	ND		500	140	ug/L			06/28/13 19:34	500
1,1,2-Trichloroethane	ND		500	100	ug/L			06/28/13 19:34	500
<b>Trichloroethene</b>	<b>13000</b>		500	72	ug/L			06/28/13 19:34	500
Vinyl chloride	ND		500	110	ug/L			06/28/13 19:34	500
Xylenes, Total	ND		1500	240	ug/L			06/28/13 19:34	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 118			500
Dibromofluoromethane (Surr)	114		70 - 128			500
1,2-Dichloroethane-d4 (Surr)	126		64 - 135			500
Toluene-d8 (Surr)	109		71 - 118			500

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

**Client Sample ID: EFFLUENT****Lab Sample ID: 180-22376-3**

Matrix: Water

Date Collected: 06/19/13 09:30

Date Received: 06/20/13 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			06/28/13 19:59	1
Benzene	ND		1.0	0.11	ug/L			06/28/13 19:59	1
Bromoform	ND		1.0	0.19	ug/L			06/28/13 19:59	1
Bromomethane	ND		1.0	0.31	ug/L			06/28/13 19:59	1
2-Butanone	ND		5.0	0.55	ug/L			06/28/13 19:59	1
Carbon disulfide	ND		1.0	0.21	ug/L			06/28/13 19:59	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			06/28/13 19:59	1
Chlorobenzene	ND		1.0	0.14	ug/L			06/28/13 19:59	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			06/28/13 19:59	1
Chloroethane	ND		1.0	0.21	ug/L			06/28/13 19:59	1
Chloroform	ND		1.0	0.17	ug/L			06/28/13 19:59	1
Chloromethane	ND		1.0	0.28	ug/L			06/28/13 19:59	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/13 19:59	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			06/28/13 19:59	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			06/28/13 19:59	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			06/28/13 19:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/28/13 19:59	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			06/28/13 19:59	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			06/28/13 19:59	1
Ethylbenzene	ND		1.0	0.23	ug/L			06/28/13 19:59	1
2-Hexanone	ND		5.0	0.16	ug/L			06/28/13 19:59	1
Methylene Chloride	ND		1.0	0.13	ug/L			06/28/13 19:59	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			06/28/13 19:59	1
Styrene	ND		1.0	0.097	ug/L			06/28/13 19:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			06/28/13 19:59	1
Tetrachloroethene	ND		1.0	0.15	ug/L			06/28/13 19:59	1
Toluene	ND		1.0	0.15	ug/L			06/28/13 19:59	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			06/28/13 19:59	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			06/28/13 19:59	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			06/28/13 19:59	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			06/28/13 19:59	1
Trichloroethene	ND		1.0	0.14	ug/L			06/28/13 19:59	1
Vinyl chloride	ND		1.0	0.23	ug/L			06/28/13 19:59	1
Xylenes, Total	ND		3.0	0.49	ug/L			06/28/13 19:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	96		70 - 118					06/28/13 19:59	1
Dibromofluoromethane (Surr)	108		70 - 128					06/28/13 19:59	1
1,2-Dichloroethane-d4 (Surr)	126		64 - 135					06/28/13 19:59	1
Toluene-d8 (Surr)	106		71 - 118					06/28/13 19:59	1

**Method: 200.7 - Metals (Custom List) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	40	J	200	16	ug/L		06/26/13 10:34	06/27/13 12:16	1
Iron	280		100	8.5	ug/L		06/26/13 10:34	06/27/13 12:16	1
Zinc	82	B	20	1.0	ug/L		06/26/13 10:34	06/27/13 12:16	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.7	1.7	mg/L		07/01/13 10:54	07/01/13 10:54	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

**Client Sample ID: EFFLUENT**  
**Date Collected: 06/19/13 09:30**  
**Date Received: 06/20/13 08:45**

**Lab Sample ID: 180-22376-3**  
**Matrix: Water**

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.97	HF	0.100	0.100	SU			06/22/13 18:15	1

1

2

3

4

5

6

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9

10

11

12

13

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

**Client Sample ID: T/B**

Date Collected: 06/19/13 00:00

Date Received: 06/20/13 08:45

**Lab Sample ID: 180-22376-4**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			06/28/13 00:33	1
Benzene	ND		1.0	0.11	ug/L			06/28/13 00:33	1
Bromoform	ND		1.0	0.19	ug/L			06/28/13 00:33	1
Bromomethane	ND		1.0	0.31	ug/L			06/28/13 00:33	1
2-Butanone	ND		5.0	0.55	ug/L			06/28/13 00:33	1
Carbon disulfide	ND		1.0	0.21	ug/L			06/28/13 00:33	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			06/28/13 00:33	1
Chlorobenzene	ND		1.0	0.14	ug/L			06/28/13 00:33	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			06/28/13 00:33	1
Chloroethane	ND		1.0	0.21	ug/L			06/28/13 00:33	1
Chloroform	ND		1.0	0.17	ug/L			06/28/13 00:33	1
Chloromethane	ND		1.0	0.28	ug/L			06/28/13 00:33	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/13 00:33	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			06/28/13 00:33	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			06/28/13 00:33	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			06/28/13 00:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/28/13 00:33	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			06/28/13 00:33	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			06/28/13 00:33	1
Ethylbenzene	ND		1.0	0.23	ug/L			06/28/13 00:33	1
2-Hexanone	ND		5.0	0.16	ug/L			06/28/13 00:33	1
<b>Methylene Chloride</b>	<b>1.3</b>	<b>B</b>	1.0	0.13	ug/L			06/28/13 00:33	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			06/28/13 00:33	1
Styrene	ND		1.0	0.097	ug/L			06/28/13 00:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			06/28/13 00:33	1
Tetrachloroethene	ND		1.0	0.15	ug/L			06/28/13 00:33	1
Toluene	ND		1.0	0.15	ug/L			06/28/13 00:33	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			06/28/13 00:33	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			06/28/13 00:33	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			06/28/13 00:33	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			06/28/13 00:33	1
<b>Trichloroethene</b>	<b>0.29</b>	<b>J</b>	1.0	0.14	ug/L			06/28/13 00:33	1
Vinyl chloride	ND		1.0	0.23	ug/L			06/28/13 00:33	1
Xylenes, Total	ND		3.0	0.49	ug/L			06/28/13 00:33	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	105			70 - 118				06/28/13 00:33	1
Dibromofluoromethane (Surr)	109			70 - 128				06/28/13 00:33	1
1,2-Dichloroethane-d4 (Surr)	123			64 - 135				06/28/13 00:33	1
Toluene-d8 (Surr)	104			71 - 118				06/28/13 00:33	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

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

**Lab Sample ID:** MB 180-76066/4

**Matrix:** Water

**Analysis Batch:** 76066

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Acetone	ND				5.0	2.5	ug/L			06/27/13 19:54	1
Benzene	ND				1.0	0.11	ug/L			06/27/13 19:54	1
Bromoform	ND				1.0	0.19	ug/L			06/27/13 19:54	1
Bromomethane	ND				1.0	0.31	ug/L			06/27/13 19:54	1
2-Butanone	ND				5.0	0.55	ug/L			06/27/13 19:54	1
Carbon disulfide	ND				1.0	0.21	ug/L			06/27/13 19:54	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			06/27/13 19:54	1
Chlorobenzene	ND				1.0	0.14	ug/L			06/27/13 19:54	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			06/27/13 19:54	1
Chloroethane	ND				1.0	0.21	ug/L			06/27/13 19:54	1
Chloroform	ND				1.0	0.17	ug/L			06/27/13 19:54	1
Chloromethane	ND				1.0	0.28	ug/L			06/27/13 19:54	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			06/27/13 19:54	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			06/27/13 19:54	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			06/27/13 19:54	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			06/27/13 19:54	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			06/27/13 19:54	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			06/27/13 19:54	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			06/27/13 19:54	1
Ethylbenzene	ND				1.0	0.23	ug/L			06/27/13 19:54	1
2-Hexanone	ND				5.0	0.16	ug/L			06/27/13 19:54	1
Methylene Chloride	0.229	J			1.0	0.13	ug/L			06/27/13 19:54	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			06/27/13 19:54	1
Styrene	ND				1.0	0.097	ug/L			06/27/13 19:54	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			06/27/13 19:54	1
Tetrachloroethene	ND				1.0	0.15	ug/L			06/27/13 19:54	1
Toluene	ND				1.0	0.15	ug/L			06/27/13 19:54	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			06/27/13 19:54	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			06/27/13 19:54	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			06/27/13 19:54	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			06/27/13 19:54	1
Trichloroethene	ND				1.0	0.14	ug/L			06/27/13 19:54	1
Vinyl chloride	ND				1.0	0.23	ug/L			06/27/13 19:54	1
Xylenes, Total	ND				3.0	0.49	ug/L			06/27/13 19:54	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	103		70 - 118				06/27/13 19:54	1
Dibromofluoromethane (Surr)	115		70 - 128				06/27/13 19:54	1
1,2-Dichloroethane-d4 (Surr)	126		64 - 135				06/27/13 19:54	1
Toluene-d8 (Surr)	98		71 - 118				06/27/13 19:54	1

**Lab Sample ID:** LCS 180-76066/7

**Matrix:** Water

**Analysis Batch:** 76066

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

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	Dil Fac
	Added	Result	Qualifier							
Acetone	10.0	10.7				ug/L		107	22 - 150	
Benzene	10.0	10.2				ug/L		102	80 - 120	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

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

Lab Sample ID: LCS 180-76066/7

Matrix: Water

Analysis Batch: 76066

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Bromoform	10.0	11.0		ug/L		110	46 - 150
Bromomethane	10.0	12.7		ug/L		127	33 - 150
2-Butanone	10.0	11.8		ug/L		118	39 - 138
Carbon disulfide	10.0	9.04		ug/L		90	54 - 132
Carbon tetrachloride	10.0	10.3		ug/L		103	55 - 150
Chlorobenzene	10.0	9.49		ug/L		95	80 - 120
Chlorodibromomethane	10.0	10.2		ug/L		102	60 - 140
Chloroethane	10.0	9.98		ug/L		100	36 - 142
Chloroform	10.0	10.1		ug/L		101	72 - 127
Chloromethane	10.0	7.22		ug/L		72	50 - 139
cis-1,2-Dichloroethene	10.0	9.40		ug/L		94	70 - 120
cis-1,3-Dichloropropene	10.0	9.14		ug/L		91	66 - 120
Dichlorobromomethane	10.0	11.0		ug/L		110	66 - 130
1,1-Dichloroethane	10.0	9.51		ug/L		95	73 - 126
1,2-Dichloroethane	10.0	11.4		ug/L		114	68 - 132
1,1-Dichloroethene	10.0	8.33		ug/L		83	65 - 136
1,2-Dichloropropane	10.0	10.5		ug/L		105	76 - 124
Ethylbenzene	10.0	9.15		ug/L		92	72 - 126
2-Hexanone	10.0	9.38		ug/L		94	25 - 132
Methylene Chloride	10.0	8.34		ug/L		83	63 - 129
4-Methyl-2-pentanone	10.0	10.2		ug/L		102	45 - 145
Styrene	10.0	9.62		ug/L		96	71 - 127
1,1,2,2-Tetrachloroethane	10.0	10.9		ug/L		109	62 - 125
Tetrachloroethene	10.0	8.84		ug/L		88	70 - 135
Toluene	10.0	9.41		ug/L		94	80 - 123
trans-1,2-Dichloroethene	10.0	9.39		ug/L		94	73 - 126
trans-1,3-Dichloropropene	10.0	9.50		ug/L		95	65 - 125
1,1,1-Trichloroethane	10.0	9.33		ug/L		93	63 - 133
1,1,2-Trichloroethane	10.0	10.5		ug/L		105	77 - 127
Trichloroethene	10.0	8.37		ug/L		84	73 - 120
Vinyl chloride	10.0	8.27		ug/L		83	53 - 138
Xylenes, Total	30.0	28.4		ug/L		95	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		70 - 118
Dibromofluoromethane (Surr)	112		70 - 128
1,2-Dichloroethane-d4 (Surr)	119		64 - 135
Toluene-d8 (Surr)	100		71 - 118

Lab Sample ID: MB 180-76179/4

Matrix: Water

Analysis Batch: 76179

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			06/28/13 14:42	1
Benzene	ND		1.0	0.11	ug/L			06/28/13 14:42	1
Bromoform	ND		1.0	0.19	ug/L			06/28/13 14:42	1
Bromomethane	ND		1.0	0.31	ug/L			06/28/13 14:42	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

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

**Lab Sample ID: MB 180-76179/4**

**Matrix: Water**

**Analysis Batch: 76179**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
2-Butanone	ND				5.0	0.55	ug/L			06/28/13 14:42	1
Carbon disulfide	ND				1.0	0.21	ug/L			06/28/13 14:42	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			06/28/13 14:42	1
Chlorobenzene	ND				1.0	0.14	ug/L			06/28/13 14:42	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			06/28/13 14:42	1
Chloroethane	ND				1.0	0.21	ug/L			06/28/13 14:42	1
Chloroform	ND				1.0	0.17	ug/L			06/28/13 14:42	1
Chloromethane	ND				1.0	0.28	ug/L			06/28/13 14:42	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			06/28/13 14:42	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			06/28/13 14:42	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			06/28/13 14:42	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			06/28/13 14:42	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			06/28/13 14:42	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			06/28/13 14:42	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			06/28/13 14:42	1
Ethylbenzene	ND				1.0	0.23	ug/L			06/28/13 14:42	1
2-Hexanone	ND				5.0	0.16	ug/L			06/28/13 14:42	1
Methylene Chloride	ND				1.0	0.13	ug/L			06/28/13 14:42	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			06/28/13 14:42	1
Styrene	ND				1.0	0.097	ug/L			06/28/13 14:42	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			06/28/13 14:42	1
Tetrachloroethene	ND				1.0	0.15	ug/L			06/28/13 14:42	1
Toluene	ND				1.0	0.15	ug/L			06/28/13 14:42	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			06/28/13 14:42	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			06/28/13 14:42	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			06/28/13 14:42	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			06/28/13 14:42	1
Trichloroethene	ND				1.0	0.14	ug/L			06/28/13 14:42	1
Vinyl chloride	ND				1.0	0.23	ug/L			06/28/13 14:42	1
Xylenes, Total	ND				3.0	0.49	ug/L			06/28/13 14:42	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	105				70 - 118			1
Dibromofluoromethane (Surr)	113				70 - 128			1
1,2-Dichloroethane-d4 (Surr)	133				64 - 135			1
Toluene-d8 (Surr)	114				71 - 118			1

**Lab Sample ID: LCS 180-76179/7**

**Matrix: Water**

**Analysis Batch: 76179**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Acetone	10.0	11.9		ug/L		119	22 - 150
Benzene	10.0	10.8		ug/L		108	80 - 120
Bromoform	10.0	12.8		ug/L		128	46 - 150
Bromomethane	10.0	12.0		ug/L		120	33 - 150
2-Butanone	10.0	12.3		ug/L		123	39 - 138
Carbon disulfide	10.0	9.92		ug/L		99	54 - 132

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

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

Lab Sample ID: LCS 180-76179/7

Matrix: Water

Analysis Batch: 76179

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

Analyte	Spike	LCS			%Rec.	Limits
	Added	Result	Qualifier	Unit		
Carbon tetrachloride	10.0	12.0		ug/L	120	55 - 150
Chlorobenzene	10.0	10.6		ug/L	106	80 - 120
Chlorodibromomethane	10.0	12.5		ug/L	125	60 - 140
Chloroethane	10.0	10.8		ug/L	108	36 - 142
Chloroform	10.0	11.0		ug/L	110	72 - 127
Chloromethane	10.0	7.56		ug/L	76	50 - 139
cis-1,2-Dichloroethene	10.0	10.1		ug/L	101	70 - 120
cis-1,3-Dichloropropene	10.0	10.6		ug/L	106	66 - 120
Dichlorobromomethane	10.0	12.5		ug/L	125	66 - 130
1,1-Dichloroethane	10.0	10.1		ug/L	101	73 - 126
1,2-Dichloroethane	10.0	12.0		ug/L	120	68 - 132
1,1-Dichloroethene	10.0	9.45		ug/L	95	65 - 136
1,2-Dichloropropane	10.0	11.2		ug/L	112	76 - 124
Ethylbenzene	10.0	10.5		ug/L	105	72 - 126
2-Hexanone	10.0	10.4		ug/L	104	25 - 132
Methylene Chloride	10.0	8.45		ug/L	84	63 - 129
4-Methyl-2-pentanone	10.0	11.8		ug/L	118	45 - 145
Styrene	10.0	11.2		ug/L	112	71 - 127
1,1,2,2-Tetrachloroethane	10.0	12.5		ug/L	125	62 - 125
Tetrachloroethene	10.0	9.79		ug/L	98	70 - 135
Toluene	10.0	10.6		ug/L	106	80 - 123
trans-1,2-Dichloroethene	10.0	9.66		ug/L	97	73 - 126
trans-1,3-Dichloropropene	10.0	11.3		ug/L	113	65 - 125
1,1,1-Trichloroethane	10.0	9.79		ug/L	98	63 - 133
1,1,2-Trichloroethane	10.0	11.8		ug/L	118	77 - 127
Trichloroethene	10.0	9.42		ug/L	94	73 - 120
Vinyl chloride	10.0	7.91		ug/L	79	53 - 138
Xylenes, Total	30.0	31.9		ug/L	106	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		70 - 118
Dibromofluoromethane (Surr)	104		70 - 128
1,2-Dichloroethane-d4 (Surr)	129		64 - 135
Toluene-d8 (Surr)	99		71 - 118

## Method: 200.7 - Metals (Custom List)

Lab Sample ID: MB 180-75868/1-A

Matrix: Water

Analysis Batch: 76073

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 75868

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		200	16	ug/L		06/26/13 10:34	06/27/13 11:45	1
Iron	ND		100	8.5	ug/L		06/26/13 10:34	06/27/13 11:45	1
Zinc	3.10	J	20	1.0	ug/L		06/26/13 10:34	06/27/13 11:45	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

## Method: 200.7 - Metals (Custom List) (Continued)

**Lab Sample ID: LCS 180-75868/2-A**

**Matrix: Water**

**Analysis Batch: 76073**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 75868**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Aluminum	2000	2080		ug/L		104	85 - 115
Iron	1000	945		ug/L		94	85 - 115
Zinc	500	541		ug/L		108	85 - 115

**Lab Sample ID: 180-22376-3 MS**

**Matrix: Water**

**Analysis Batch: 76073**

**Client Sample ID: EFFLUENT**

**Prep Type: Total Recoverable**

**Prep Batch: 75868**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Aluminum	40	J	2000	2130		ug/L		105	70 - 130
Iron	280		1000	1210		ug/L		93	70 - 130
Zinc	82	B	500	615		ug/L		107	70 - 130

**Lab Sample ID: 180-22376-3 MSD**

**Matrix: Water**

**Analysis Batch: 76073**

**Client Sample ID: EFFLUENT**

**Prep Type: Total Recoverable**

**Prep Batch: 75868**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	
Aluminum	40	J	2000	2170		ug/L		107	70 - 130	2
Iron	280		1000	1270		ug/L		99	70 - 130	4
Zinc	82	B	500	628		ug/L		109	70 - 130	2

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 180-76288/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 76399**

**Prep Batch: 76288**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
HEM (Oil and Grease)	1.80	J	5.0	1.5	mg/L		07/01/13 10:54	07/01/13 10:54	1

**Lab Sample ID: LCS 180-76288/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 76399**

**Prep Batch: 76288**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
HEM (Oil and Grease)	40.0	34.1		mg/L		85	78 - 114

**Lab Sample ID: LCSD 180-76288/3-A**

**Client Sample ID: Lab Control Sample Dup**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 76399**

**Prep Batch: 76288**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
HEM (Oil and Grease)	40.0	34.9		mg/L		87	78 - 114

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 180-75528/1

Matrix: Water

Analysis Batch: 75528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec.
pH	7.00	6.990		SU		100	99 - 101

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

## GC/MS VOA

### Analysis Batch: 76066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22376-1 - DL	MW2	Total/NA	Water	8260B	
180-22376-4	T/B	Total/NA	Water	8260B	
LCS 180-76066/7	Lab Control Sample	Total/NA	Water	8260B	
MB 180-76066/4	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 76179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22376-1	MW2	Total/NA	Water	8260B	
180-22376-2	MW14	Total/NA	Water	8260B	
180-22376-3	EFFLUENT	Total/NA	Water	8260B	
LCS 180-76179/7	Lab Control Sample	Total/NA	Water	8260B	
MB 180-76179/4	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 75868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22376-3	EFFLUENT	Total Recoverable	Water	200.7	
180-22376-3 MS	EFFLUENT	Total Recoverable	Water	200.7	
180-22376-3 MSD	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-75868/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-75868/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 76073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22376-3	EFFLUENT	Total Recoverable	Water	200.7	75868
180-22376-3 MS	EFFLUENT	Total Recoverable	Water	200.7	75868
180-22376-3 MSD	EFFLUENT	Total Recoverable	Water	200.7	75868
LCS 180-75868/2-A	Lab Control Sample	Total Recoverable	Water	200.7	75868
MB 180-75868/1-A	Method Blank	Total Recoverable	Water	200.7	75868

## General Chemistry

### Analysis Batch: 75528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22376-3	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-75528/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 76288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22376-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-76288/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-76288/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-76288/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 76399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-22376-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-76288/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-76288/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-22376-1

## General Chemistry (Continued)

### Analysis Batch: 76399 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-76288/1-A	Method Blank	Total/NA	Water	1664A	76288

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TestAmerica Pittsburgh

Pittsburgh, PA 15238  
(112) 963-7058 Fax (112) 963-3468

Chain of Custody



testAmerica

## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-22376-1

**Login Number:** 22376

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Watson, Debbie

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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	
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.	False	pH
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").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-23154-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

7/31/2013 6:39:20 PM

David Dunlap, Laboratory Technical Director

dave.dunlap@testamericainc.com

### LINKS

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The  
Expert

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[www.testamericainc.com](http://www.testamericainc.com)

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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

### Job ID: 180-23154-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-23154-1

#### Receipt

The samples were received on 7/16/2013 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8° C.

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): TRIP BLANK (180-23154-4). Notation was made to the COC.

#### GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for batch 78339 recovered below the control limits for methylene chloide and trans-1,2-dichloroethene. As the routine control compound recoveries were within the control limits, the results were reported.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-23154-1) and MW14 (180-23154-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

## Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### Metals

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.
B	Compound was found in the blank and sample.

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

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## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14 *
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-13 *
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13 *

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-23154-1	MW2	Water	07/15/13 07:00	07/16/13 09:45
180-23154-2	MW14	Water	07/15/13 08:00	07/16/13 09:45
180-23154-3	EFFLUENT	Water	07/15/13 09:00	07/16/13 09:45
180-23154-4	TRIP BLANK	Water	07/15/13 00:00	07/16/13 09:45

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TestAmerica Pittsburgh

## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664A	HEM and SGT-HEM	1664A	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

### Client Sample ID: MW2

Date Collected: 07/15/13 07:00  
Date Received: 07/16/13 09:45

Lab Sample ID: 180-23154-1  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	78339	07/24/13 22:36	JER	TAL PIT
		Instrument ID: HP5								
Total/NA	Analysis	8260B		500	5 mL	5 mL	78455	07/25/13 20:59	DLF	TAL PIT
		Instrument ID: HP5								

### Client Sample ID: MW14

Date Collected: 07/15/13 08:00  
Date Received: 07/16/13 09:45

Lab Sample ID: 180-23154-2  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	78339	07/24/13 23:24	JER	TAL PIT
		Instrument ID: HP5								

### Client Sample ID: EFFLUENT

Date Collected: 07/15/13 09:00  
Date Received: 07/16/13 09:45

Lab Sample ID: 180-23154-3  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	78339	07/24/13 23:48	JER	TAL PIT
		Instrument ID: HP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	77739	07/18/13 10:30	CEH	TAL PIT
Total Recoverable	Analysis	200.7		1			78095	07/22/13 15:40	RJR	TAL PIT
		Instrument ID: Q								
Total/NA	Analysis	SM 4500 H+ B		1		50 mL	77865	07/19/13 13:31	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	1664A			900 mL	1000 mL	78750	07/29/13 11:15	JWM	TAL PIT
Total/NA	Analysis	1664A		1			78805	07/29/13 11:15	JWM	TAL PIT
		Instrument ID: NOEQUIP								

### Client Sample ID: TRIP BLANK

Date Collected: 07/15/13 00:00  
Date Received: 07/16/13 09:45

Lab Sample ID: 180-23154-4  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	78339	07/24/13 23:00	JER	TAL PIT
		Instrument ID: HP5								

#### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CEH = Caitlyn Haluck

JWM = Jeremiah McLaughlin

Batch Type: Analysis

DLF = Donald Ferguson

HRA = Hannah Anderson

JER = Jessica Ryan

JWM = Jeremiah McLaughlin

RJR = Ron Rosenbaum

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# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

**Client Sample ID: MW2**

Date Collected: 07/15/13 07:00

Date Received: 07/16/13 09:45

**Lab Sample ID: 180-23154-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			07/25/13 20:59	500
Benzene	ND		500	53	ug/L			07/25/13 20:59	500
Bromoform	ND		500	96	ug/L			07/25/13 20:59	500
Bromomethane	ND		500	160	ug/L			07/25/13 20:59	500
2-Butanone	ND		2500	270	ug/L			07/25/13 20:59	500
Carbon disulfide	ND		500	110	ug/L			07/25/13 20:59	500
Carbon tetrachloride	ND		500	68	ug/L			07/25/13 20:59	500
Chlorobenzene	ND		500	68	ug/L			07/25/13 20:59	500
Chlorodibromomethane	ND		500	68	ug/L			07/25/13 20:59	500
Chloroethane	ND		500	110	ug/L			07/25/13 20:59	500
Chloroform	ND		500	85	ug/L			07/25/13 20:59	500
Chloromethane	ND		500	140	ug/L			07/25/13 20:59	500
<b>cis-1,2-Dichloroethene</b>	<b>100000</b>	<b>E</b>	500	120	ug/L			07/25/13 20:59	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			07/25/13 20:59	500
Dichlorobromomethane	ND		500	65	ug/L			07/25/13 20:59	500
1,1-Dichloroethane	ND		500	58	ug/L			07/25/13 20:59	500
1,2-Dichloroethane	ND		500	110	ug/L			07/25/13 20:59	500
1,1-Dichloroethene	ND		500	150	ug/L			07/25/13 20:59	500
1,2-Dichloropropane	ND		500	47	ug/L			07/25/13 20:59	500
Ethylbenzene	ND		500	110	ug/L			07/25/13 20:59	500
2-Hexanone	ND		2500	80	ug/L			07/25/13 20:59	500
Methylene Chloride	ND		500	63	ug/L			07/25/13 20:59	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			07/25/13 20:59	500
Styrene	ND		500	48	ug/L			07/25/13 20:59	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			07/25/13 20:59	500
Tetrachloroethene	ND		500	74	ug/L			07/25/13 20:59	500
Toluene	ND		500	75	ug/L			07/25/13 20:59	500
trans-1,2-Dichloroethene	ND		500	85	ug/L			07/25/13 20:59	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			07/25/13 20:59	500
1,1,1-Trichloroethane	ND		500	140	ug/L			07/25/13 20:59	500
1,1,2-Trichloroethane	ND		500	100	ug/L			07/25/13 20:59	500
<b>Trichloroethene</b>	<b>310</b>	<b>J</b>	500	72	ug/L			07/25/13 20:59	500
<b>Vinyl chloride</b>	<b>16000</b>		500	110	ug/L			07/25/13 20:59	500
Xylenes, Total	ND		1500	240	ug/L			07/25/13 20:59	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	90			70 - 118				07/25/13 20:59	500
Dibromofluoromethane (Surr)	120			70 - 128				07/25/13 20:59	500
1,2-Dichloroethane-d4 (Surr)	122			64 - 135				07/25/13 20:59	500
Toluene-d8 (Surr)	99			71 - 118				07/25/13 20:59	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			07/24/13 22:36	5000
Benzene	ND		5000	530	ug/L			07/24/13 22:36	5000
Bromoform	ND		5000	960	ug/L			07/24/13 22:36	5000
Bromomethane	ND		5000	1600	ug/L			07/24/13 22:36	5000
2-Butanone	ND		25000	2700	ug/L			07/24/13 22:36	5000
Carbon disulfide	ND		5000	1100	ug/L			07/24/13 22:36	5000
Carbon tetrachloride	ND		5000	680	ug/L			07/24/13 22:36	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

**Client Sample ID: MW2**

**Date Collected: 07/15/13 07:00**

**Date Received: 07/16/13 09:45**

**Lab Sample ID: 180-23154-1**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds by GC/MS (Low Level) - DL (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5000	680	ug/L			07/24/13 22:36	5000
Chlorodibromomethane	ND		5000	680	ug/L			07/24/13 22:36	5000
Chloroethane	ND		5000	1100	ug/L			07/24/13 22:36	5000
Chloroform	ND		5000	850	ug/L			07/24/13 22:36	5000
Chloromethane	ND		5000	1400	ug/L			07/24/13 22:36	5000
<b>cis-1,2-Dichloroethene</b>	<b>98000</b>		5000	1200	ug/L			07/24/13 22:36	5000
cis-1,3-Dichloropropene	ND		5000	930	ug/L			07/24/13 22:36	5000
Dichlorobromomethane	ND		5000	650	ug/L			07/24/13 22:36	5000
1,1-Dichloroethane	ND		5000	580	ug/L			07/24/13 22:36	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			07/24/13 22:36	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			07/24/13 22:36	5000
1,2-Dichloropropane	ND		5000	470	ug/L			07/24/13 22:36	5000
Ethylbenzene	ND		5000	1100	ug/L			07/24/13 22:36	5000
2-Hexanone	ND		25000	800	ug/L			07/24/13 22:36	5000
Methylene Chloride	ND *		5000	630	ug/L			07/24/13 22:36	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			07/24/13 22:36	5000
Styrene	ND		5000	480	ug/L			07/24/13 22:36	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			07/24/13 22:36	5000
Tetrachloroethene	ND		5000	740	ug/L			07/24/13 22:36	5000
Toluene	ND		5000	750	ug/L			07/24/13 22:36	5000
trans-1,2-Dichloroethene	ND *		5000	850	ug/L			07/24/13 22:36	5000
trans-1,3-Dichloropropene	ND		5000	740	ug/L			07/24/13 22:36	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			07/24/13 22:36	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			07/24/13 22:36	5000
Trichloroethene	ND		5000	720	ug/L			07/24/13 22:36	5000
<b>Vinyl chloride</b>	<b>15000</b>		5000	1100	ug/L			07/24/13 22:36	5000
Xylenes, Total	ND		15000	2400	ug/L			07/24/13 22:36	5000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	112			70 - 118				07/24/13 22:36	5000
Dibromofluoromethane (Surr)	112			70 - 128				07/24/13 22:36	5000
1,2-Dichloroethane-d4 (Surr)	110			64 - 135				07/24/13 22:36	5000
Toluene-d8 (Surr)	113			71 - 118				07/24/13 22:36	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

**Client Sample ID: MW14**

**Lab Sample ID: 180-23154-2**

Date Collected: 07/15/13 08:00

Matrix: Water

Date Received: 07/16/13 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			07/24/13 23:24	1000
Benzene	ND		1000	110	ug/L			07/24/13 23:24	1000
Bromoform	ND		1000	190	ug/L			07/24/13 23:24	1000
Bromomethane	ND		1000	310	ug/L			07/24/13 23:24	1000
2-Butanone	ND		5000	550	ug/L			07/24/13 23:24	1000
Carbon disulfide	ND		1000	210	ug/L			07/24/13 23:24	1000
Carbon tetrachloride	ND		1000	140	ug/L			07/24/13 23:24	1000
Chlorobenzene	ND		1000	140	ug/L			07/24/13 23:24	1000
Chlorodibromomethane	ND		1000	140	ug/L			07/24/13 23:24	1000
Chloroethane	ND		1000	210	ug/L			07/24/13 23:24	1000
Chloroform	ND		1000	170	ug/L			07/24/13 23:24	1000
Chloromethane	ND		1000	280	ug/L			07/24/13 23:24	1000
<b>cis-1,2-Dichloroethene</b>	<b>2000</b>		1000	240	ug/L			07/24/13 23:24	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			07/24/13 23:24	1000
Dichlorobromomethane	ND		1000	130	ug/L			07/24/13 23:24	1000
1,1-Dichloroethane	ND		1000	120	ug/L			07/24/13 23:24	1000
1,2-Dichloroethane	ND		1000	210	ug/L			07/24/13 23:24	1000
1,1-Dichloroethene	ND		1000	300	ug/L			07/24/13 23:24	1000
1,2-Dichloropropane	ND		1000	95	ug/L			07/24/13 23:24	1000
Ethylbenzene	ND		1000	230	ug/L			07/24/13 23:24	1000
2-Hexanone	ND		5000	160	ug/L			07/24/13 23:24	1000
Methylene Chloride	ND *		1000	130	ug/L			07/24/13 23:24	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			07/24/13 23:24	1000
Styrene	ND		1000	97	ug/L			07/24/13 23:24	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			07/24/13 23:24	1000
Tetrachloroethene	ND		1000	150	ug/L			07/24/13 23:24	1000
Toluene	ND		1000	150	ug/L			07/24/13 23:24	1000
trans-1,2-Dichloroethene	ND *		1000	170	ug/L			07/24/13 23:24	1000
trans-1,3-Dichloropropene	ND		1000	150	ug/L			07/24/13 23:24	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			07/24/13 23:24	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			07/24/13 23:24	1000
<b>Trichloroethene</b>	<b>11000</b>		1000	140	ug/L			07/24/13 23:24	1000
Vinyl chloride	ND		1000	230	ug/L			07/24/13 23:24	1000
Xylenes, Total	ND		3000	490	ug/L			07/24/13 23:24	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	104		70 - 118				07/24/13 23:24	1000	
Dibromofluoromethane (Surr)	113		70 - 128				07/24/13 23:24	1000	
1,2-Dichloroethane-d4 (Surr)	108		64 - 135				07/24/13 23:24	1000	
Toluene-d8 (Surr)	106		71 - 118				07/24/13 23:24	1000	

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

## Client Sample ID: EFFLUENT

Date Collected: 07/15/13 09:00

Date Received: 07/16/13 09:45

## Lab Sample ID: 180-23154-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			07/24/13 23:48	1
Benzene	ND		1.0	0.11	ug/L			07/24/13 23:48	1
Bromoform	ND		1.0	0.19	ug/L			07/24/13 23:48	1
Bromomethane	ND		1.0	0.31	ug/L			07/24/13 23:48	1
2-Butanone	ND		5.0	0.55	ug/L			07/24/13 23:48	1
Carbon disulfide	ND		1.0	0.21	ug/L			07/24/13 23:48	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			07/24/13 23:48	1
Chlorobenzene	ND		1.0	0.14	ug/L			07/24/13 23:48	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			07/24/13 23:48	1
Chloroethane	ND		1.0	0.21	ug/L			07/24/13 23:48	1
Chloroform	ND		1.0	0.17	ug/L			07/24/13 23:48	1
Chloromethane	ND		1.0	0.28	ug/L			07/24/13 23:48	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/24/13 23:48	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			07/24/13 23:48	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			07/24/13 23:48	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			07/24/13 23:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/24/13 23:48	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			07/24/13 23:48	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			07/24/13 23:48	1
Ethylbenzene	ND		1.0	0.23	ug/L			07/24/13 23:48	1
2-Hexanone	ND		5.0	0.16	ug/L			07/24/13 23:48	1
Methylene Chloride	ND *		1.0	0.13	ug/L			07/24/13 23:48	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			07/24/13 23:48	1
Styrene	ND		1.0	0.097	ug/L			07/24/13 23:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			07/24/13 23:48	1
Tetrachloroethene	ND		1.0	0.15	ug/L			07/24/13 23:48	1
Toluene	ND		1.0	0.15	ug/L			07/24/13 23:48	1
trans-1,2-Dichloroethene	ND *		1.0	0.17	ug/L			07/24/13 23:48	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			07/24/13 23:48	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			07/24/13 23:48	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			07/24/13 23:48	1
Trichloroethene	ND		1.0	0.14	ug/L			07/24/13 23:48	1
Vinyl chloride	ND		1.0	0.23	ug/L			07/24/13 23:48	1
Xylenes, Total	ND		3.0	0.49	ug/L			07/24/13 23:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101		70 - 118					07/24/13 23:48	1
Dibromofluoromethane (Surr)	114		70 - 128					07/24/13 23:48	1
1,2-Dichloroethane-d4 (Surr)	109		64 - 135					07/24/13 23:48	1
Toluene-d8 (Surr)	106		71 - 118					07/24/13 23:48	1

### Method: 200.7 - Metals (Custom List) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	86	J	200	16	ug/L		07/18/13 10:30	07/22/13 15:40	1
Iron	410		100	8.5	ug/L		07/18/13 10:30	07/22/13 15:40	1
Zinc	98	B	20	1.0	ug/L		07/18/13 10:30	07/22/13 15:40	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.6	1.7	mg/L		07/29/13 11:15	07/29/13 11:15	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

**Client Sample ID: EFFLUENT**  
**Date Collected: 07/15/13 09:00**  
**Date Received: 07/16/13 09:45**

**Lab Sample ID: 180-23154-3**  
**Matrix: Water**

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.85	HF	0.100	0.100	SU			07/19/13 13:31	1

1

2

3

4

5

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7

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9

10

11

12

13

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 180-23154-4**

**Matrix: Water**

Date Collected: 07/15/13 00:00

Date Received: 07/16/13 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			07/24/13 23:00	1
Benzene	ND		1.0	0.11	ug/L			07/24/13 23:00	1
Bromoform	ND		1.0	0.19	ug/L			07/24/13 23:00	1
Bromomethane	ND		1.0	0.31	ug/L			07/24/13 23:00	1
2-Butanone	ND		5.0	0.55	ug/L			07/24/13 23:00	1
Carbon disulfide	ND		1.0	0.21	ug/L			07/24/13 23:00	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			07/24/13 23:00	1
Chlorobenzene	ND		1.0	0.14	ug/L			07/24/13 23:00	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			07/24/13 23:00	1
Chloroethane	ND		1.0	0.21	ug/L			07/24/13 23:00	1
Chloroform	ND		1.0	0.17	ug/L			07/24/13 23:00	1
Chloromethane	ND		1.0	0.28	ug/L			07/24/13 23:00	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/24/13 23:00	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			07/24/13 23:00	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			07/24/13 23:00	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			07/24/13 23:00	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/24/13 23:00	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			07/24/13 23:00	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			07/24/13 23:00	1
Ethylbenzene	ND		1.0	0.23	ug/L			07/24/13 23:00	1
2-Hexanone	ND		5.0	0.16	ug/L			07/24/13 23:00	1
Methylene Chloride	ND *		1.0	0.13	ug/L			07/24/13 23:00	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			07/24/13 23:00	1
Styrene	ND		1.0	0.097	ug/L			07/24/13 23:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			07/24/13 23:00	1
Tetrachloroethene	ND		1.0	0.15	ug/L			07/24/13 23:00	1
Toluene	ND		1.0	0.15	ug/L			07/24/13 23:00	1
trans-1,2-Dichloroethene	ND *		1.0	0.17	ug/L			07/24/13 23:00	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			07/24/13 23:00	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			07/24/13 23:00	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			07/24/13 23:00	1
Trichloroethene	ND		1.0	0.14	ug/L			07/24/13 23:00	1
Vinyl chloride	ND		1.0	0.23	ug/L			07/24/13 23:00	1
Xylenes, Total	ND		3.0	0.49	ug/L			07/24/13 23:00	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	102		70 - 118				07/24/13 23:00	1	
Dibromofluoromethane (Surr)	116		70 - 128				07/24/13 23:00	1	
1,2-Dichloroethane-d4 (Surr)	109		64 - 135				07/24/13 23:00	1	
Toluene-d8 (Surr)	109		71 - 118				07/24/13 23:00	1	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

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

**Lab Sample ID:** MB 180-78339/3

**Matrix:** Water

**Analysis Batch:** 78339

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier				
Acetone	ND		5.0	2.5	ug/L	1
Benzene	ND		1.0	0.11	ug/L	1
Bromoform	ND		1.0	0.19	ug/L	1
Bromomethane	ND		1.0	0.31	ug/L	1
2-Butanone	ND		5.0	0.55	ug/L	1
Carbon disulfide	ND		1.0	0.21	ug/L	1
Carbon tetrachloride	ND		1.0	0.14	ug/L	1
Chlorobenzene	ND		1.0	0.14	ug/L	1
Chlorodibromomethane	ND		1.0	0.14	ug/L	1
Chloroethane	ND		1.0	0.21	ug/L	1
Chloroform	ND		1.0	0.17	ug/L	1
Chloromethane	ND		1.0	0.28	ug/L	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L	1
Dichlorobromomethane	ND		1.0	0.13	ug/L	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L	1
Ethylbenzene	ND		1.0	0.23	ug/L	1
2-Hexanone	ND		5.0	0.16	ug/L	1
Methylene Chloride	ND		1.0	0.13	ug/L	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L	1
Styrene	ND		1.0	0.097	ug/L	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L	1
Tetrachloroethene	ND		1.0	0.15	ug/L	1
Toluene	ND		1.0	0.15	ug/L	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L	1
Trichloroethene	ND		1.0	0.14	ug/L	1
Vinyl chloride	ND		1.0	0.23	ug/L	1
Xylenes, Total	ND		3.0	0.49	ug/L	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	99		70 - 118		07/24/13 15:48	1
Dibromofluoromethane (Surr)	110		70 - 128		07/24/13 15:48	1
1,2-Dichloroethane-d4 (Surr)	114		64 - 135		07/24/13 15:48	1
Toluene-d8 (Surr)	101		71 - 118		07/24/13 15:48	1

**Lab Sample ID:** LCS 180-78339/7

**Matrix:** Water

**Analysis Batch:** 78339

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Acetone	10.0	8.70		ug/L	87	22 - 150	
Benzene	10.0	8.02		ug/L	80	80 - 120	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

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

Lab Sample ID: LCS 180-78339/7

Matrix: Water

Analysis Batch: 78339

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Bromoform	10.0	8.54		ug/L		85	46 - 150
Bromomethane	10.0	6.35		ug/L		63	33 - 150
2-Butanone	10.0	8.70		ug/L		87	39 - 138
Carbon disulfide	10.0	6.35		ug/L		64	54 - 132
Carbon tetrachloride	10.0	7.38		ug/L		74	55 - 150
Chlorobenzene	10.0	8.65		ug/L		87	80 - 120
Chlorodibromomethane	10.0	8.91		ug/L		89	60 - 140
Chloroethane	10.0	6.76		ug/L		68	36 - 142
Chloroform	10.0	8.19		ug/L		82	72 - 127
Chloromethane	10.0	6.28		ug/L		63	50 - 139
cis-1,2-Dichloroethene	10.0	7.60		ug/L		76	70 - 120
cis-1,3-Dichloropropene	10.0	7.94		ug/L		79	66 - 120
Dichlorobromomethane	10.0	8.54		ug/L		85	66 - 130
1,1-Dichloroethane	10.0	7.52		ug/L		75	73 - 126
1,2-Dichloroethane	10.0	8.62		ug/L		86	68 - 132
1,1-Dichloroethene	10.0	7.41		ug/L		74	65 - 136
1,2-Dichloropropane	10.0	8.21		ug/L		82	76 - 124
Ethylbenzene	10.0	7.80		ug/L		78	72 - 126
2-Hexanone	10.0	8.85		ug/L		89	25 - 132
Methylene Chloride	10.0	4.97 *		ug/L		50	63 - 129
4-Methyl-2-pentanone	10.0	9.37		ug/L		94	45 - 145
Styrene	10.0	8.33		ug/L		83	71 - 127
1,1,2,2-Tetrachloroethane	10.0	9.57		ug/L		96	62 - 125
Tetrachloroethene	10.0	7.98		ug/L		80	70 - 135
Toluene	10.0	8.39		ug/L		84	80 - 123
trans-1,2-Dichloroethene	10.0	7.25 *		ug/L		72	73 - 126
trans-1,3-Dichloropropene	10.0	8.44		ug/L		84	65 - 125
1,1,1-Trichloroethane	10.0	7.74		ug/L		77	63 - 133
1,1,2-Trichloroethane	10.0	9.31		ug/L		93	77 - 127
Trichloroethene	10.0	7.66		ug/L		77	73 - 120
Vinyl chloride	10.0	5.93		ug/L		59	53 - 138
Xylenes, Total	20.0	16.6		ug/L		83	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	92		70 - 118
Dibromofluoromethane (Surr)	89		70 - 128
1,2-Dichloroethane-d4 (Surr)	94		64 - 135
Toluene-d8 (Surr)	90		71 - 118

Lab Sample ID: MB 180-78455/3

Matrix: Water

Analysis Batch: 78455

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			07/25/13 11:48	1
Benzene	ND		1.0	0.11	ug/L			07/25/13 11:48	1
Bromoform	ND		1.0	0.19	ug/L			07/25/13 11:48	1
Bromomethane	ND		1.0	0.31	ug/L			07/25/13 11:48	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

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

**Lab Sample ID: MB 180-78455/3**

**Matrix: Water**

**Analysis Batch: 78455**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
2-Butanone	ND				5.0	0.55	ug/L			07/25/13 11:48	1
Carbon disulfide	ND				1.0	0.21	ug/L			07/25/13 11:48	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			07/25/13 11:48	1
Chlorobenzene	ND				1.0	0.14	ug/L			07/25/13 11:48	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			07/25/13 11:48	1
Chloroethane	ND				1.0	0.21	ug/L			07/25/13 11:48	1
Chloroform	ND				1.0	0.17	ug/L			07/25/13 11:48	1
Chloromethane	ND				1.0	0.28	ug/L			07/25/13 11:48	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			07/25/13 11:48	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			07/25/13 11:48	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			07/25/13 11:48	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			07/25/13 11:48	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			07/25/13 11:48	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			07/25/13 11:48	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			07/25/13 11:48	1
Ethylbenzene	ND				1.0	0.23	ug/L			07/25/13 11:48	1
2-Hexanone	ND				5.0	0.16	ug/L			07/25/13 11:48	1
Methylene Chloride	ND				1.0	0.13	ug/L			07/25/13 11:48	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			07/25/13 11:48	1
Styrene	ND				1.0	0.097	ug/L			07/25/13 11:48	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			07/25/13 11:48	1
Tetrachloroethene	ND				1.0	0.15	ug/L			07/25/13 11:48	1
Toluene	ND				1.0	0.15	ug/L			07/25/13 11:48	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			07/25/13 11:48	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			07/25/13 11:48	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			07/25/13 11:48	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			07/25/13 11:48	1
Trichloroethene	ND				1.0	0.14	ug/L			07/25/13 11:48	1
Vinyl chloride	ND				1.0	0.23	ug/L			07/25/13 11:48	1
Xylenes, Total	ND				3.0	0.49	ug/L			07/25/13 11:48	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	91		91		70 - 118			1
Dibromofluoromethane (Surr)	113		113		70 - 128			1
1,2-Dichloroethane-d4 (Surr)	111		111		64 - 135			1
Toluene-d8 (Surr)	96		96		71 - 118			1

**Lab Sample ID: LCS 180-78455/6**

**Matrix: Water**

**Analysis Batch: 78455**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Acetone	10.0	8.14		ug/L		81	22 - 150
Benzene	10.0	10.3		ug/L		103	80 - 120
Bromoform	10.0	12.8		ug/L		128	46 - 150
Bromomethane	10.0	8.25		ug/L		82	33 - 150
2-Butanone	10.0	9.24		ug/L		92	39 - 138
Carbon disulfide	10.0	8.97		ug/L		90	54 - 132

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

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

**Lab Sample ID: LCS 180-78455/6**

**Matrix: Water**

**Analysis Batch: 78455**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Carbon tetrachloride	10.0	10.3		ug/L		103	55 - 150
Chlorobenzene	10.0	11.6		ug/L		116	80 - 120
Chlorodibromomethane	10.0	12.3		ug/L		123	60 - 140
Chloroethane	10.0	8.29		ug/L		83	36 - 142
Chloroform	10.0	10.1		ug/L		101	72 - 127
Chloromethane	10.0	7.12		ug/L		71	50 - 139
cis-1,2-Dichloroethene	10.0	9.45		ug/L		94	70 - 120
cis-1,3-Dichloropropene	10.0	9.72		ug/L		97	66 - 120
Dichlorobromomethane	10.0	11.2		ug/L		112	66 - 130
1,1-Dichloroethane	10.0	10.0		ug/L		100	73 - 126
1,2-Dichloroethane	10.0	11.3		ug/L		113	68 - 132
1,1-Dichloroethene	10.0	9.52		ug/L		95	65 - 136
1,2-Dichloropropane	10.0	9.85		ug/L		98	76 - 124
Ethylbenzene	10.0	10.9		ug/L		109	72 - 126
2-Hexanone	10.0	9.49		ug/L		95	25 - 132
Methylene Chloride	10.0	6.64		ug/L		66	63 - 129
4-Methyl-2-pentanone	10.0	10.2		ug/L		102	45 - 145
Styrene	10.0	11.3		ug/L		113	71 - 127
1,1,2,2-Tetrachloroethane	10.0	12.1		ug/L		121	62 - 125
Tetrachloroethene	10.0	10.4		ug/L		104	70 - 135
Toluene	10.0	11.2		ug/L		112	80 - 123
trans-1,2-Dichloroethene	10.0	9.77		ug/L		98	73 - 126
trans-1,3-Dichloropropene	10.0	10.9		ug/L		109	65 - 125
1,1,1-Trichloroethane	10.0	9.97		ug/L		100	63 - 133
1,1,2-Trichloroethane	10.0	11.6		ug/L		116	77 - 127
Trichloroethene	10.0	10.1		ug/L		101	73 - 120
Vinyl chloride	10.0	7.39		ug/L		74	53 - 138
Xylenes, Total	20.0	21.9		ug/L		109	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		70 - 118
Dibromofluoromethane (Surr)	102		70 - 128
1,2-Dichloroethane-d4 (Surr)	99		64 - 135
Toluene-d8 (Surr)	101		71 - 118

## Method: 200.7 - Metals (Custom List)

**Lab Sample ID: MB 180-77739/1-A**

**Matrix: Water**

**Analysis Batch: 78095**

**Client Sample ID: Method Blank**

**Prep Type: Total Recoverable**

**Prep Batch: 77739**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		200	16	ug/L		07/18/13 10:30	07/22/13 15:25	1
Iron	ND		100	8.5	ug/L		07/18/13 10:30	07/22/13 15:25	1
Zinc	8.94	J	20	1.0	ug/L		07/18/13 10:30	07/22/13 15:25	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

## Method: 200.7 - Metals (Custom List) (Continued)

**Lab Sample ID: LCS 180-77739/2-A**

**Matrix: Water**

**Analysis Batch: 78095**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 77739**

Analyte	Spike Added	LCS	LCS				%Rec.	
		Result	Qualifier	Unit	D	%Rec	Limits	
Aluminum	2000	1970		ug/L		98	85 - 115	
Iron	1000	1000		ug/L		100	85 - 115	
Zinc	500	509		ug/L		102	85 - 115	

**Lab Sample ID: 180-23154-3 MS**

**Matrix: Water**

**Analysis Batch: 78095**

**Client Sample ID: EFFLUENT**

**Prep Type: Total Recoverable**

**Prep Batch: 77739**

Analyte	Sample	Sample	Spike	MS	MS				%Rec.	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Aluminum	86	J	2000	2090		ug/L		100	70 - 130	
Iron	410		1000	1410		ug/L		100	70 - 130	
Zinc	98	B	500	591		ug/L		99	70 - 130	

**Lab Sample ID: 180-23154-3 MSD**

**Matrix: Water**

**Analysis Batch: 78095**

**Client Sample ID: EFFLUENT**

**Prep Type: Total Recoverable**

**Prep Batch: 77739**

Analyte	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aluminum	86	J	2000	2100		ug/L		100	70 - 130	0	20
Iron	410		1000	1410		ug/L		100	70 - 130	0	20
Zinc	98	B	500	581		ug/L		97	70 - 130	2	20

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 180-78750/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 78805**

**Prep Batch: 78750**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
HEM (Oil and Grease)	1.60	J	5.0	1.5	mg/L		07/29/13 11:15	07/29/13 11:15	1

**Lab Sample ID: LCS 180-78750/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 78805**

**Prep Batch: 78750**

Analyte	Spike	LCS	LCS				%Rec.	
	Added	Result	Qualifier	Unit	D	%Rec	Limits	
HEM (Oil and Grease)	40.0	34.0		mg/L		85	78 - 114	

**Lab Sample ID: LCSD 180-78750/3-A**

**Client Sample ID: Lab Control Sample Dup**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 78805**

**Prep Batch: 78750**

Analyte	Spike	LCSD	LCSD				%Rec.		RPD
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
HEM (Oil and Grease)	40.0	35.3		mg/L		88	78 - 114	4	18

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 180-77865/1

Matrix: Water

Analysis Batch: 77865

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec. Limits
pH	7.00	7.010		SU		100	99 - 101

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

## GC/MS VOA

### Analysis Batch: 78339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23154-1 - DL	MW2	Total/NA	Water	8260B	
180-23154-2	MW14	Total/NA	Water	8260B	
180-23154-3	EFFLUENT	Total/NA	Water	8260B	
180-23154-4	TRIP BLANK	Total/NA	Water	8260B	
LCS 180-78339/7	Lab Control Sample	Total/NA	Water	8260B	
MB 180-78339/3	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 78455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23154-1	MW2	Total/NA	Water	8260B	
LCS 180-78455/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-78455/3	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 77739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23154-3	EFFLUENT	Total Recoverable	Water	200.7	
180-23154-3 MS	EFFLUENT	Total Recoverable	Water	200.7	
180-23154-3 MSD	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-77739/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-77739/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 78095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23154-3	EFFLUENT	Total Recoverable	Water	200.7	77739
180-23154-3 MS	EFFLUENT	Total Recoverable	Water	200.7	77739
180-23154-3 MSD	EFFLUENT	Total Recoverable	Water	200.7	77739
LCS 180-77739/2-A	Lab Control Sample	Total Recoverable	Water	200.7	77739
MB 180-77739/1-A	Method Blank	Total Recoverable	Water	200.7	77739

## General Chemistry

### Analysis Batch: 77865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23154-3	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-77865/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 78750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23154-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-78750/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-78750/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-78750/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 78805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23154-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-78750/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-78750/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

TestAmerica Pittsburgh

## QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-23154-1

### General Chemistry (Continued)

#### Analysis Batch: 78805 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-78750/1-A	Method Blank	Total/NA	Water	1664A	78750

1

2

3

4

5

6

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8

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10

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12

13

## Chain of Custody Record

TestAmerica Pittsburgh

301 Alpha Drive RIDC Park  
Pittsburgh, PA 15238  
Phone (412) 963-7058 Fax (412) 963-2468

## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-23154-1

**Login Number:** 23154

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Skowronek, Elyse N

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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	
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.	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").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-24103-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

8/27/2013 9:22:29 AM

David Dunlap, Laboratory Technical Director

dave.dunlap@testamericainc.com

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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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

### Job ID: 180-24103-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-24103-1

#### Receipt

The samples were received on 8/13/2013 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6° C.

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): TRIP BLANK (180-24103-4). Notation was made to the COC.

#### GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for batch 81089 recovered above the control limits for trans-1,3-dichloropropene. As the routine control compound recoveries were within the control limits, the results were reported.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-24103-1) and MW14 (180-24103-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

## Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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 exceeds the control limits
E	Result exceeded calibration range.

#### Metals

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.

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

### 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

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## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-13 *
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-24103-1	MW2	Water	08/12/13 07:00	08/13/13 08:50
180-24103-2	MW14	Water	08/12/13 08:00	08/13/13 08:50
180-24103-3	EFFLUENT	Water	08/12/13 10:30	08/13/13 08:50
180-24103-4	TRIP BLANK	Water	08/12/13 00:00	08/13/13 08:50

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TestAmerica Pittsburgh

## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664A	HEM and SGT-HEM	1664A	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

**Client Sample ID: MW2**

Date Collected: 08/12/13 07:00

Date Received: 08/13/13 08:50

**Lab Sample ID: 180-24103-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP6	DL	5000	5 mL	5 mL	81089	08/20/13 17:57	DLF	TAL PIT
Total/NA	Analysis	8260B Instrument ID: HP6		500	5 mL	5 mL	81221	08/21/13 20:21	DLF	TAL PIT

**Client Sample ID: MW14**

Date Collected: 08/12/13 08:00

Date Received: 08/13/13 08:50

**Lab Sample ID: 180-24103-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP6		1000	5 mL	5 mL	81089	08/20/13 18:45	DLF	TAL PIT

**Client Sample ID: EFFLUENT**

Date Collected: 08/12/13 10:30

Date Received: 08/13/13 08:50

**Lab Sample ID: 180-24103-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP6		1	5 mL	5 mL	81089	08/20/13 19:09	DLF	TAL PIT
Total Recoverable	Prep	200.7			50 mL	50 mL	80501	08/14/13 10:44	CEH	TAL PIT
Total Recoverable	Analysis	200.7 Instrument ID: Q		1			80807	08/16/13 10:02	RJR	TAL PIT
Total Recoverable	Analysis	200.7 Instrument ID: Q		1			80990	08/19/13 14:52	RJR	TAL PIT
Total/NA	Analysis	SM 4500 H+ B Instrument ID: NOEQUIP		1		50 mL	80476	08/14/13 09:26	HRA	TAL PIT
Total/NA	Prep	1664A			920 mL	1000 mL	81229	08/21/13 11:53	JWM	TAL PIT
Total/NA	Analysis	1664A Instrument ID: NOEQUIP		1			81367	08/21/13 11:53	JWM	TAL PIT

**Client Sample ID: TRIP BLANK**

Date Collected: 08/12/13 00:00

Date Received: 08/13/13 08:50

**Lab Sample ID: 180-24103-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP6		1	5 mL	5 mL	81089	08/20/13 18:21	DLF	TAL PIT

## Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CEH = Caitlyn Haluck

JWM = Jeremiah McLaughlin

Batch Type: Analysis

DLF = Donald Ferguson

HRA = Hannah Anderson

JWM = Jeremiah McLaughlin

RJR = Ron Rosenbaum

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# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

**Client Sample ID: MW2**

Date Collected: 08/12/13 07:00

Date Received: 08/13/13 08:50

**Lab Sample ID: 180-24103-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			08/21/13 20:21	500
Benzene	ND		500	53	ug/L			08/21/13 20:21	500
Bromoform	ND		500	96	ug/L			08/21/13 20:21	500
Bromomethane	ND		500	160	ug/L			08/21/13 20:21	500
2-Butanone	ND		2500	270	ug/L			08/21/13 20:21	500
Carbon disulfide	ND		500	110	ug/L			08/21/13 20:21	500
Carbon tetrachloride	ND		500	68	ug/L			08/21/13 20:21	500
Chlorobenzene	ND		500	68	ug/L			08/21/13 20:21	500
Chlorodibromomethane	ND		500	68	ug/L			08/21/13 20:21	500
Chloroethane	ND		500	110	ug/L			08/21/13 20:21	500
Chloroform	ND		500	85	ug/L			08/21/13 20:21	500
Chloromethane	ND		500	140	ug/L			08/21/13 20:21	500
<b>cis-1,2-Dichloroethene</b>	<b>150000</b>	<b>E</b>	500	120	ug/L			08/21/13 20:21	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			08/21/13 20:21	500
Dichlorobromomethane	ND		500	65	ug/L			08/21/13 20:21	500
1,1-Dichloroethane	ND		500	58	ug/L			08/21/13 20:21	500
1,2-Dichloroethane	ND		500	110	ug/L			08/21/13 20:21	500
<b>1,1-Dichloroethene</b>	<b>350</b>	<b>J</b>	500	150	ug/L			08/21/13 20:21	500
1,2-Dichloropropane	ND		500	47	ug/L			08/21/13 20:21	500
Ethylbenzene	ND		500	110	ug/L			08/21/13 20:21	500
2-Hexanone	ND		2500	80	ug/L			08/21/13 20:21	500
<b>Methylene Chloride</b>	<b>360</b>	<b>J B</b>	500	63	ug/L			08/21/13 20:21	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			08/21/13 20:21	500
Styrene	ND		500	48	ug/L			08/21/13 20:21	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			08/21/13 20:21	500
Tetrachloroethene	ND		500	74	ug/L			08/21/13 20:21	500
Toluene	ND		500	75	ug/L			08/21/13 20:21	500
<b>trans-1,2-Dichloroethene</b>	<b>270</b>	<b>J</b>	500	85	ug/L			08/21/13 20:21	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			08/21/13 20:21	500
1,1,1-Trichloroethane	ND		500	140	ug/L			08/21/13 20:21	500
1,1,2-Trichloroethane	ND		500	100	ug/L			08/21/13 20:21	500
<b>Trichloroethene</b>	<b>310</b>	<b>J</b>	500	72	ug/L			08/21/13 20:21	500
<b>Vinyl chloride</b>	<b>30000</b>	<b>E</b>	500	110	ug/L			08/21/13 20:21	500
Xylenes, Total	ND		1500	240	ug/L			08/21/13 20:21	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95		70 - 118					08/21/13 20:21	500
Dibromofluoromethane (Surr)	111		70 - 128					08/21/13 20:21	500
1,2-Dichloroethane-d4 (Surr)	122		64 - 135					08/21/13 20:21	500
Toluene-d8 (Surr)	93		71 - 118					08/21/13 20:21	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			08/20/13 17:57	5000
Benzene	ND		5000	530	ug/L			08/20/13 17:57	5000
Bromoform	ND		5000	960	ug/L			08/20/13 17:57	5000
Bromomethane	ND		5000	1600	ug/L			08/20/13 17:57	5000
2-Butanone	ND		25000	2700	ug/L			08/20/13 17:57	5000
Carbon disulfide	ND		5000	1100	ug/L			08/20/13 17:57	5000
Carbon tetrachloride	ND		5000	680	ug/L			08/20/13 17:57	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

**Client Sample ID: MW2**

**Date Collected: 08/12/13 07:00**

**Date Received: 08/13/13 08:50**

**Lab Sample ID: 180-24103-1**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds by GC/MS (Low Level) - DL (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5000	680	ug/L			08/20/13 17:57	5000
Chlorodibromomethane	ND		5000	680	ug/L			08/20/13 17:57	5000
Chloroethane	ND		5000	1100	ug/L			08/20/13 17:57	5000
Chloroform	ND		5000	850	ug/L			08/20/13 17:57	5000
Chloromethane	ND		5000	1400	ug/L			08/20/13 17:57	5000
<b>cis-1,2-Dichloroethene</b>	<b>180000</b>		5000	1200	ug/L			08/20/13 17:57	5000
cis-1,3-Dichloropropene	ND		5000	930	ug/L			08/20/13 17:57	5000
Dichlorobromomethane	ND		5000	650	ug/L			08/20/13 17:57	5000
1,1-Dichloroethane	ND		5000	580	ug/L			08/20/13 17:57	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			08/20/13 17:57	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			08/20/13 17:57	5000
1,2-Dichloropropane	ND		5000	470	ug/L			08/20/13 17:57	5000
Ethylbenzene	ND		5000	1100	ug/L			08/20/13 17:57	5000
2-Hexanone	ND		25000	800	ug/L			08/20/13 17:57	5000
<b>Methylene Chloride</b>	<b>3000</b>	<b>J B</b>	5000	630	ug/L			08/20/13 17:57	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			08/20/13 17:57	5000
Styrene	ND		5000	480	ug/L			08/20/13 17:57	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			08/20/13 17:57	5000
Tetrachloroethene	ND		5000	740	ug/L			08/20/13 17:57	5000
Toluene	ND		5000	750	ug/L			08/20/13 17:57	5000
trans-1,2-Dichloroethene	ND		5000	850	ug/L			08/20/13 17:57	5000
trans-1,3-Dichloropropene	ND *		5000	740	ug/L			08/20/13 17:57	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			08/20/13 17:57	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			08/20/13 17:57	5000
Trichloroethene	ND		5000	720	ug/L			08/20/13 17:57	5000
<b>Vinyl chloride</b>	<b>39000</b>		5000	1100	ug/L			08/20/13 17:57	5000
Xylenes, Total	ND		15000	2400	ug/L			08/20/13 17:57	5000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 118		08/20/13 17:57	5000
Dibromofluoromethane (Surr)	110		70 - 128		08/20/13 17:57	5000
1,2-Dichloroethane-d4 (Surr)	118		64 - 135		08/20/13 17:57	5000
Toluene-d8 (Surr)	102		71 - 118		08/20/13 17:57	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

**Client Sample ID: MW14**

**Lab Sample ID: 180-24103-2**

Date Collected: 08/12/13 08:00

Matrix: Water

Date Received: 08/13/13 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			08/20/13 18:45	1000
Benzene	ND		1000	110	ug/L			08/20/13 18:45	1000
Bromoform	ND		1000	190	ug/L			08/20/13 18:45	1000
Bromomethane	ND		1000	310	ug/L			08/20/13 18:45	1000
2-Butanone	ND		5000	550	ug/L			08/20/13 18:45	1000
Carbon disulfide	ND		1000	210	ug/L			08/20/13 18:45	1000
Carbon tetrachloride	ND		1000	140	ug/L			08/20/13 18:45	1000
Chlorobenzene	ND		1000	140	ug/L			08/20/13 18:45	1000
Chlorodibromomethane	ND		1000	140	ug/L			08/20/13 18:45	1000
Chloroethane	ND		1000	210	ug/L			08/20/13 18:45	1000
Chloroform	ND		1000	170	ug/L			08/20/13 18:45	1000
Chloromethane	ND		1000	280	ug/L			08/20/13 18:45	1000
<b>cis-1,2-Dichloroethene</b>	<b>3900</b>		1000	240	ug/L			08/20/13 18:45	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			08/20/13 18:45	1000
Dichlorobromomethane	ND		1000	130	ug/L			08/20/13 18:45	1000
1,1-Dichloroethane	ND		1000	120	ug/L			08/20/13 18:45	1000
1,2-Dichloroethane	ND		1000	210	ug/L			08/20/13 18:45	1000
1,1-Dichloroethene	ND		1000	300	ug/L			08/20/13 18:45	1000
1,2-Dichloropropane	ND		1000	95	ug/L			08/20/13 18:45	1000
Ethylbenzene	ND		1000	230	ug/L			08/20/13 18:45	1000
2-Hexanone	ND		5000	160	ug/L			08/20/13 18:45	1000
<b>Methylene Chloride</b>	<b>470 JB</b>		1000	130	ug/L			08/20/13 18:45	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			08/20/13 18:45	1000
Styrene	ND		1000	97	ug/L			08/20/13 18:45	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			08/20/13 18:45	1000
Tetrachloroethene	ND		1000	150	ug/L			08/20/13 18:45	1000
Toluene	ND		1000	150	ug/L			08/20/13 18:45	1000
trans-1,2-Dichloroethene	ND		1000	170	ug/L			08/20/13 18:45	1000
trans-1,3-Dichloropropene	ND *		1000	150	ug/L			08/20/13 18:45	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			08/20/13 18:45	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			08/20/13 18:45	1000
<b>Trichloroethene</b>	<b>9300</b>		1000	140	ug/L			08/20/13 18:45	1000
Vinyl chloride	ND		1000	230	ug/L			08/20/13 18:45	1000
Xylenes, Total	ND		3000	490	ug/L			08/20/13 18:45	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	104		70 - 118					08/20/13 18:45	1000
Dibromofluoromethane (Surr)	108		70 - 128					08/20/13 18:45	1000
1,2-Dichloroethane-d4 (Surr)	123		64 - 135					08/20/13 18:45	1000
Toluene-d8 (Surr)	98		71 - 118					08/20/13 18:45	1000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

## Client Sample ID: EFFLUENT

Date Collected: 08/12/13 10:30  
Date Received: 08/13/13 08:50

## Lab Sample ID: 180-24103-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		08/20/13 19:09		1
Benzene	ND		1.0	0.11	ug/L		08/20/13 19:09		1
Bromoform	ND		1.0	0.19	ug/L		08/20/13 19:09		1
Bromomethane	ND		1.0	0.31	ug/L		08/20/13 19:09		1
2-Butanone	ND		5.0	0.55	ug/L		08/20/13 19:09		1
Carbon disulfide	ND		1.0	0.21	ug/L		08/20/13 19:09		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		08/20/13 19:09		1
Chlorobenzene	ND		1.0	0.14	ug/L		08/20/13 19:09		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		08/20/13 19:09		1
Chloroethane	ND		1.0	0.21	ug/L		08/20/13 19:09		1
Chloroform	ND		1.0	0.17	ug/L		08/20/13 19:09		1
Chloromethane	ND		1.0	0.28	ug/L		08/20/13 19:09		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		08/20/13 19:09		1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L		08/20/13 19:09		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		08/20/13 19:09		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		08/20/13 19:09		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		08/20/13 19:09		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		08/20/13 19:09		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		08/20/13 19:09		1
Ethylbenzene	ND		1.0	0.23	ug/L		08/20/13 19:09		1
2-Hexanone	ND		5.0	0.16	ug/L		08/20/13 19:09		1
Methylene Chloride	ND		1.0	0.13	ug/L		08/20/13 19:09		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		08/20/13 19:09		1
Styrene	ND		1.0	0.097	ug/L		08/20/13 19:09		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		08/20/13 19:09		1
Tetrachloroethene	ND		1.0	0.15	ug/L		08/20/13 19:09		1
Toluene	ND		1.0	0.15	ug/L		08/20/13 19:09		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		08/20/13 19:09		1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L		08/20/13 19:09		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		08/20/13 19:09		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		08/20/13 19:09		1
Trichloroethene	ND		1.0	0.14	ug/L		08/20/13 19:09		1
Vinyl chloride	ND		1.0	0.23	ug/L		08/20/13 19:09		1
Xylenes, Total	ND		3.0	0.49	ug/L		08/20/13 19:09		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	102		70 - 118					08/20/13 19:09	1
Dibromofluoromethane (Surr)	110		70 - 128					08/20/13 19:09	1
1,2-Dichloroethane-d4 (Surr)	123		64 - 135					08/20/13 19:09	1
Toluene-d8 (Surr)	100		71 - 118					08/20/13 19:09	1

### Method: 200.7 - Metals (Custom List) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	16	ug/L		08/14/13 10:44	08/16/13 10:02	1
Iron	410		100	8.5	ug/L		08/14/13 10:44	08/19/13 14:52	1
Zinc	140		20	1.0	ug/L		08/14/13 10:44	08/16/13 10:02	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.4	1.6	mg/L		08/21/13 11:53	08/21/13 11:53	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

**Client Sample ID: EFFLUENT**  
**Date Collected: 08/12/13 10:30**  
**Date Received: 08/13/13 08:50**

**Lab Sample ID: 180-24103-3**  
**Matrix: Water**

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.54	HF	0.100	0.100	SU			08/14/13 09:26	1

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 180-24103-4**

**Matrix: Water**

Date Collected: 08/12/13 00:00

Date Received: 08/13/13 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			08/20/13 18:21	1
Benzene	ND		1.0	0.11	ug/L			08/20/13 18:21	1
Bromoform	ND		1.0	0.19	ug/L			08/20/13 18:21	1
Bromomethane	ND		1.0	0.31	ug/L			08/20/13 18:21	1
2-Butanone	ND		5.0	0.55	ug/L			08/20/13 18:21	1
Carbon disulfide	ND		1.0	0.21	ug/L			08/20/13 18:21	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			08/20/13 18:21	1
Chlorobenzene	ND		1.0	0.14	ug/L			08/20/13 18:21	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			08/20/13 18:21	1
Chloroethane	ND		1.0	0.21	ug/L			08/20/13 18:21	1
Chloroform	ND		1.0	0.17	ug/L			08/20/13 18:21	1
Chloromethane	ND		1.0	0.28	ug/L			08/20/13 18:21	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			08/20/13 18:21	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			08/20/13 18:21	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			08/20/13 18:21	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			08/20/13 18:21	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/20/13 18:21	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/20/13 18:21	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			08/20/13 18:21	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/20/13 18:21	1
2-Hexanone	ND		5.0	0.16	ug/L			08/20/13 18:21	1
<b>Methylene Chloride</b>	<b>0.36 JB</b>		1.0	0.13	ug/L			08/20/13 18:21	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			08/20/13 18:21	1
Styrene	ND		1.0	0.097	ug/L			08/20/13 18:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			08/20/13 18:21	1
Tetrachloroethene	ND		1.0	0.15	ug/L			08/20/13 18:21	1
Toluene	ND		1.0	0.15	ug/L			08/20/13 18:21	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			08/20/13 18:21	1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L			08/20/13 18:21	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			08/20/13 18:21	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			08/20/13 18:21	1
Trichloroethene	ND		1.0	0.14	ug/L			08/20/13 18:21	1
Vinyl chloride	ND		1.0	0.23	ug/L			08/20/13 18:21	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/20/13 18:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	100		70 - 118				08/20/13 18:21	1	
Dibromofluoromethane (Surr)	112		70 - 128				08/20/13 18:21	1	
1,2-Dichloroethane-d4 (Surr)	122		64 - 135				08/20/13 18:21	1	
Toluene-d8 (Surr)	98		71 - 118				08/20/13 18:21	1	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

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

**Lab Sample ID:** MB 180-81089/3

**Matrix:** Water

**Analysis Batch:** 81089

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Acetone	ND				5.0	2.5	ug/L			08/20/13 10:57	1
Benzene	ND				1.0	0.11	ug/L			08/20/13 10:57	1
Bromoform	ND				1.0	0.19	ug/L			08/20/13 10:57	1
Bromomethane	ND				1.0	0.31	ug/L			08/20/13 10:57	1
2-Butanone	ND				5.0	0.55	ug/L			08/20/13 10:57	1
Carbon disulfide	ND				1.0	0.21	ug/L			08/20/13 10:57	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			08/20/13 10:57	1
Chlorobenzene	ND				1.0	0.14	ug/L			08/20/13 10:57	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			08/20/13 10:57	1
Chloroethane	ND				1.0	0.21	ug/L			08/20/13 10:57	1
Chloroform	ND				1.0	0.17	ug/L			08/20/13 10:57	1
Chloromethane	ND				1.0	0.28	ug/L			08/20/13 10:57	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			08/20/13 10:57	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			08/20/13 10:57	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			08/20/13 10:57	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			08/20/13 10:57	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			08/20/13 10:57	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			08/20/13 10:57	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			08/20/13 10:57	1
Ethylbenzene	ND				1.0	0.23	ug/L			08/20/13 10:57	1
2-Hexanone	ND				5.0	0.16	ug/L			08/20/13 10:57	1
Methylene Chloride	0.298	J			1.0	0.13	ug/L			08/20/13 10:57	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			08/20/13 10:57	1
Styrene	ND				1.0	0.097	ug/L			08/20/13 10:57	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			08/20/13 10:57	1
Tetrachloroethene	ND				1.0	0.15	ug/L			08/20/13 10:57	1
Toluene	ND				1.0	0.15	ug/L			08/20/13 10:57	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			08/20/13 10:57	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			08/20/13 10:57	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			08/20/13 10:57	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			08/20/13 10:57	1
Trichloroethene	ND				1.0	0.14	ug/L			08/20/13 10:57	1
Vinyl chloride	ND				1.0	0.23	ug/L			08/20/13 10:57	1
Xylenes, Total	ND				3.0	0.49	ug/L			08/20/13 10:57	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	102		102		70 - 118			1
Dibromofluoromethane (Surr)	108		108		70 - 128			1
1,2-Dichloroethane-d4 (Surr)	121		121		64 - 135			1
Toluene-d8 (Surr)	104		104		71 - 118			1

**Lab Sample ID:** LCS 180-81089/6

**Matrix:** Water

**Analysis Batch:** 81089

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

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	Prepared	Analyzed	Dil Fac
	Added	Result	Qualifier									
Acetone		10.0		12.0		ug/L		120	22 - 150			
Benzene		10.0		10.8		ug/L		108	80 - 120			

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

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

Lab Sample ID: LCS 180-81089/6

Matrix: Water

Analysis Batch: 81089

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Bromoform	10.0	11.8		ug/L		118	46 - 150
Bromomethane	10.0	10.9		ug/L		109	33 - 150
2-Butanone	10.0	11.3		ug/L		113	39 - 138
Carbon disulfide	10.0	12.8		ug/L		128	54 - 132
Carbon tetrachloride	10.0	11.7		ug/L		117	55 - 150
Chlorobenzene	10.0	10.6		ug/L		106	80 - 120
Chlorodibromomethane	10.0	12.0		ug/L		120	60 - 140
Chloroethane	10.0	11.2		ug/L		112	36 - 142
Chloroform	10.0	11.2		ug/L		112	72 - 127
Chloromethane	10.0	10.6		ug/L		106	50 - 139
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	70 - 120
cis-1,3-Dichloropropene	10.0	11.1		ug/L		111	66 - 120
Dichlorobromomethane	10.0	11.3		ug/L		113	66 - 130
1,1-Dichloroethane	10.0	11.4		ug/L		114	73 - 126
1,2-Dichloroethane	10.0	11.2		ug/L		112	68 - 132
1,1-Dichloroethene	10.0	10.3		ug/L		103	65 - 136
1,2-Dichloropropane	10.0	11.2		ug/L		112	76 - 124
Ethylbenzene	10.0	10.5		ug/L		105	72 - 126
2-Hexanone	10.0	10.6		ug/L		106	25 - 132
Methylene Chloride	10.0	8.82		ug/L		88	63 - 129
4-Methyl-2-pentanone	10.0	10.5		ug/L		105	45 - 145
Styrene	10.0	11.0		ug/L		110	71 - 127
1,1,2,2-Tetrachloroethane	10.0	11.6		ug/L		116	62 - 125
Tetrachloroethene	10.0	10.6		ug/L		106	70 - 135
Toluene	10.0	10.9		ug/L		109	80 - 123
trans-1,2-Dichloroethene	10.0	10.9		ug/L		109	73 - 126
trans-1,3-Dichloropropene	10.0	12.7 *		ug/L		127	65 - 125
1,1,1-Trichloroethane	10.0	11.7		ug/L		117	63 - 133
1,1,2-Trichloroethane	10.0	10.8		ug/L		108	77 - 127
Trichloroethene	10.0	10.6		ug/L		106	73 - 120
Vinyl chloride	10.0	10.9		ug/L		109	53 - 138
Xylenes, Total	20.0	21.5		ug/L		107	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		70 - 118
Dibromofluoromethane (Surr)	94		70 - 128
1,2-Dichloroethane-d4 (Surr)	102		64 - 135
Toluene-d8 (Surr)	94		71 - 118

Lab Sample ID: MB 180-81221/3

Matrix: Water

Analysis Batch: 81221

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			08/21/13 10:13	1
Benzene	ND		1.0	0.11	ug/L			08/21/13 10:13	1
Bromoform	ND		1.0	0.19	ug/L			08/21/13 10:13	1
Bromomethane	ND		1.0	0.31	ug/L			08/21/13 10:13	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

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

Lab Sample ID: MB 180-81221/3

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 81221

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		5.0	0.55	ug/L			08/21/13 10:13	1
Carbon disulfide	ND		1.0	0.21	ug/L			08/21/13 10:13	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			08/21/13 10:13	1
Chlorobenzene	ND		1.0	0.14	ug/L			08/21/13 10:13	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			08/21/13 10:13	1
Chloroethane	ND		1.0	0.21	ug/L			08/21/13 10:13	1
Chloroform	ND		1.0	0.17	ug/L			08/21/13 10:13	1
Chloromethane	ND		1.0	0.28	ug/L			08/21/13 10:13	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			08/21/13 10:13	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			08/21/13 10:13	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			08/21/13 10:13	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			08/21/13 10:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/21/13 10:13	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/21/13 10:13	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			08/21/13 10:13	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/21/13 10:13	1
2-Hexanone	ND		5.0	0.16	ug/L			08/21/13 10:13	1
Methylene Chloride	0.178	J	1.0	0.13	ug/L			08/21/13 10:13	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			08/21/13 10:13	1
Styrene	ND		1.0	0.097	ug/L			08/21/13 10:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			08/21/13 10:13	1
Tetrachloroethene	ND		1.0	0.15	ug/L			08/21/13 10:13	1
Toluene	ND		1.0	0.15	ug/L			08/21/13 10:13	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			08/21/13 10:13	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			08/21/13 10:13	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			08/21/13 10:13	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			08/21/13 10:13	1
Trichloroethene	ND		1.0	0.14	ug/L			08/21/13 10:13	1
Vinyl chloride	ND		1.0	0.23	ug/L			08/21/13 10:13	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/21/13 10:13	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 118		08/21/13 10:13	1
Dibromofluoromethane (Surr)	107		70 - 128		08/21/13 10:13	1
1,2-Dichloroethane-d4 (Surr)	118		64 - 135		08/21/13 10:13	1
Toluene-d8 (Surr)	100		71 - 118		08/21/13 10:13	1

Lab Sample ID: LCS 180-81221/6

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 81221

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	10.0	11.6		ug/L		116	22 - 150
Benzene	10.0	9.78		ug/L		98	80 - 120
Bromoform	10.0	11.0		ug/L		110	46 - 150
Bromomethane	10.0	9.19		ug/L		92	33 - 150
2-Butanone	10.0	10.8		ug/L		108	39 - 138
Carbon disulfide	10.0	10.7		ug/L		107	54 - 132

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

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

Lab Sample ID: LCS 180-81221/6

Matrix: Water

Analysis Batch: 81221

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS			%Rec.	Limits
	Added	Result	Qualifier	Unit		
Carbon tetrachloride	10.0	10.5		ug/L	105	55 - 150
Chlorobenzene	10.0	9.76		ug/L	98	80 - 120
Chlorodibromomethane	10.0	10.8		ug/L	108	60 - 140
Chloroethane	10.0	9.88		ug/L	99	36 - 142
Chloroform	10.0	10.2		ug/L	102	72 - 127
Chloromethane	10.0	9.58		ug/L	96	50 - 139
cis-1,2-Dichloroethene	10.0	9.45		ug/L	94	70 - 120
cis-1,3-Dichloropropene	10.0	9.49		ug/L	95	66 - 120
Dichlorobromomethane	10.0	10.2		ug/L	102	66 - 130
1,1-Dichloroethane	10.0	10.1		ug/L	101	73 - 126
1,2-Dichloroethane	10.0	10.2		ug/L	102	68 - 132
1,1-Dichloroethene	10.0	8.85		ug/L	89	65 - 136
1,2-Dichloropropane	10.0	9.77		ug/L	98	76 - 124
Ethylbenzene	10.0	9.62		ug/L	96	72 - 126
2-Hexanone	10.0	10.1		ug/L	101	25 - 132
Methylene Chloride	10.0	8.22		ug/L	82	63 - 129
4-Methyl-2-pentanone	10.0	9.93		ug/L	99	45 - 145
Styrene	10.0	9.99		ug/L	100	71 - 127
1,1,2,2-Tetrachloroethane	10.0	11.1		ug/L	111	62 - 125
Tetrachloroethene	10.0	9.44		ug/L	94	70 - 135
Toluene	10.0	10.0		ug/L	100	80 - 123
trans-1,2-Dichloroethene	10.0	9.80		ug/L	98	73 - 126
trans-1,3-Dichloropropene	10.0	11.2		ug/L	112	65 - 125
1,1,1-Trichloroethane	10.0	10.3		ug/L	103	63 - 133
1,1,2-Trichloroethane	10.0	10.5		ug/L	105	77 - 127
Trichloroethene	10.0	9.45		ug/L	94	73 - 120
Vinyl chloride	10.0	9.77		ug/L	98	53 - 138
Xylenes, Total	20.0	19.7		ug/L	99	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	91		70 - 118
Dibromofluoromethane (Surr)	90		70 - 128
1,2-Dichloroethane-d4 (Surr)	95		64 - 135
Toluene-d8 (Surr)	87		71 - 118

## Method: 200.7 - Metals (Custom List)

Lab Sample ID: MB 180-80501/1-A

Matrix: Water

Analysis Batch: 80807

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 80501

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	49.8	J	200	16	ug/L		08/14/13 10:44	08/16/13 08:45	1
Zinc	ND		20	1.0	ug/L		08/14/13 10:44	08/16/13 08:45	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

## Method: 200.7 - Metals (Custom List) (Continued)

Lab Sample ID: MB 180-80501/1-A

Matrix: Water

Analysis Batch: 80990

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 80501

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	8.5	ug/L		08/14/13 10:44	08/19/13 13:52	1

Lab Sample ID: LCS 180-80501/2-A

Matrix: Water

Analysis Batch: 80807

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 80501

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Aluminum	2000	2160		ug/L		108	85 - 115
Zinc	500	515		ug/L		103	85 - 115

Lab Sample ID: LCS 180-80501/2-A

Matrix: Water

Analysis Batch: 80990

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 80501

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Iron	1000	1010		ug/L		101	85 - 115

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 180-81229/1-A

Matrix: Water

Analysis Batch: 81367

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 81229

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.0	1.5	mg/L		08/21/13 11:53	08/21/13 11:53	1

Lab Sample ID: LCS 180-81229/2-A

Matrix: Water

Analysis Batch: 81367

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 81229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
HEM (Oil and Grease)	40.0	34.0		mg/L		85	78 - 114

Lab Sample ID: LCSD 180-81229/3-A

Matrix: Water

Analysis Batch: 81367

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 81229

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	Limit
HEM (Oil and Grease)	40.0	35.2		mg/L		88	78 - 114	3

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 180-80476/1

Matrix: Water

Analysis Batch: 80476

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
pH		7.00	7.010	SU		100	99 - 101

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

## GC/MS VOA

### Analysis Batch: 81089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-24103-1 - DL	MW2	Total/NA	Water	8260B	
180-24103-2	MW14	Total/NA	Water	8260B	
180-24103-3	EFFLUENT	Total/NA	Water	8260B	
180-24103-4	TRIP BLANK	Total/NA	Water	8260B	
LCS 180-81089/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-81089/3	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 81221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-24103-1	MW2	Total/NA	Water	8260B	
LCS 180-81221/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-81221/3	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 80501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-24103-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-80501/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-80501/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 80807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-24103-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-80501/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-80501/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 80990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-24103-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-80501/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-80501/1-A	Method Blank	Total Recoverable	Water	200.7	

## General Chemistry

### Analysis Batch: 80476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-24103-3	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-80476/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 81229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-24103-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-81229/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-81229/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-81229/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 81367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-24103-3	EFFLUENT	Total/NA	Water	1664A	

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-24103-1

## General Chemistry (Continued)

### Analysis Batch: 81367 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-81229/2-A	Lab Control Sample	Total/NA	Water	1664A	81229
LCSD 180-81229/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	81229
MB 180-81229/1-A	Method Blank	Total/NA	Water	1664A	81229



## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-24103-1

**Login Number: 24103**

**List Source: TestAmerica Pittsburgh**

**List Number: 1**

**Creator: Skowronek, Elyse N**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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	
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.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time.	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").	True	
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 Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-25103-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

9/26/2013 12:52:22 PM

David Dunlap, Laboratory Technical Director

dave.dunlap@testamericainc.com

### LINKS

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Expert

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[www.testamericainc.com](http://www.testamericainc.com)

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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

### Job ID: 180-25103-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-25103-1

#### Receipt

The samples were received on 9/13/2013 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): TRIP BLANK (180-25103-4). Notation was made to the COC.

#### GC/MS VOA

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-25103-2) and MW14 (180-25103-3). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

# Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

## 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.
E	Result exceeded calibration range.

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

## 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-13 *
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-14
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-25103-1	EFFLUENT	Water	09/12/13 09:00	09/13/13 09:00
180-25103-2	MW2	Water	09/12/13 06:45	09/13/13 09:00
180-25103-3	MW14	Water	09/12/13 08:00	09/13/13 09:00
180-25103-4	TRIP BLANK	Water	09/12/13 00:00	09/13/13 09:00

## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664A	HEM and SGT-HEM	1664A	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

## Client Sample ID: EFFLUENT

Date Collected: 09/12/13 09:00  
Date Received: 09/13/13 09:00

## Lab Sample ID: 180-25103-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84499	09/24/13 07:15	MAZ	TAL PIT
		Instrument ID: HP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	83788	09/17/13 11:07	CEH	TAL PIT
Total Recoverable	Analysis	200.7		1			84248	09/20/13 12:27	RJR	TAL PIT
		Instrument ID: Q								
Total/NA	Analysis	SM 4500 H+ B		1		50 mL	83825	09/17/13 16:06	AW	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	1664A			970 mL	1000 mL	83856	09/17/13 18:24	JWM	TAL PIT
Total/NA	Analysis	1664A		1			83857	09/17/13 18:24	JWM	TAL PIT
		Instrument ID: NOEQUIP								

## Client Sample ID: MW2

Date Collected: 09/12/13 06:45  
Date Received: 09/13/13 09:00

## Lab Sample ID: 180-25103-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	84605	09/24/13 21:37	DLF	TAL PIT
		Instrument ID: HP6								
Total/NA	Analysis	8260B	DL	10000	5 mL	5 mL	84605	09/24/13 14:44	DLF	TAL PIT
		Instrument ID: HP6								

## Client Sample ID: MW14

Date Collected: 09/12/13 08:00  
Date Received: 09/13/13 09:00

## Lab Sample ID: 180-25103-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		400	5 mL	5 mL	84605	09/24/13 15:08	DLF	TAL PIT

## Client Sample ID: TRIP BLANK

Date Collected: 09/12/13 00:00  
Date Received: 09/13/13 09:00

## Lab Sample ID: 180-25103-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84499	09/24/13 08:27	MAZ	TAL PIT

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CEH = Caitlyn Haluck

JWM = Jeremiah McLaughlin

Batch Type: Analysis

AW = Adam Wolfe

DLF = Donald Ferguson

JWM = Jeremiah McLaughlin

MAZ = Mike Zukowski

RJR = Ron Rosenbaum

1

2

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13

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

**Client Sample ID: EFFLUENT**

Date Collected: 09/12/13 09:00

Date Received: 09/13/13 09:00

**Lab Sample ID: 180-25103-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			09/24/13 07:15	1
Benzene	ND		1.0	0.11	ug/L			09/24/13 07:15	1
<b>Bromoform</b>	<b>2.7</b>		1.0	0.19	ug/L			09/24/13 07:15	1
Bromomethane	ND		1.0	0.31	ug/L			09/24/13 07:15	1
2-Butanone	ND		5.0	0.55	ug/L			09/24/13 07:15	1
Carbon disulfide	ND		1.0	0.21	ug/L			09/24/13 07:15	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			09/24/13 07:15	1
Chlorobenzene	ND		1.0	0.14	ug/L			09/24/13 07:15	1
<b>Chlorodibromomethane</b>	<b>1.2</b>		1.0	0.14	ug/L			09/24/13 07:15	1
Chloroethane	ND		1.0	0.21	ug/L			09/24/13 07:15	1
Chloroform	ND		1.0	0.17	ug/L			09/24/13 07:15	1
Chloromethane	ND		1.0	0.28	ug/L			09/24/13 07:15	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			09/24/13 07:15	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			09/24/13 07:15	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			09/24/13 07:15	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			09/24/13 07:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/24/13 07:15	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/24/13 07:15	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			09/24/13 07:15	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/24/13 07:15	1
2-Hexanone	ND		5.0	0.16	ug/L			09/24/13 07:15	1
Methylene Chloride	ND		1.0	0.13	ug/L			09/24/13 07:15	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			09/24/13 07:15	1
Styrene	ND		1.0	0.097	ug/L			09/24/13 07:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			09/24/13 07:15	1
Tetrachloroethene	ND		1.0	0.15	ug/L			09/24/13 07:15	1
Toluene	ND		1.0	0.15	ug/L			09/24/13 07:15	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			09/24/13 07:15	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			09/24/13 07:15	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			09/24/13 07:15	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			09/24/13 07:15	1
Trichloroethene	ND		1.0	0.14	ug/L			09/24/13 07:15	1
Vinyl chloride	ND		1.0	0.23	ug/L			09/24/13 07:15	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/24/13 07:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	92		70 - 118					09/24/13 07:15	1
Dibromofluoromethane (Surr)	113		70 - 128					09/24/13 07:15	1
1,2-Dichloroethane-d4 (Surr)	109		64 - 135					09/24/13 07:15	1
Toluene-d8 (Surr)	95		71 - 118					09/24/13 07:15	1

**Method: 200.7 - Metals (Custom List) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	16	ug/L		09/17/13 11:07	09/20/13 12:27	1
<b>Iron</b>	<b>130</b>	<b>B</b>	100	8.5	ug/L		09/17/13 11:07	09/20/13 12:27	1
<b>Zinc</b>	<b>9.5</b>	<b>J B</b>	20	1.0	ug/L		09/17/13 11:07	09/20/13 12:27	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.2	1.5	mg/L		09/17/13 18:24	09/17/13 18:24	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

**Client Sample ID: EFFLUENT**  
**Date Collected: 09/12/13 09:00**  
**Date Received: 09/13/13 09:00**

**Lab Sample ID: 180-25103-1**  
**Matrix: Water**

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.02	HF	0.100	0.100	SU			09/17/13 16:06	1

1

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TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

**Client Sample ID: MW2**

Date Collected: 09/12/13 06:45

Date Received: 09/13/13 09:00

**Lab Sample ID: 180-25103-2**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			09/24/13 21:37	1000
Benzene	ND		1000	110	ug/L			09/24/13 21:37	1000
Bromoform	ND		1000	190	ug/L			09/24/13 21:37	1000
Bromomethane	ND		1000	310	ug/L			09/24/13 21:37	1000
2-Butanone	ND		5000	550	ug/L			09/24/13 21:37	1000
Carbon disulfide	ND		1000	210	ug/L			09/24/13 21:37	1000
Carbon tetrachloride	ND		1000	140	ug/L			09/24/13 21:37	1000
Chlorobenzene	ND		1000	140	ug/L			09/24/13 21:37	1000
Chlorodibromomethane	ND		1000	140	ug/L			09/24/13 21:37	1000
Chloroethane	ND		1000	210	ug/L			09/24/13 21:37	1000
<b>Chloroform</b>	<b>230</b>	<b>J</b>	1000	170	ug/L			09/24/13 21:37	1000
Chloromethane	ND		1000	280	ug/L			09/24/13 21:37	1000
<b>cis-1,2-Dichloroethene</b>	<b>200000</b>	<b>E</b>	1000	240	ug/L			09/24/13 21:37	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			09/24/13 21:37	1000
Dichlorobromomethane	ND		1000	130	ug/L			09/24/13 21:37	1000
1,1-Dichloroethane	ND		1000	120	ug/L			09/24/13 21:37	1000
1,2-Dichloroethane	ND		1000	210	ug/L			09/24/13 21:37	1000
<b>1,1-Dichloroethene</b>	<b>300</b>	<b>J</b>	1000	300	ug/L			09/24/13 21:37	1000
1,2-Dichloropropane	ND		1000	95	ug/L			09/24/13 21:37	1000
Ethylbenzene	ND		1000	230	ug/L			09/24/13 21:37	1000
2-Hexanone	ND		5000	160	ug/L			09/24/13 21:37	1000
<b>Methylene Chloride</b>	<b>490</b>	<b>J</b>	1000	130	ug/L			09/24/13 21:37	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			09/24/13 21:37	1000
Styrene	ND		1000	97	ug/L			09/24/13 21:37	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			09/24/13 21:37	1000
Tetrachloroethene	ND		1000	150	ug/L			09/24/13 21:37	1000
Toluene	ND		1000	150	ug/L			09/24/13 21:37	1000
<b>trans-1,2-Dichloroethene</b>	<b>310</b>	<b>J</b>	1000	170	ug/L			09/24/13 21:37	1000
trans-1,3-Dichloropropene	ND		1000	150	ug/L			09/24/13 21:37	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			09/24/13 21:37	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			09/24/13 21:37	1000
Trichloroethene	ND		1000	140	ug/L			09/24/13 21:37	1000
<b>Vinyl chloride</b>	<b>38000</b>		1000	230	ug/L			09/24/13 21:37	1000
Xylenes, Total	ND		3000	490	ug/L			09/24/13 21:37	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99		70 - 118					09/24/13 21:37	1000
Dibromofluoromethane (Surr)	91		70 - 128					09/24/13 21:37	1000
1,2-Dichloroethane-d4 (Surr)	88		64 - 135					09/24/13 21:37	1000
Toluene-d8 (Surr)	91		71 - 118					09/24/13 21:37	1000

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50000	25000	ug/L			09/24/13 14:44	10000
Benzene	ND		10000	1100	ug/L			09/24/13 14:44	10000
Bromoform	ND		10000	1900	ug/L			09/24/13 14:44	10000
Bromomethane	ND		10000	3100	ug/L			09/24/13 14:44	10000
2-Butanone	ND		50000	5500	ug/L			09/24/13 14:44	10000
Carbon disulfide	ND		10000	2100	ug/L			09/24/13 14:44	10000
Carbon tetrachloride	ND		10000	1400	ug/L			09/24/13 14:44	10000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

**Client Sample ID: MW2**

**Date Collected: 09/12/13 06:45**

**Date Received: 09/13/13 09:00**

**Lab Sample ID: 180-25103-2**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds by GC/MS (Low Level) - DL (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		10000	1400	ug/L			09/24/13 14:44	10000
Chlorodibromomethane	ND		10000	1400	ug/L			09/24/13 14:44	10000
Chloroethane	ND		10000	2100	ug/L			09/24/13 14:44	10000
Chloroform	ND		10000	1700	ug/L			09/24/13 14:44	10000
Chloromethane	ND		10000	2800	ug/L			09/24/13 14:44	10000
<b>cis-1,2-Dichloroethene</b>	<b>210000</b>		10000	2400	ug/L			09/24/13 14:44	10000
cis-1,3-Dichloropropene	ND		10000	1900	ug/L			09/24/13 14:44	10000
Dichlorobromomethane	ND		10000	1300	ug/L			09/24/13 14:44	10000
1,1-Dichloroethane	ND		10000	1200	ug/L			09/24/13 14:44	10000
1,2-Dichloroethane	ND		10000	2100	ug/L			09/24/13 14:44	10000
1,1-Dichloroethene	ND		10000	3000	ug/L			09/24/13 14:44	10000
1,2-Dichloropropane	ND		10000	950	ug/L			09/24/13 14:44	10000
Ethylbenzene	ND		10000	2300	ug/L			09/24/13 14:44	10000
2-Hexanone	ND		50000	1600	ug/L			09/24/13 14:44	10000
<b>Methylene Chloride</b>	<b>5600 J</b>		10000	1300	ug/L			09/24/13 14:44	10000
4-Methyl-2-pentanone	ND		50000	5300	ug/L			09/24/13 14:44	10000
Styrene	ND		10000	970	ug/L			09/24/13 14:44	10000
1,1,2,2-Tetrachloroethane	ND		10000	2000	ug/L			09/24/13 14:44	10000
Tetrachloroethene	ND		10000	1500	ug/L			09/24/13 14:44	10000
Toluene	ND		10000	1500	ug/L			09/24/13 14:44	10000
trans-1,2-Dichloroethene	ND		10000	1700	ug/L			09/24/13 14:44	10000
trans-1,3-Dichloropropene	ND		10000	1500	ug/L			09/24/13 14:44	10000
1,1,1-Trichloroethane	ND		10000	2900	ug/L			09/24/13 14:44	10000
1,1,2-Trichloroethane	ND		10000	2000	ug/L			09/24/13 14:44	10000
Trichloroethene	ND		10000	1400	ug/L			09/24/13 14:44	10000
<b>Vinyl chloride</b>	<b>51000</b>		10000	2300	ug/L			09/24/13 14:44	10000
Xylenes, Total	ND		30000	4900	ug/L			09/24/13 14:44	10000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 118		09/24/13 14:44	10000
Dibromofluoromethane (Surr)	89		70 - 128		09/24/13 14:44	10000
1,2-Dichloroethane-d4 (Surr)	84		64 - 135		09/24/13 14:44	10000
Toluene-d8 (Surr)	89		71 - 118		09/24/13 14:44	10000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

**Client Sample ID: MW14**

Date Collected: 09/12/13 08:00

Date Received: 09/13/13 09:00

**Lab Sample ID: 180-25103-3**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2000	1000	ug/L			09/24/13 15:08	400
Benzene	ND		400	42	ug/L			09/24/13 15:08	400
Bromoform	ND		400	77	ug/L			09/24/13 15:08	400
Bromomethane	ND		400	130	ug/L			09/24/13 15:08	400
2-Butanone	ND		2000	220	ug/L			09/24/13 15:08	400
Carbon disulfide	ND		400	85	ug/L			09/24/13 15:08	400
Carbon tetrachloride	ND		400	55	ug/L			09/24/13 15:08	400
Chlorobenzene	ND		400	54	ug/L			09/24/13 15:08	400
Chlorodibromomethane	ND		400	55	ug/L			09/24/13 15:08	400
Chloroethane	ND		400	86	ug/L			09/24/13 15:08	400
Chloroform	ND		400	68	ug/L			09/24/13 15:08	400
Chloromethane	ND		400	110	ug/L			09/24/13 15:08	400
<b>cis-1,2-Dichloroethene</b>	<b>3900</b>		400	95	ug/L			09/24/13 15:08	400
cis-1,3-Dichloropropene	ND		400	75	ug/L			09/24/13 15:08	400
Dichlorobromomethane	ND		400	52	ug/L			09/24/13 15:08	400
1,1-Dichloroethane	ND		400	47	ug/L			09/24/13 15:08	400
1,2-Dichloroethane	ND		400	85	ug/L			09/24/13 15:08	400
1,1-Dichloroethene	ND		400	120	ug/L			09/24/13 15:08	400
1,2-Dichloropropane	ND		400	38	ug/L			09/24/13 15:08	400
Ethylbenzene	ND		400	91	ug/L			09/24/13 15:08	400
2-Hexanone	ND		2000	64	ug/L			09/24/13 15:08	400
<b>Methylene Chloride</b>	<b>180 J</b>		400	50	ug/L			09/24/13 15:08	400
4-Methyl-2-pentanone	ND		2000	210	ug/L			09/24/13 15:08	400
Styrene	ND		400	39	ug/L			09/24/13 15:08	400
1,1,2,2-Tetrachloroethane	ND		400	80	ug/L			09/24/13 15:08	400
Tetrachloroethene	ND		400	59	ug/L			09/24/13 15:08	400
Toluene	ND		400	60	ug/L			09/24/13 15:08	400
trans-1,2-Dichloroethene	ND		400	68	ug/L			09/24/13 15:08	400
trans-1,3-Dichloropropene	ND		400	59	ug/L			09/24/13 15:08	400
1,1,1-Trichloroethane	ND		400	110	ug/L			09/24/13 15:08	400
1,1,2-Trichloroethane	ND		400	81	ug/L			09/24/13 15:08	400
<b>Trichloroethene</b>	<b>6400</b>		400	57	ug/L			09/24/13 15:08	400
Vinyl chloride	ND		400	91	ug/L			09/24/13 15:08	400
Xylenes, Total	ND		1200	200	ug/L			09/24/13 15:08	400
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	97			70 - 118				09/24/13 15:08	400
Dibromofluoromethane (Surr)	86			70 - 128				09/24/13 15:08	400
1,2-Dichloroethane-d4 (Surr)	85			64 - 135				09/24/13 15:08	400
Toluene-d8 (Surr)	89			71 - 118				09/24/13 15:08	400

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 180-25103-4**

**Matrix: Water**

Date Collected: 09/12/13 00:00

Date Received: 09/13/13 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		09/24/13 08:27		1
Benzene	ND		1.0	0.11	ug/L		09/24/13 08:27		1
Bromoform	ND		1.0	0.19	ug/L		09/24/13 08:27		1
Bromomethane	ND		1.0	0.31	ug/L		09/24/13 08:27		1
2-Butanone	ND		5.0	0.55	ug/L		09/24/13 08:27		1
Carbon disulfide	ND		1.0	0.21	ug/L		09/24/13 08:27		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		09/24/13 08:27		1
Chlorobenzene	ND		1.0	0.14	ug/L		09/24/13 08:27		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		09/24/13 08:27		1
Chloroethane	ND		1.0	0.21	ug/L		09/24/13 08:27		1
Chloroform	ND		1.0	0.17	ug/L		09/24/13 08:27		1
Chloromethane	ND		1.0	0.28	ug/L		09/24/13 08:27		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		09/24/13 08:27		1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L		09/24/13 08:27		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		09/24/13 08:27		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		09/24/13 08:27		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		09/24/13 08:27		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		09/24/13 08:27		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		09/24/13 08:27		1
Ethylbenzene	ND		1.0	0.23	ug/L		09/24/13 08:27		1
2-Hexanone	ND		5.0	0.16	ug/L		09/24/13 08:27		1
<b>Methylene Chloride</b>	<b>2.2</b>		1.0	0.13	ug/L		09/24/13 08:27		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		09/24/13 08:27		1
Styrene	ND		1.0	0.097	ug/L		09/24/13 08:27		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		09/24/13 08:27		1
Tetrachloroethene	ND		1.0	0.15	ug/L		09/24/13 08:27		1
Toluene	ND		1.0	0.15	ug/L		09/24/13 08:27		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		09/24/13 08:27		1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L		09/24/13 08:27		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		09/24/13 08:27		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		09/24/13 08:27		1
Trichloroethene	ND		1.0	0.14	ug/L		09/24/13 08:27		1
Vinyl chloride	ND		1.0	0.23	ug/L		09/24/13 08:27		1
Xylenes, Total	ND		3.0	0.49	ug/L		09/24/13 08:27		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	90		70 - 118				09/24/13 08:27		1
Dibromofluoromethane (Surr)	114		70 - 128				09/24/13 08:27		1
1,2-Dichloroethane-d4 (Surr)	113		64 - 135				09/24/13 08:27		1
Toluene-d8 (Surr)	95		71 - 118				09/24/13 08:27		1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

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

**Lab Sample ID:** MB 180-84499/3

**Matrix:** Water

**Analysis Batch:** 84499

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Acetone	ND				5.0	2.5	ug/L			09/24/13 01:19	1
Benzene	ND				1.0	0.11	ug/L			09/24/13 01:19	1
Bromoform	ND				1.0	0.19	ug/L			09/24/13 01:19	1
Bromomethane	ND				1.0	0.31	ug/L			09/24/13 01:19	1
2-Butanone	ND				5.0	0.55	ug/L			09/24/13 01:19	1
Carbon disulfide	ND				1.0	0.21	ug/L			09/24/13 01:19	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			09/24/13 01:19	1
Chlorobenzene	ND				1.0	0.14	ug/L			09/24/13 01:19	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			09/24/13 01:19	1
Chloroethane	ND				1.0	0.21	ug/L			09/24/13 01:19	1
Chloroform	ND				1.0	0.17	ug/L			09/24/13 01:19	1
Chloromethane	ND				1.0	0.28	ug/L			09/24/13 01:19	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			09/24/13 01:19	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			09/24/13 01:19	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			09/24/13 01:19	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			09/24/13 01:19	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			09/24/13 01:19	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			09/24/13 01:19	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			09/24/13 01:19	1
Ethylbenzene	ND				1.0	0.23	ug/L			09/24/13 01:19	1
2-Hexanone	ND				5.0	0.16	ug/L			09/24/13 01:19	1
Methylene Chloride	ND				1.0	0.13	ug/L			09/24/13 01:19	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			09/24/13 01:19	1
Styrene	ND				1.0	0.097	ug/L			09/24/13 01:19	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			09/24/13 01:19	1
Tetrachloroethene	ND				1.0	0.15	ug/L			09/24/13 01:19	1
Toluene	ND				1.0	0.15	ug/L			09/24/13 01:19	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			09/24/13 01:19	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			09/24/13 01:19	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			09/24/13 01:19	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			09/24/13 01:19	1
Trichloroethene	ND				1.0	0.14	ug/L			09/24/13 01:19	1
Vinyl chloride	ND				1.0	0.23	ug/L			09/24/13 01:19	1
Xylenes, Total	ND				3.0	0.49	ug/L			09/24/13 01:19	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	Result	Qualifier							
4-Bromofluorobenzene (Surr)	94		70 - 118					09/24/13 01:19	1
Dibromofluoromethane (Surr)	100		70 - 128					09/24/13 01:19	1
1,2-Dichloroethane-d4 (Surr)	105		64 - 135					09/24/13 01:19	1
Toluene-d8 (Surr)	96		71 - 118					09/24/13 01:19	1

**Lab Sample ID:** LCS 180-84499/6

**Matrix:** Water

**Analysis Batch:** 84499

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

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	Dil Fac
	Added	Result	Qualifier							
Acetone	10.0	7.27				ug/L		73	22 - 150	
Benzene	10.0	9.94				ug/L		99	80 - 120	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

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

Lab Sample ID: LCS 180-84499/6

Matrix: Water

Analysis Batch: 84499

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Bromoform	10.0	8.98		ug/L	90	46 - 150	
Bromomethane	10.0	9.59		ug/L	96	33 - 150	
2-Butanone	10.0	8.47		ug/L	85	39 - 138	
Carbon disulfide	10.0	8.76		ug/L	88	54 - 132	
Carbon tetrachloride	10.0	9.91		ug/L	99	55 - 150	
Chlorobenzene	10.0	9.70		ug/L	97	80 - 120	
Chlorodibromomethane	10.0	9.27		ug/L	93	60 - 140	
Chloroethane	10.0	9.29		ug/L	93	36 - 142	
Chloroform	10.0	9.56		ug/L	96	72 - 127	
Chloromethane	10.0	9.50		ug/L	95	50 - 139	
cis-1,2-Dichloroethene	10.0	9.58		ug/L	96	70 - 120	
cis-1,3-Dichloropropene	10.0	8.84		ug/L	88	66 - 120	
Dichlorobromomethane	10.0	8.67		ug/L	87	66 - 130	
1,1-Dichloroethane	10.0	9.81		ug/L	98	73 - 126	
1,2-Dichloroethane	10.0	9.69		ug/L	97	68 - 132	
1,1-Dichloroethene	10.0	9.27		ug/L	93	65 - 136	
1,2-Dichloropropane	10.0	9.72		ug/L	97	76 - 124	
Ethylbenzene	10.0	9.86		ug/L	99	72 - 126	
2-Hexanone	10.0	8.17		ug/L	82	25 - 132	
Methylene Chloride	10.0	9.62		ug/L	96	63 - 129	
4-Methyl-2-pentanone	10.0	8.84		ug/L	88	45 - 145	
Styrene	10.0	10.0		ug/L	100	71 - 127	
1,1,2,2-Tetrachloroethane	10.0	10.5		ug/L	105	62 - 125	
Tetrachloroethene	10.0	9.63		ug/L	96	70 - 135	
Toluene	10.0	10.1		ug/L	101	80 - 123	
trans-1,2-Dichloroethene	10.0	9.61		ug/L	96	73 - 126	
trans-1,3-Dichloropropene	10.0	9.58		ug/L	96	65 - 125	
1,1,1-Trichloroethane	10.0	9.55		ug/L	96	63 - 133	
1,1,2-Trichloroethane	10.0	9.74		ug/L	97	77 - 127	
Trichloroethene	10.0	9.56		ug/L	96	73 - 120	
Vinyl chloride	10.0	9.78		ug/L	98	53 - 138	
Xylenes, Total	20.0	19.7		ug/L	99	76 - 128	

### LCS   LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 118
Dibromofluoromethane (Surr)	100		70 - 128
1,2-Dichloroethane-d4 (Surr)	102		64 - 135
Toluene-d8 (Surr)	106		71 - 118

Lab Sample ID: MB 180-84605/3

Matrix: Water

Analysis Batch: 84605

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			09/24/13 11:23	1
Benzene	ND		1.0	0.11	ug/L			09/24/13 11:23	1
Bromoform	ND		1.0	0.19	ug/L			09/24/13 11:23	1
Bromomethane	ND		1.0	0.31	ug/L			09/24/13 11:23	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

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

**Lab Sample ID: MB 180-84605/3**

**Matrix: Water**

**Analysis Batch: 84605**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
2-Butanone	ND				5.0	0.55	ug/L			09/24/13 11:23	1
Carbon disulfide	ND				1.0	0.21	ug/L			09/24/13 11:23	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			09/24/13 11:23	1
Chlorobenzene	ND				1.0	0.14	ug/L			09/24/13 11:23	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			09/24/13 11:23	1
Chloroethane	ND				1.0	0.21	ug/L			09/24/13 11:23	1
Chloroform	ND				1.0	0.17	ug/L			09/24/13 11:23	1
Chloromethane	ND				1.0	0.28	ug/L			09/24/13 11:23	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			09/24/13 11:23	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			09/24/13 11:23	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			09/24/13 11:23	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			09/24/13 11:23	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			09/24/13 11:23	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			09/24/13 11:23	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			09/24/13 11:23	1
Ethylbenzene	ND				1.0	0.23	ug/L			09/24/13 11:23	1
2-Hexanone	ND				5.0	0.16	ug/L			09/24/13 11:23	1
Methylene Chloride	ND				1.0	0.13	ug/L			09/24/13 11:23	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			09/24/13 11:23	1
Styrene	ND				1.0	0.097	ug/L			09/24/13 11:23	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			09/24/13 11:23	1
Tetrachloroethene	ND				1.0	0.15	ug/L			09/24/13 11:23	1
Toluene	ND				1.0	0.15	ug/L			09/24/13 11:23	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			09/24/13 11:23	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			09/24/13 11:23	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			09/24/13 11:23	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			09/24/13 11:23	1
Trichloroethene	ND				1.0	0.14	ug/L			09/24/13 11:23	1
Vinyl chloride	ND				1.0	0.23	ug/L			09/24/13 11:23	1
Xylenes, Total	ND				3.0	0.49	ug/L			09/24/13 11:23	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	Result	Qualifier							
4-Bromofluorobenzene (Surr)	99		99		70 - 118			09/24/13 11:23	1
Dibromofluoromethane (Surr)	86		86		70 - 128			09/24/13 11:23	1
1,2-Dichloroethane-d4 (Surr)	82		82		64 - 135			09/24/13 11:23	1
Toluene-d8 (Surr)	90		90		71 - 118			09/24/13 11:23	1

**Lab Sample ID: LCS 180-84605/6**

**Matrix: Water**

**Analysis Batch: 84605**

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

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	
	Added	Result	Qualifier							
Acetone	10.0	9.96				ug/L		100	22 - 150	
Benzene	10.0	10.6				ug/L		106	80 - 120	
Bromoform	10.0	9.39				ug/L		94	46 - 150	
Bromomethane	10.0	10.1				ug/L		101	33 - 150	
2-Butanone	10.0	8.15				ug/L		81	39 - 138	
Carbon disulfide	10.0	10.6				ug/L		106	54 - 132	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

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

**Lab Sample ID: LCS 180-84605/6**

**Matrix: Water**

**Analysis Batch: 84605**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Carbon tetrachloride	10.0	10.9		ug/L		109	55 - 150
Chlorobenzene	10.0	10.6		ug/L		106	80 - 120
Chlorodibromomethane	10.0	9.57		ug/L		96	60 - 140
Chloroethane	10.0	10.7		ug/L		107	36 - 142
Chloroform	10.0	10.1		ug/L		101	72 - 127
Chloromethane	10.0	10.8		ug/L		108	50 - 139
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	70 - 120
cis-1,3-Dichloropropene	10.0	9.42		ug/L		94	66 - 120
Dichlorobromomethane	10.0	9.63		ug/L		96	66 - 130
1,1-Dichloroethane	10.0	10.9		ug/L		109	73 - 126
1,2-Dichloroethane	10.0	9.27		ug/L		93	68 - 132
1,1-Dichloroethene	10.0	10.8		ug/L		108	65 - 136
1,2-Dichloropropane	10.0	10.3		ug/L		103	76 - 124
Ethylbenzene	10.0	10.9		ug/L		109	72 - 126
2-Hexanone	10.0	7.37		ug/L		74	25 - 132
Methylene Chloride	10.0	9.55		ug/L		95	63 - 129
4-Methyl-2-pentanone	10.0	8.24		ug/L		82	45 - 145
Styrene	10.0	10.3		ug/L		103	71 - 127
1,1,2,2-Tetrachloroethane	10.0	9.42		ug/L		94	62 - 125
Tetrachloroethene	10.0	10.9		ug/L		109	70 - 135
Toluene	10.0	11.2		ug/L		112	80 - 123
trans-1,2-Dichloroethene	10.0	11.2		ug/L		112	73 - 126
trans-1,3-Dichloropropene	10.0	10.7		ug/L		107	65 - 125
1,1,1-Trichloroethane	10.0	10.9		ug/L		109	63 - 133
1,1,2-Trichloroethane	10.0	9.85		ug/L		98	77 - 127
Trichloroethene	10.0	10.8		ug/L		108	73 - 120
Vinyl chloride	10.0	10.8		ug/L		108	53 - 138
Xylenes, Total	20.0	21.7		ug/L		108	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	89		70 - 118
Dibromofluoromethane (Surr)	82		70 - 128
1,2-Dichloroethane-d4 (Surr)	84		64 - 135
Toluene-d8 (Surr)	91		71 - 118

## Method: 200.7 - Metals (Custom List)

**Lab Sample ID: MB 180-83788/1-A**

**Matrix: Water**

**Analysis Batch: 84248**

**Client Sample ID: Method Blank**

**Prep Type: Total Recoverable**

**Prep Batch: 83788**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	31.9	J	200	16	ug/L		09/17/13 11:07	09/20/13 11:16	1
Iron	18.7	J	100	8.5	ug/L		09/17/13 11:07	09/20/13 11:16	1
Zinc	1.29	J	20	1.0	ug/L		09/17/13 11:07	09/20/13 11:16	1

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# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

## Method: 200.7 - Metals (Custom List) (Continued)

**Lab Sample ID: LCS 180-83788/2-A**

**Matrix: Water**

**Analysis Batch: 84248**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 83788**

Analyte	Spike Added	LCS	LCS				%Rec.	
		Result	Qualifier	Unit	D	%Rec	Limits	
Aluminum	2000	2110		ug/L		106	85 - 115	
Iron	1000	1070		ug/L		107	85 - 115	
Zinc	500	529		ug/L		106	85 - 115	

**Lab Sample ID: 180-25103-1 MS**

**Matrix: Water**

**Analysis Batch: 84248**

**Client Sample ID: EFFLUENT**

**Prep Type: Total Recoverable**

**Prep Batch: 83788**

Analyte	Sample	Sample	Spike	MS	MS				%Rec.	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Aluminum	ND		2000	2080		ug/L		104	70 - 130	
Iron	130	B	1000	1160		ug/L		103	70 - 130	
Zinc	9.5	J B	500	517		ug/L		101	70 - 130	

**Lab Sample ID: 180-25103-1 MSD**

**Matrix: Water**

**Analysis Batch: 84248**

**Client Sample ID: EFFLUENT**

**Prep Type: Total Recoverable**

**Prep Batch: 83788**

Analyte	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aluminum	ND		2000	2120		ug/L		106	70 - 130	2	20
Iron	130	B	1000	1180		ug/L		105	70 - 130	2	20
Zinc	9.5	J B	500	521		ug/L		102	70 - 130	1	20

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 180-83856/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 83857**

**Prep Batch: 83856**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
HEM (Oil and Grease)	ND		5.0	1.5	mg/L		09/17/13 18:24	09/17/13 18:24	1

**Lab Sample ID: LCS 180-83856/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 83857**

**Prep Batch: 83856**

Analyte	Spike	LCS	LCS				%Rec.	
	Added	Result	Qualifier	Unit	D	%Rec	Limits	
HEM (Oil and Grease)	40.0	34.9		mg/L		87	78 - 114	

**Lab Sample ID: LCSD 180-83856/3-A**

**Client Sample ID: Lab Control Sample Dup**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 83857**

**Prep Batch: 83856**

Analyte	Spike	LCSD	LCSD				%Rec.		RPD
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
HEM (Oil and Grease)	40.0	32.3		mg/L		81	78 - 114	8	18

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 180-83825/1

Matrix: Water

Analysis Batch: 83825

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec. Limits
pH	7.00	7.020		SU		100	99 - 101

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

## GC/MS VOA

### Analysis Batch: 84499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-25103-1	EFFLUENT	Total/NA	Water	8260B	
180-25103-4	TRIP BLANK	Total/NA	Water	8260B	
LCS 180-84499/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-84499/3	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 84605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-25103-2 - DL	MW2	Total/NA	Water	8260B	
180-25103-2	MW2	Total/NA	Water	8260B	
180-25103-3	MW14	Total/NA	Water	8260B	
LCS 180-84605/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-84605/3	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 83788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-25103-1	EFFLUENT	Total Recoverable	Water	200.7	
180-25103-1 MS	EFFLUENT	Total Recoverable	Water	200.7	
180-25103-1 MSD	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-83788/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-83788/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 84248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-25103-1	EFFLUENT	Total Recoverable	Water	200.7	83788
180-25103-1 MS	EFFLUENT	Total Recoverable	Water	200.7	83788
180-25103-1 MSD	EFFLUENT	Total Recoverable	Water	200.7	83788
LCS 180-83788/2-A	Lab Control Sample	Total Recoverable	Water	200.7	83788
MB 180-83788/1-A	Method Blank	Total Recoverable	Water	200.7	83788

## General Chemistry

### Analysis Batch: 83825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-25103-1	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-83825/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 83856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-25103-1	EFFLUENT	Total/NA	Water	1664A	
LCS 180-83856/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-83856/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-83856/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 83857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-25103-1	EFFLUENT	Total/NA	Water	1664A	83856
LCS 180-83856/2-A	Lab Control Sample	Total/NA	Water	1664A	83856
LCSD 180-83856/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	83856

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-25103-1

## General Chemistry (Continued)

### Analysis Batch: 83857 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-83856/1-A	Method Blank	Total/NA	Water	1664A	83856

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**TestAmerica Pittsburgh**  
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Pittsburgh, PA 15238  
Phone (412) 963-7058 Fax (412) 963-2468

## Chain of Custody Record

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Sample # <b>Chuck Becker</b>		Lab P.M. Dunlap, David A.	Carmer Tracking No(s): 180-1-2966-31-1																														
Client Contact: Patty Lundin	Phone: (716) 922-9108	E-Mail: dave.dunlap@testamericainc.com	Page: Page 1 of 1	Job #:																															
<b>Analysis Requested</b>  <input checked="" type="checkbox"/> Date Requested: <input type="checkbox"/> TAT Requested (days):  <input type="checkbox"/> Purchase Order not required <input type="checkbox"/> WO #:  <input type="checkbox"/> Project #: 18006934 <input type="checkbox"/> SSOW #:  <input type="checkbox"/> Total Number of Containers:  <input type="checkbox"/> Preservation Codes:  <input type="checkbox"/> M - Hexane <input type="checkbox"/> N - None <input type="checkbox"/> O - AsNaO2 <input type="checkbox"/> P - Na2O4S <input type="checkbox"/> Q - Na2SCo3 <input type="checkbox"/> R - Na2SzSO3 <input type="checkbox"/> S - H2SO4 <input type="checkbox"/> T - TSP Dodecahydrate <input type="checkbox"/> U - Acetone <input type="checkbox"/> V - MCA <input type="checkbox"/> W - pH 4-5 <input type="checkbox"/> Z - other (specify): Other:  <input type="checkbox"/> Special Instructions/Note:  <input type="checkbox"/> 1864A - HEM (Oil and Grease) <input type="checkbox"/> 200-7 - ICP Metals (Al,Fe,Zn) <input type="checkbox"/> 8280B - LL - TCL 32 - Low Level <input type="checkbox"/> SM4600 - H+ - pH  <input type="checkbox"/> Protection WS/MSD (Yes or No): <input checked="" type="checkbox"/> Field Trifilter Sample (Yes or No): <input checked="" type="checkbox"/> Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Lab Filtered Sample (Yes or No):  <input type="checkbox"/> Sample Identification  <table border="1"> <thead> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Matrix (H-water, Snow/soil, Oil/Water, BTR/Tissue, As/Au)</th> <th>Preservation Codes</th> </tr> </thead> <tbody> <tr> <td>MW 2</td> <td>9/12/13</td> <td>6:45</td> <td>G</td> <td>H</td> <td>NN 3</td> </tr> <tr> <td>MW 4/</td> <td>9/12/13</td> <td>8:00</td> <td>G</td> <td>H</td> <td>NN 3</td> </tr> <tr> <td><b>EFFLUENT</b></td> <td>9/12/13</td> <td>9:00</td> <td>G</td> <td>H</td> <td>NN 3 / 1 2</td> </tr> <tr> <td colspan="6"><i>also received a triplicate for volatiles 9/13/13</i></td> </tr> </tbody> </table>						Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (H-water, Snow/soil, Oil/Water, BTR/Tissue, As/Au)	Preservation Codes	MW 2	9/12/13	6:45	G	H	NN 3	MW 4/	9/12/13	8:00	G	H	NN 3	<b>EFFLUENT</b>	9/12/13	9:00	G	H	NN 3 / 1 2	<i>also received a triplicate for volatiles 9/13/13</i>					
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (H-water, Snow/soil, Oil/Water, BTR/Tissue, As/Au)	Preservation Codes																														
MW 2	9/12/13	6:45	G	H	NN 3																														
MW 4/	9/12/13	8:00	G	H	NN 3																														
<b>EFFLUENT</b>	9/12/13	9:00	G	H	NN 3 / 1 2																														
<i>also received a triplicate for volatiles 9/13/13</i>																																			
<input type="checkbox"/> Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological  <input type="checkbox"/> Deliverable Requested: I, II, III, IV, Other (specify):  <input type="checkbox"/> Empty Kit Reinquished by: <input checked="" type="checkbox"/> Chuck Becker <input type="checkbox"/> Reinquished by: <input type="checkbox"/> Reinquished by:  <input type="checkbox"/> Custody Seals intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Cooler Temperature(s): °C and Other Remarks:  <input type="checkbox"/> Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months  <input type="checkbox"/> Special Instructions/QC Requirements:  <input type="checkbox"/> Method of Shipment  <input type="checkbox"/> Received by: <i>John</i> Date/Time: <i>9/13/13 09:00</i> Company: <i>TestAmerica Inc.</i> <input type="checkbox"/> Received by: Date/Time: Company: <i>TestAmerica Inc.</i> <input type="checkbox"/> Received by: Date/Time: Company: <i>TestAmerica Inc.</i>  <input type="checkbox"/> Cooler Temperature(s): °C and Other Remarks:  <input type="checkbox"/> Custody Seal No.: <input type="checkbox"/> □ Yes <input type="checkbox"/> □ No																																			

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## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-25103-1

**Login Number: 25103**

**List Source: TestAmerica Pittsburgh**

**List Number: 1**

**Creator: Dunlap, David A**

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	
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.	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").	True	
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 Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-26139-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

10/31/2013 8:53:30 AM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

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The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

### Job ID: 180-26139-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-26139-1

#### Receipt

The samples were received on 10/17/2013 1:28 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): TRIP BLANK (180-26139-4). Notation was made to the COC.

#### GC/MS VOA

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-26139-1) and MW14 (180-26139-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

## Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

#### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

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## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-13 *
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-14
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-26139-1	MW2	Water	10/16/13 07:00	10/17/13 13:28
180-26139-2	MW14	Water	10/16/13 08:00	10/17/13 13:28
180-26139-3	EFFLUENT	Water	10/16/13 10:00	10/17/13 13:28
180-26139-4	TRIP BLANK	Water	10/16/13 00:00	10/17/13 13:28

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TestAmerica Pittsburgh

## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664A	HEM and SGT-HEM	1664A	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

## Client Sample ID: MW2

Date Collected: 10/16/13 07:00  
Date Received: 10/17/13 13:28

Lab Sample ID: 180-26139-1  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	87757	10/24/13 21:17	DLF	TAL PIT
		Instrument ID: HP6								
Total/NA	Analysis	8260B		500	5 mL	5 mL	88237	10/29/13 22:48	JER	TAL PIT
		Instrument ID: HP5								

## Client Sample ID: MW14

Date Collected: 10/16/13 08:00  
Date Received: 10/17/13 13:28

Lab Sample ID: 180-26139-2  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	5 mL	5 mL	87757	10/24/13 21:41	DLF	TAL PIT
		Instrument ID: HP6								

## Client Sample ID: EFFLUENT

Date Collected: 10/16/13 10:00  
Date Received: 10/17/13 13:28

Lab Sample ID: 180-26139-3  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	87918	10/25/13 18:12	DLF	TAL PIT
		Instrument ID: HP5								
Total Recoverable	Analysis	200.7		1	50 mL	50 mL	87541	10/22/13 14:14	RJR	TAL PIT
		Instrument ID: Q								
Total Recoverable	Prep	200.7			50 mL	50 mL	87327	10/21/13 12:34	CEH	TAL PIT
Total Recoverable	Analysis	200.7		1	50 mL	50 mL	87653	10/23/13 13:21	RJR	TAL PIT
		Instrument ID: Q								
Total/NA	Analysis	SM 4500 H+ B		1		50 mL	87484	10/22/13 16:01	ALF	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	1664A			870 mL	1000 mL	87470	10/22/13 13:02	MTW	TAL PIT
Total/NA	Analysis	1664A		1	870 mL	1000 mL	87506	10/22/13 13:02	MTW	TAL PIT
		Instrument ID: NOEQUIP								

## Client Sample ID: TRIP BLANK

Date Collected: 10/16/13 00:00  
Date Received: 10/17/13 13:28

Lab Sample ID: 180-26139-4  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	87918	10/25/13 12:10	DLF	TAL PIT
		Instrument ID: HP5								

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CEH = Caitlyn Haluck

MTW = Michael Wesoloski

Batch Type: Analysis

ALF = Ato Foulland

DLF = Donald Ferguson

JER = Jessica Ryan

MTW = Michael Wesoloski

RJR = Ron Rosenbaum

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# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

**Client Sample ID: MW2**

Date Collected: 10/16/13 07:00

Date Received: 10/17/13 13:28

**Lab Sample ID: 180-26139-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			10/29/13 22:48	500
Benzene	ND		500	53	ug/L			10/29/13 22:48	500
Bromoform	ND		500	96	ug/L			10/29/13 22:48	500
Bromomethane	ND		500	160	ug/L			10/29/13 22:48	500
2-Butanone	ND		2500	270	ug/L			10/29/13 22:48	500
Carbon disulfide	ND		500	110	ug/L			10/29/13 22:48	500
Carbon tetrachloride	ND		500	68	ug/L			10/29/13 22:48	500
Chlorobenzene	ND		500	68	ug/L			10/29/13 22:48	500
Chlorodibromomethane	ND		500	68	ug/L			10/29/13 22:48	500
Chloroethane	ND		500	110	ug/L			10/29/13 22:48	500
<b>Chloroform</b>	<b>95 J B</b>		500	85	ug/L			10/29/13 22:48	500
Chloromethane	ND		500	140	ug/L			10/29/13 22:48	500
<b>cis-1,2-Dichloroethene</b>	<b>110000 E</b>		500	120	ug/L			10/29/13 22:48	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			10/29/13 22:48	500
Dichlorobromomethane	ND		500	65	ug/L			10/29/13 22:48	500
1,1-Dichloroethane	ND		500	58	ug/L			10/29/13 22:48	500
1,2-Dichloroethane	ND		500	110	ug/L			10/29/13 22:48	500
<b>1,1-Dichloroethene</b>	<b>230 J</b>		500	150	ug/L			10/29/13 22:48	500
1,2-Dichloropropane	ND		500	47	ug/L			10/29/13 22:48	500
Ethylbenzene	ND		500	110	ug/L			10/29/13 22:48	500
2-Hexanone	ND		2500	80	ug/L			10/29/13 22:48	500
Methylene Chloride	ND		500	63	ug/L			10/29/13 22:48	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			10/29/13 22:48	500
Styrene	ND		500	48	ug/L			10/29/13 22:48	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			10/29/13 22:48	500
Tetrachloroethene	ND		500	74	ug/L			10/29/13 22:48	500
Toluene	ND		500	75	ug/L			10/29/13 22:48	500
<b>trans-1,2-Dichloroethene</b>	<b>180 J</b>		500	85	ug/L			10/29/13 22:48	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			10/29/13 22:48	500
1,1,1-Trichloroethane	ND		500	140	ug/L			10/29/13 22:48	500
1,1,2-Trichloroethane	ND		500	100	ug/L			10/29/13 22:48	500
Trichloroethene	ND		500	72	ug/L			10/29/13 22:48	500
<b>Vinyl chloride</b>	<b>18000</b>		500	110	ug/L			10/29/13 22:48	500
Xylenes, Total	ND		1500	240	ug/L			10/29/13 22:48	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	89			70 - 118				10/29/13 22:48	500
Dibromofluoromethane (Surr)	112			70 - 128				10/29/13 22:48	500
1,2-Dichloroethane-d4 (Surr)	117			64 - 135				10/29/13 22:48	500
Toluene-d8 (Surr)	100			71 - 118				10/29/13 22:48	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			10/24/13 21:17	5000
Benzene	ND		5000	530	ug/L			10/24/13 21:17	5000
Bromoform	ND		5000	960	ug/L			10/24/13 21:17	5000
Bromomethane	ND		5000	1600	ug/L			10/24/13 21:17	5000
2-Butanone	ND		25000	2700	ug/L			10/24/13 21:17	5000
Carbon disulfide	ND		5000	1100	ug/L			10/24/13 21:17	5000
Carbon tetrachloride	ND		5000	680	ug/L			10/24/13 21:17	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

**Client Sample ID: MW2**

**Date Collected: 10/16/13 07:00**

**Date Received: 10/17/13 13:28**

**Lab Sample ID: 180-26139-1**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds by GC/MS (Low Level) - DL (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5000	680	ug/L			10/24/13 21:17	5000
Chlorodibromomethane	ND		5000	680	ug/L			10/24/13 21:17	5000
Chloroethane	ND		5000	1100	ug/L			10/24/13 21:17	5000
<b>Chloroform</b>	<b>1100</b>	<b>J B</b>	5000	850	ug/L			10/24/13 21:17	5000
Chloromethane	ND		5000	1400	ug/L			10/24/13 21:17	5000
<b>cis-1,2-Dichloroethene</b>	<b>100000</b>		5000	1200	ug/L			10/24/13 21:17	5000
cis-1,3-Dichloropropene	ND		5000	930	ug/L			10/24/13 21:17	5000
Dichlorobromomethane	ND		5000	650	ug/L			10/24/13 21:17	5000
1,1-Dichloroethane	ND		5000	580	ug/L			10/24/13 21:17	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			10/24/13 21:17	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			10/24/13 21:17	5000
1,2-Dichloropropane	ND		5000	470	ug/L			10/24/13 21:17	5000
Ethylbenzene	ND		5000	1100	ug/L			10/24/13 21:17	5000
2-Hexanone	ND		25000	800	ug/L			10/24/13 21:17	5000
<b>Methylene Chloride</b>	<b>1300</b>	<b>J B</b>	5000	630	ug/L			10/24/13 21:17	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			10/24/13 21:17	5000
Styrene	ND		5000	480	ug/L			10/24/13 21:17	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			10/24/13 21:17	5000
Tetrachloroethene	ND		5000	740	ug/L			10/24/13 21:17	5000
Toluene	ND		5000	750	ug/L			10/24/13 21:17	5000
trans-1,2-Dichloroethene	ND		5000	850	ug/L			10/24/13 21:17	5000
trans-1,3-Dichloropropene	ND		5000	740	ug/L			10/24/13 21:17	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			10/24/13 21:17	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			10/24/13 21:17	5000
Trichloroethene	ND		5000	720	ug/L			10/24/13 21:17	5000
<b>Vinyl chloride</b>	<b>20000</b>		5000	1100	ug/L			10/24/13 21:17	5000
Xylenes, Total	ND		15000	2400	ug/L			10/24/13 21:17	5000
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 118					10/24/13 21:17	5000
Dibromofluoromethane (Surr)	103		70 - 128					10/24/13 21:17	5000
1,2-Dichloroethane-d4 (Surr)	112		64 - 135					10/24/13 21:17	5000
Toluene-d8 (Surr)	92		71 - 118					10/24/13 21:17	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

**Client Sample ID: MW14**

**Lab Sample ID: 180-26139-2**

Date Collected: 10/16/13 08:00

Matrix: Water

Date Received: 10/17/13 13:28

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			10/24/13 21:41	500
Benzene	ND		500	53	ug/L			10/24/13 21:41	500
Bromoform	ND		500	96	ug/L			10/24/13 21:41	500
Bromomethane	ND		500	160	ug/L			10/24/13 21:41	500
2-Butanone	ND		2500	270	ug/L			10/24/13 21:41	500
Carbon disulfide	ND		500	110	ug/L			10/24/13 21:41	500
Carbon tetrachloride	ND		500	68	ug/L			10/24/13 21:41	500
Chlorobenzene	ND		500	68	ug/L			10/24/13 21:41	500
Chlorodibromomethane	ND		500	68	ug/L			10/24/13 21:41	500
Chloroethane	ND		500	110	ug/L			10/24/13 21:41	500
<b>Chloroform</b>	<b>94 JB</b>		500	85	ug/L			10/24/13 21:41	500
Chloromethane	ND		500	140	ug/L			10/24/13 21:41	500
<b>cis-1,2-Dichloroethene</b>	<b>6800</b>		500	120	ug/L			10/24/13 21:41	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			10/24/13 21:41	500
Dichlorobromomethane	ND		500	65	ug/L			10/24/13 21:41	500
1,1-Dichloroethane	ND		500	58	ug/L			10/24/13 21:41	500
1,2-Dichloroethane	ND		500	110	ug/L			10/24/13 21:41	500
1,1-Dichloroethene	ND		500	150	ug/L			10/24/13 21:41	500
1,2-Dichloropropane	ND		500	47	ug/L			10/24/13 21:41	500
Ethylbenzene	ND		500	110	ug/L			10/24/13 21:41	500
2-Hexanone	ND		2500	80	ug/L			10/24/13 21:41	500
<b>Methylene Chloride</b>	<b>150 JB</b>		500	63	ug/L			10/24/13 21:41	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			10/24/13 21:41	500
Styrene	ND		500	48	ug/L			10/24/13 21:41	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			10/24/13 21:41	500
Tetrachloroethene	ND		500	74	ug/L			10/24/13 21:41	500
Toluene	ND		500	75	ug/L			10/24/13 21:41	500
trans-1,2-Dichloroethene	ND		500	85	ug/L			10/24/13 21:41	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			10/24/13 21:41	500
1,1,1-Trichloroethane	ND		500	140	ug/L			10/24/13 21:41	500
1,1,2-Trichloroethane	ND		500	100	ug/L			10/24/13 21:41	500
<b>Trichloroethene</b>	<b>3100</b>		500	72	ug/L			10/24/13 21:41	500
Vinyl chloride	ND		500	110	ug/L			10/24/13 21:41	500
Xylenes, Total	ND		1500	240	ug/L			10/24/13 21:41	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 118			500
Dibromofluoromethane (Surr)	100		70 - 128			500
1,2-Dichloroethane-d4 (Surr)	106		64 - 135			500
Toluene-d8 (Surr)	92		71 - 118			500

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

**Client Sample ID: EFFLUENT****Lab Sample ID: 180-26139-3**

Matrix: Water

Date Collected: 10/16/13 10:00

Date Received: 10/17/13 13:28

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			10/25/13 18:12	1
Benzene	ND		1.0	0.11	ug/L			10/25/13 18:12	1
<b>Bromoform</b>	<b>2.6</b>		1.0	0.19	ug/L			10/25/13 18:12	1
Bromomethane	ND		1.0	0.31	ug/L			10/25/13 18:12	1
2-Butanone	ND		5.0	0.55	ug/L			10/25/13 18:12	1
Carbon disulfide	ND		1.0	0.21	ug/L			10/25/13 18:12	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			10/25/13 18:12	1
Chlorobenzene	ND		1.0	0.14	ug/L			10/25/13 18:12	1
<b>Chlorodibromomethane</b>	<b>1.1</b>		1.0	0.14	ug/L			10/25/13 18:12	1
Chloroethane	ND		1.0	0.21	ug/L			10/25/13 18:12	1
Chloroform	ND		1.0	0.17	ug/L			10/25/13 18:12	1
Chloromethane	ND		1.0	0.28	ug/L			10/25/13 18:12	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			10/25/13 18:12	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			10/25/13 18:12	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			10/25/13 18:12	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			10/25/13 18:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/25/13 18:12	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			10/25/13 18:12	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			10/25/13 18:12	1
Ethylbenzene	ND		1.0	0.23	ug/L			10/25/13 18:12	1
2-Hexanone	ND		5.0	0.16	ug/L			10/25/13 18:12	1
Methylene Chloride	ND		1.0	0.13	ug/L			10/25/13 18:12	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			10/25/13 18:12	1
Styrene	ND		1.0	0.097	ug/L			10/25/13 18:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			10/25/13 18:12	1
Tetrachloroethene	ND		1.0	0.15	ug/L			10/25/13 18:12	1
Toluene	ND		1.0	0.15	ug/L			10/25/13 18:12	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			10/25/13 18:12	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			10/25/13 18:12	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			10/25/13 18:12	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			10/25/13 18:12	1
Trichloroethene	ND		1.0	0.14	ug/L			10/25/13 18:12	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/13 18:12	1
Xylenes, Total	ND		3.0	0.49	ug/L			10/25/13 18:12	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	84		70 - 118					10/25/13 18:12	1
Dibromofluoromethane (Surr)	121		70 - 128					10/25/13 18:12	1
1,2-Dichloroethane-d4 (Surr)	127		64 - 135					10/25/13 18:12	1
Toluene-d8 (Surr)	98		71 - 118					10/25/13 18:12	1

**Method: 200.7 - Metals (Custom List) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aluminum</b>	<b>150</b>	<b>J</b>	200	16	ug/L		10/21/13 12:34	10/23/13 13:21	1
<b>Iron</b>	<b>14000</b>	<b>B</b>	100	8.5	ug/L		10/21/13 12:34	10/23/13 13:21	1
<b>Zinc</b>	<b>31</b>	<b>B</b>	20	1.0	ug/L		10/21/13 12:34	10/22/13 14:14	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>HEM (Oil and Grease)</b>	<b>2.2</b>	<b>J</b>	5.7	1.7	mg/L		10/22/13 13:02	10/22/13 13:02	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

**Client Sample ID: EFFLUENT**  
**Date Collected: 10/16/13 10:00**  
**Date Received: 10/17/13 13:28**

**Lab Sample ID: 180-26139-3**  
**Matrix: Water**

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.35	HF	0.100	0.100	SU			10/22/13 16:01	1

1

2

3

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11

12

13

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 180-26139-4**

**Matrix: Water**

Date Collected: 10/16/13 00:00

Date Received: 10/17/13 13:28

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			10/25/13 12:10	1
Benzene	ND		1.0	0.11	ug/L			10/25/13 12:10	1
Bromoform	ND		1.0	0.19	ug/L			10/25/13 12:10	1
Bromomethane	ND		1.0	0.31	ug/L			10/25/13 12:10	1
2-Butanone	ND		5.0	0.55	ug/L			10/25/13 12:10	1
Carbon disulfide	ND		1.0	0.21	ug/L			10/25/13 12:10	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			10/25/13 12:10	1
Chlorobenzene	ND		1.0	0.14	ug/L			10/25/13 12:10	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			10/25/13 12:10	1
Chloroethane	ND		1.0	0.21	ug/L			10/25/13 12:10	1
<b>Chloroform</b>	<b>0.21</b>	<b>J B</b>	1.0	0.17	ug/L			10/25/13 12:10	1
Chloromethane	ND		1.0	0.28	ug/L			10/25/13 12:10	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			10/25/13 12:10	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			10/25/13 12:10	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			10/25/13 12:10	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			10/25/13 12:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/25/13 12:10	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			10/25/13 12:10	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			10/25/13 12:10	1
Ethylbenzene	ND		1.0	0.23	ug/L			10/25/13 12:10	1
2-Hexanone	ND		5.0	0.16	ug/L			10/25/13 12:10	1
<b>Methylene Chloride</b>	<b>3.3</b>		1.0	0.13	ug/L			10/25/13 12:10	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			10/25/13 12:10	1
Styrene	ND		1.0	0.097	ug/L			10/25/13 12:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			10/25/13 12:10	1
Tetrachloroethene	ND		1.0	0.15	ug/L			10/25/13 12:10	1
Toluene	ND		1.0	0.15	ug/L			10/25/13 12:10	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			10/25/13 12:10	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			10/25/13 12:10	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			10/25/13 12:10	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			10/25/13 12:10	1
Trichloroethene	ND		1.0	0.14	ug/L			10/25/13 12:10	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/13 12:10	1
Xylenes, Total	ND		3.0	0.49	ug/L			10/25/13 12:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	85		70 - 118				10/25/13 12:10	1	
Dibromofluoromethane (Surr)	113		70 - 128				10/25/13 12:10	1	
1,2-Dichloroethane-d4 (Surr)	125		64 - 135				10/25/13 12:10	1	
Toluene-d8 (Surr)	98		71 - 118				10/25/13 12:10	1	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

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

**Lab Sample ID:** MB 180-87757/3

**Matrix:** Water

**Analysis Batch:** 87757

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Acetone	ND		1	5.0	2.5	ug/L		10/24/13 11:19	
Benzene	ND		1	1.0	0.11	ug/L		10/24/13 11:19	
Bromoform	ND		1	1.0	0.19	ug/L		10/24/13 11:19	
Bromomethane	ND		1	1.0	0.31	ug/L		10/24/13 11:19	
2-Butanone	ND		1	5.0	0.55	ug/L		10/24/13 11:19	
Carbon disulfide	ND		1	1.0	0.21	ug/L		10/24/13 11:19	
Carbon tetrachloride	ND		1	1.0	0.14	ug/L		10/24/13 11:19	
Chlorobenzene	ND		1	1.0	0.14	ug/L		10/24/13 11:19	
Chlorodibromomethane	ND		1	1.0	0.14	ug/L		10/24/13 11:19	
Chloroethane	ND		1	1.0	0.21	ug/L		10/24/13 11:19	
Chloroform	0.642	J	1	1.0	0.17	ug/L		10/24/13 11:19	
Chloromethane	ND		1	1.0	0.28	ug/L		10/24/13 11:19	
cis-1,2-Dichloroethene	ND		1	1.0	0.24	ug/L		10/24/13 11:19	
cis-1,3-Dichloropropene	ND		1	1.0	0.19	ug/L		10/24/13 11:19	
Dichlorobromomethane	ND		1	1.0	0.13	ug/L		10/24/13 11:19	
1,1-Dichloroethane	ND		1	1.0	0.12	ug/L		10/24/13 11:19	
1,2-Dichloroethane	ND		1	1.0	0.21	ug/L		10/24/13 11:19	
1,1-Dichloroethene	ND		1	1.0	0.30	ug/L		10/24/13 11:19	
1,2-Dichloropropane	ND		1	1.0	0.095	ug/L		10/24/13 11:19	
Ethylbenzene	ND		1	1.0	0.23	ug/L		10/24/13 11:19	
2-Hexanone	ND		1	5.0	0.16	ug/L		10/24/13 11:19	
Methylene Chloride	0.137	J	1	1.0	0.13	ug/L		10/24/13 11:19	
4-Methyl-2-pentanone	ND		1	5.0	0.53	ug/L		10/24/13 11:19	
Styrene	ND		1	1.0	0.097	ug/L		10/24/13 11:19	
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.20	ug/L		10/24/13 11:19	
Tetrachloroethene	ND		1	1.0	0.15	ug/L		10/24/13 11:19	
Toluene	ND		1	1.0	0.15	ug/L		10/24/13 11:19	
trans-1,2-Dichloroethene	ND		1	1.0	0.17	ug/L		10/24/13 11:19	
trans-1,3-Dichloropropene	ND		1	1.0	0.15	ug/L		10/24/13 11:19	
1,1,1-Trichloroethane	ND		1	1.0	0.29	ug/L		10/24/13 11:19	
1,1,2-Trichloroethane	ND		1	1.0	0.20	ug/L		10/24/13 11:19	
Trichloroethene	ND		1	1.0	0.14	ug/L		10/24/13 11:19	
Vinyl chloride	ND		1	1.0	0.23	ug/L		10/24/13 11:19	
Xylenes, Total	ND		1	3.0	0.49	ug/L		10/24/13 11:19	

Surrogate	MB	MB	Dil Fac				
	%Recovery	Qualifier		Limits	Prepared	Analyzed	
4-Bromofluorobenzene (Surr)	88		1	70 - 118		10/24/13 11:19	
Dibromofluoromethane (Surr)	100		1	70 - 128		10/24/13 11:19	
1,2-Dichloroethane-d4 (Surr)	108		1	64 - 135		10/24/13 11:19	
Toluene-d8 (Surr)	94		1	71 - 118		10/24/13 11:19	

**Lab Sample ID:** LCS 180-87757/6

**Matrix:** Water

**Analysis Batch:** 87757

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

Analyte	Spike		LCS	LCS	Unit	D	%Rec.	Limits
	Added		Result	Qualifier				
Acetone			10.0		12.0		120	22 - 150
Benzene			10.0		11.0		110	80 - 120

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

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

Lab Sample ID: LCS 180-87757/6

Matrix: Water

Analysis Batch: 87757

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Bromoform	10.0	9.82		ug/L	98	46 - 150	
Bromomethane	10.0	12.5		ug/L	125	33 - 150	
2-Butanone	10.0	11.4		ug/L	114	39 - 138	
Carbon disulfide	10.0	10.2		ug/L	102	54 - 132	
Carbon tetrachloride	10.0	11.2		ug/L	112	55 - 150	
Chlorobenzene	10.0	10.9		ug/L	109	80 - 120	
Chlorodibromomethane	10.0	10.4		ug/L	104	60 - 140	
Chloroethane	10.0	13.2		ug/L	132	36 - 142	
Chloroform	10.0	11.0		ug/L	110	72 - 127	
Chloromethane	10.0	11.5		ug/L	115	50 - 139	
cis-1,2-Dichloroethene	10.0	10.6		ug/L	106	70 - 120	
cis-1,3-Dichloropropene	10.0	8.79		ug/L	88	66 - 120	
Dichlorobromomethane	10.0	10.3		ug/L	103	66 - 130	
1,1-Dichloroethane	10.0	11.5		ug/L	115	73 - 126	
1,2-Dichloroethane	10.0	11.4		ug/L	114	68 - 132	
1,1-Dichloroethene	10.0	10.7		ug/L	107	65 - 136	
1,2-Dichloropropane	10.0	11.3		ug/L	113	76 - 124	
Ethylbenzene	10.0	10.7		ug/L	107	72 - 126	
2-Hexanone	10.0	7.57		ug/L	76	25 - 132	
Methylene Chloride	10.0	10.0		ug/L	100	63 - 129	
4-Methyl-2-pentanone	10.0	8.60		ug/L	86	45 - 145	
Styrene	10.0	10.4		ug/L	104	71 - 127	
1,1,2,2-Tetrachloroethane	10.0	9.87		ug/L	99	62 - 125	
Tetrachloroethene	10.0	11.5		ug/L	115	70 - 135	
Toluene	10.0	10.7		ug/L	107	80 - 123	
trans-1,2-Dichloroethene	10.0	11.7		ug/L	117	73 - 126	
trans-1,3-Dichloropropene	10.0	8.82		ug/L	88	65 - 125	
1,1,1-Trichloroethane	10.0	10.7		ug/L	107	63 - 133	
1,1,2-Trichloroethane	10.0	10.5		ug/L	105	77 - 127	
Trichloroethene	10.0	11.8		ug/L	118	73 - 120	
Vinyl chloride	10.0	11.7		ug/L	117	53 - 138	
Xylenes, Total	20.0	20.9		ug/L	105	76 - 128	

### LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 118
Dibromofluoromethane (Surr)	102		70 - 128
1,2-Dichloroethane-d4 (Surr)	105		64 - 135
Toluene-d8 (Surr)	99		71 - 118

Lab Sample ID: MB 180-87918/4

Matrix: Water

Analysis Batch: 87918

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			10/25/13 10:59	1
Benzene	ND		1.0	0.11	ug/L			10/25/13 10:59	1
Bromoform	ND		1.0	0.19	ug/L			10/25/13 10:59	1
Bromomethane	ND		1.0	0.31	ug/L			10/25/13 10:59	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

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

**Lab Sample ID: MB 180-87918/4**

**Matrix: Water**

**Analysis Batch: 87918**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
2-Butanone	ND				5.0	0.55	ug/L			10/25/13 10:59	1
Carbon disulfide	ND				1.0	0.21	ug/L			10/25/13 10:59	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			10/25/13 10:59	1
Chlorobenzene	ND				1.0	0.14	ug/L			10/25/13 10:59	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			10/25/13 10:59	1
Chloroethane	ND				1.0	0.21	ug/L			10/25/13 10:59	1
Chloroform	0.382	J			1.0	0.17	ug/L			10/25/13 10:59	1
Chloromethane	ND				1.0	0.28	ug/L			10/25/13 10:59	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			10/25/13 10:59	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			10/25/13 10:59	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			10/25/13 10:59	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			10/25/13 10:59	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			10/25/13 10:59	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			10/25/13 10:59	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			10/25/13 10:59	1
Ethylbenzene	ND				1.0	0.23	ug/L			10/25/13 10:59	1
2-Hexanone	ND				5.0	0.16	ug/L			10/25/13 10:59	1
Methylene Chloride	ND				1.0	0.13	ug/L			10/25/13 10:59	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			10/25/13 10:59	1
Styrene	ND				1.0	0.097	ug/L			10/25/13 10:59	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			10/25/13 10:59	1
Tetrachloroethene	ND				1.0	0.15	ug/L			10/25/13 10:59	1
Toluene	ND				1.0	0.15	ug/L			10/25/13 10:59	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			10/25/13 10:59	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			10/25/13 10:59	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			10/25/13 10:59	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			10/25/13 10:59	1
Trichloroethene	ND				1.0	0.14	ug/L			10/25/13 10:59	1
Vinyl chloride	ND				1.0	0.23	ug/L			10/25/13 10:59	1
Xylenes, Total	ND				3.0	0.49	ug/L			10/25/13 10:59	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	89		89		70 - 118			1
Dibromofluoromethane (Surr)	109		109		70 - 128			1
1,2-Dichloroethane-d4 (Surr)	116		116		64 - 135			1
Toluene-d8 (Surr)	96		96		71 - 118			1

**Lab Sample ID: LCS 180-87918/7**

**Matrix: Water**

**Analysis Batch: 87918**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Acetone	10.0	5.13		ug/L		51	22 - 150
Benzene	10.0	10.3		ug/L		103	80 - 120
Bromoform	10.0	9.60		ug/L		96	46 - 150
Bromomethane	10.0	9.21		ug/L		92	33 - 150
2-Butanone	10.0	6.66		ug/L		67	39 - 138
Carbon disulfide	10.0	10.4		ug/L		104	54 - 132

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

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

**Lab Sample ID: LCS 180-87918/7**

**Matrix: Water**

**Analysis Batch: 87918**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Carbon tetrachloride	10.0	10.5		ug/L		105	55 - 150
Chlorobenzene	10.0	10.9		ug/L		109	80 - 120
Chlorodibromomethane	10.0	10.9		ug/L		109	60 - 140
Chloroethane	10.0	10.5		ug/L		105	36 - 142
Chloroform	10.0	10.2		ug/L		102	72 - 127
Chloromethane	10.0	11.3		ug/L		113	50 - 139
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	70 - 120
cis-1,3-Dichloropropene	10.0	8.76		ug/L		88	66 - 120
Dichlorobromomethane	10.0	10.1		ug/L		101	66 - 130
1,1-Dichloroethane	10.0	11.2		ug/L		112	73 - 126
1,2-Dichloroethane	10.0	10.6		ug/L		106	68 - 132
1,1-Dichloroethene	10.0	10.2		ug/L		102	65 - 136
1,2-Dichloropropane	10.0	10.1		ug/L		101	76 - 124
Ethylbenzene	10.0	10.6		ug/L		106	72 - 126
2-Hexanone	10.0	7.63		ug/L		76	25 - 132
Methylene Chloride	10.0	9.74		ug/L		97	63 - 129
4-Methyl-2-pentanone	10.0	9.30		ug/L		93	45 - 145
Styrene	10.0	10.9		ug/L		109	71 - 127
1,1,2,2-Tetrachloroethane	10.0	10.6		ug/L		106	62 - 125
Tetrachloroethene	10.0	11.5		ug/L		115	70 - 135
Toluene	10.0	11.8		ug/L		118	80 - 123
trans-1,2-Dichloroethene	10.0	10.6		ug/L		106	73 - 126
trans-1,3-Dichloropropene	10.0	11.3		ug/L		113	65 - 125
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	63 - 133
1,1,2-Trichloroethane	10.0	11.2		ug/L		112	77 - 127
Trichloroethene	10.0	9.80		ug/L		98	73 - 120
Vinyl chloride	10.0	10.8		ug/L		108	53 - 138
Xylenes, Total	20.0	21.2		ug/L		106	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		70 - 118
Dibromofluoromethane (Surr)	94		70 - 128
1,2-Dichloroethane-d4 (Surr)	94		64 - 135
Toluene-d8 (Surr)	104		71 - 118

**Lab Sample ID: MB 180-88237/4**

**Matrix: Water**

**Analysis Batch: 88237**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			10/29/13 13:21	1
Benzene	ND		1.0	0.11	ug/L			10/29/13 13:21	1
Bromoform	ND		1.0	0.19	ug/L			10/29/13 13:21	1
Bromomethane	ND		1.0	0.31	ug/L			10/29/13 13:21	1
2-Butanone	ND		5.0	0.55	ug/L			10/29/13 13:21	1
Carbon disulfide	ND		1.0	0.21	ug/L			10/29/13 13:21	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			10/29/13 13:21	1
Chlorobenzene	ND		1.0	0.14	ug/L			10/29/13 13:21	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

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

**Lab Sample ID: MB 180-88237/4**

**Matrix: Water**

**Analysis Batch: 88237**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Chlorodibromomethane	ND				1.0	0.14	ug/L			10/29/13 13:21	1
Chloroethane	ND				1.0	0.21	ug/L			10/29/13 13:21	1
Chloroform	0.267	J			1.0	0.17	ug/L			10/29/13 13:21	1
Chloromethane	ND				1.0	0.28	ug/L			10/29/13 13:21	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			10/29/13 13:21	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			10/29/13 13:21	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			10/29/13 13:21	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			10/29/13 13:21	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			10/29/13 13:21	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			10/29/13 13:21	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			10/29/13 13:21	1
Ethylbenzene	ND				1.0	0.23	ug/L			10/29/13 13:21	1
2-Hexanone	ND				5.0	0.16	ug/L			10/29/13 13:21	1
Methylene Chloride	ND				1.0	0.13	ug/L			10/29/13 13:21	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			10/29/13 13:21	1
Styrene	ND				1.0	0.097	ug/L			10/29/13 13:21	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			10/29/13 13:21	1
Tetrachloroethene	ND				1.0	0.15	ug/L			10/29/13 13:21	1
Toluene	ND				1.0	0.15	ug/L			10/29/13 13:21	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			10/29/13 13:21	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			10/29/13 13:21	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			10/29/13 13:21	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			10/29/13 13:21	1
Trichloroethene	ND				1.0	0.14	ug/L			10/29/13 13:21	1
Vinyl chloride	ND				1.0	0.23	ug/L			10/29/13 13:21	1
Xylenes, Total	ND				3.0	0.49	ug/L			10/29/13 13:21	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	98		70 - 118				10/29/13 13:21	1
Dibromofluoromethane (Surr)	105		70 - 128				10/29/13 13:21	1
1,2-Dichloroethane-d4 (Surr)	109		64 - 135				10/29/13 13:21	1
Toluene-d8 (Surr)	104		71 - 118				10/29/13 13:21	1

**Lab Sample ID: LCS 180-88237/6**

**Matrix: Water**

**Analysis Batch: 88237**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	10.0	10.1		ug/L		101	22 - 150
Benzene	10.0	10.2		ug/L		102	80 - 120
Bromoform	10.0	10.9		ug/L		109	46 - 150
Bromomethane	10.0	9.14		ug/L		91	33 - 150
2-Butanone	10.0	9.52		ug/L		95	39 - 138
Carbon disulfide	10.0	10.2		ug/L		102	54 - 132
Carbon tetrachloride	10.0	10.4		ug/L		104	55 - 150
Chlorobenzene	10.0	10.5		ug/L		105	80 - 120
Chlorodibromomethane	10.0	11.0		ug/L		110	60 - 140
Chloroethane	10.0	8.90		ug/L		89	36 - 142

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

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

Lab Sample ID: LCS 180-88237/6

Matrix: Water

Analysis Batch: 88237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike		LCS		Unit	D	%Rec.		Limits
	Added	Result	Qualifier	%Rec					
Chloroform	10.0	10.5			ug/L		105		72 - 127
Chloromethane	10.0	8.54			ug/L		85		50 - 139
cis-1,2-Dichloroethene	10.0	9.70			ug/L		97		70 - 120
cis-1,3-Dichloropropene	10.0	9.38			ug/L		94		66 - 120
Dichlorobromomethane	10.0	10.2			ug/L		102		66 - 130
1,1-Dichloroethane	10.0	9.82			ug/L		98		73 - 126
1,2-Dichloroethane	10.0	10.1			ug/L		101		68 - 132
1,1-Dichloroethene	10.0	9.73			ug/L		97		65 - 136
1,2-Dichloropropane	10.0	9.33			ug/L		93		76 - 124
Ethylbenzene	10.0	10.3			ug/L		103		72 - 126
2-Hexanone	10.0	9.94			ug/L		99		25 - 132
Methylene Chloride	10.0	9.56			ug/L		96		63 - 129
4-Methyl-2-pentanone	10.0	8.86			ug/L		89		45 - 145
Styrene	10.0	11.0			ug/L		110		71 - 127
1,1,2,2-Tetrachloroethane	10.0	11.8			ug/L		118		62 - 125
Tetrachloroethene	10.0	10.8			ug/L		108		70 - 135
Toluene	10.0	11.9			ug/L		119		80 - 123
trans-1,2-Dichloroethene	10.0	10.3			ug/L		103		73 - 126
trans-1,3-Dichloropropene	10.0	12.0			ug/L		120		65 - 125
1,1,1-Trichloroethane	10.0	9.92			ug/L		99		63 - 133
1,1,2-Trichloroethane	10.0	11.3			ug/L		113		77 - 127
Trichloroethene	10.0	9.31			ug/L		93		73 - 120
Vinyl chloride	10.0	9.25			ug/L		93		53 - 138
Xylenes, Total	20.0	22.5			ug/L		113		76 - 128

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		70 - 118
Dibromofluoromethane (Surr)	90		70 - 128
1,2-Dichloroethane-d4 (Surr)	97		64 - 135
Toluene-d8 (Surr)	104		71 - 118

## Method: 200.7 - Metals (Custom List)

Lab Sample ID: MB 180-87327/1-A

Matrix: Water

Analysis Batch: 87541

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 87327

Analyte	MB		RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed		
Aluminum	ND		200	16	ug/L		10/21/13 12:34	10/22/13 13:08		1
Iron	10.6	J	100	8.5	ug/L		10/21/13 12:34	10/22/13 13:08		1
Zinc	2.19	J	20	1.0	ug/L		10/21/13 12:34	10/22/13 13:08		1

Lab Sample ID: LCS 180-87327/2-A

Matrix: Water

Analysis Batch: 87541

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 87327

Analyte	Spike		Result	Qualifier	Unit	D	%Rec.		Limits
	Added						%Rec		
Aluminum	2000		2100		ug/L		105		85 - 115

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

## Method: 200.7 - Metals (Custom List) (Continued)

Lab Sample ID: LCS 180-87327/2-A

Matrix: Water

Analysis Batch: 87541

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 87327

Analyte	Spike Added	LCS		Unit	D	%Rec.	Limits
		Result	Qualifier				
Iron	1000	1070		ug/L		107	85 - 115
Zinc	500	539		ug/L		108	85 - 115

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 180-87470/1-A

Matrix: Water

Analysis Batch: 87506

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 87470

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
HEM (Oil and Grease)	ND		5.0	1.5	mg/L		10/22/13 13:02	10/22/13 13:02	1

Lab Sample ID: LCS 180-87470/2-A

Matrix: Water

Analysis Batch: 87506

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87470

Analyte	Spikes	LCS		Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
HEM (Oil and Grease)	40.0	37.9		mg/L		95	78 - 114

Lab Sample ID: LCSD 180-87470/3-A

Matrix: Water

Analysis Batch: 87506

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 87470

Analyte	Spikes	LCSD		Unit	D	%Rec.	RPD	Limit
	Added	Result	Qualifier					
HEM (Oil and Grease)	40.0	37.5		mg/L		94	78 - 114	1

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 180-87484/1

Matrix: Water

Analysis Batch: 87484

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spikes	LCS		Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
pH	7.00	7.010		SU		100	99 - 101

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

## GC/MS VOA

### Analysis Batch: 87757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-26139-1 - DL	MW2	Total/NA	Water	8260B	
180-26139-2	MW14	Total/NA	Water	8260B	
LCS 180-87757/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-87757/3	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 87918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-26139-3	EFFLUENT	Total/NA	Water	8260B	
180-26139-4	TRIP BLANK	Total/NA	Water	8260B	
LCS 180-87918/7	Lab Control Sample	Total/NA	Water	8260B	
MB 180-87918/4	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 88237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-26139-1	MW2	Total/NA	Water	8260B	
LCS 180-88237/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-88237/4	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 87327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-26139-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-87327/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-87327/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 87541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-26139-3	EFFLUENT	Total Recoverable	Water	200.7	87327
LCS 180-87327/2-A	Lab Control Sample	Total Recoverable	Water	200.7	87327
MB 180-87327/1-A	Method Blank	Total Recoverable	Water	200.7	87327

### Analysis Batch: 87653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-26139-3	EFFLUENT	Total Recoverable	Water	200.7	87327

## General Chemistry

### Prep Batch: 87470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-26139-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-87470/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-87470/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-87470/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 87484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-26139-3	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-87484/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

TestAmerica Pittsburgh

## QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-26139-1

### General Chemistry (Continued)

Analysis Batch: 87506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-26139-3	EFFLUENT	Total/NA	Water	1664A	87470
LCS 180-87470/2-A	Lab Control Sample	Total/NA	Water	1664A	87470
LCSD 180-87470/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	87470
MB 180-87470/1-A	Method Blank	Total/NA	Water	1664A	87470

Client Information  
*Chuck Beck*  
Dunlap, David A

Pittsburgh, PA 15238  
Phone (412) 963-7058 Fax (412) 963-2468

## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-26139-1

**Login Number:** 26139

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Lonzo, Michael A

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	
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.	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").	True	
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 Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-27134-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

11/25/2013 10:35:24 AM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

### LINKS

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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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

### Job ID: 180-27134-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-27134-1

#### Receipt

The samples were received on 11/14/2013 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): TRIP BLANK (180-27134-4). Notation was made to the COC.

#### GC/MS VOA

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-27134-1) and MW14 (180-27134-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

## Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

#### Metals

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.

#### General Chemistry

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.
HF	Field parameter with a holding time of 15 minutes

### 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-13 *
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-14
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

## Sample Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-27134-1	MW2	Water	11/13/13 07:00	11/14/13 09:15
180-27134-2	MW14	Water	11/13/13 08:00	11/14/13 09:15
180-27134-3	EFFLUENT	Water	11/13/13 09:30	11/14/13 09:15
180-27134-4	TRIP BLANK	Water	11/13/13 00:00	11/14/13 09:15

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## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664A	HEM and SGT-HEM	1664A	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

**Client Sample ID: MW2**

Date Collected: 11/13/13 07:00

Date Received: 11/14/13 09:15

**Lab Sample ID: 180-27134-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP5	DL	5000	5 mL	5 mL	90163	11/19/13 12:02	MAZ	TAL PIT
Total/NA	Analysis	8260B Instrument ID: HP5		500	5 mL	5 mL	90300	11/20/13 10:09	MAZ	TAL PIT

**Client Sample ID: MW14**

Date Collected: 11/13/13 08:00

Date Received: 11/14/13 09:15

**Lab Sample ID: 180-27134-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP5		1000	5 mL	5 mL	90163	11/19/13 12:26	MAZ	TAL PIT

**Client Sample ID: EFFLUENT**

Date Collected: 11/13/13 09:30

Date Received: 11/14/13 09:15

**Lab Sample ID: 180-27134-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP5		1	5 mL	5 mL	90300	11/20/13 04:21	MAZ	TAL PIT
Total Recoverable	Prep	200.7			50 mL	50 mL	89895	11/15/13 11:23	CEH	TAL PIT
Total Recoverable	Analysis	200.7 Instrument ID: T		1	50 mL	50 mL	90436	11/20/13 16:40	RJG	TAL PIT
Total/NA	Prep	1664A			870 mL	1000 mL	89873	11/15/13 09:12	MTW	TAL PIT
Total/NA	Analysis	1664A Instrument ID: NOEQUIP		1	870 mL	1000 mL	89932	11/15/13 09:12	MTW	TAL PIT
Total/NA	Analysis	SM 4500 H+ B Instrument ID: NOEQUIP		1		50 mL	90197	11/19/13 15:41	ADW	TAL PIT

**Client Sample ID: TRIP BLANK**

Date Collected: 11/13/13 00:00

Date Received: 11/14/13 09:15

**Lab Sample ID: 180-27134-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP5		1	5 mL	5 mL	90163	11/19/13 11:08	MAZ	TAL PIT

## Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CEH = Caitlyn Haluck

MTW = Michael Wesoloski

Batch Type: Analysis

ADW = Adam Wolfe

MAZ = Mike Zukowski

MTW = Michael Wesoloski

RJG = Rob Good

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# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

**Client Sample ID: MW2**

Date Collected: 11/13/13 07:00

Date Received: 11/14/13 09:15

**Lab Sample ID: 180-27134-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			11/20/13 10:09	500
Benzene	ND		500	53	ug/L			11/20/13 10:09	500
Bromoform	ND		500	96	ug/L			11/20/13 10:09	500
Bromomethane	ND		500	160	ug/L			11/20/13 10:09	500
2-Butanone	ND		2500	270	ug/L			11/20/13 10:09	500
Carbon disulfide	ND		500	110	ug/L			11/20/13 10:09	500
Carbon tetrachloride	ND		500	68	ug/L			11/20/13 10:09	500
Chlorobenzene	ND		500	68	ug/L			11/20/13 10:09	500
Chlorodibromomethane	ND		500	68	ug/L			11/20/13 10:09	500
Chloroethane	ND		500	110	ug/L			11/20/13 10:09	500
<b>Chloroform</b>	<b>150</b>	<b>J B</b>	500	85	ug/L			11/20/13 10:09	500
Chloromethane	ND		500	140	ug/L			11/20/13 10:09	500
<b>cis-1,2-Dichloroethene</b>	<b>79000</b>	<b>E</b>	500	120	ug/L			11/20/13 10:09	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			11/20/13 10:09	500
Dichlorobromomethane	ND		500	65	ug/L			11/20/13 10:09	500
1,1-Dichloroethane	ND		500	58	ug/L			11/20/13 10:09	500
1,2-Dichloroethane	ND		500	110	ug/L			11/20/13 10:09	500
<b>1,1-Dichloroethene</b>	<b>240</b>	<b>J</b>	500	150	ug/L			11/20/13 10:09	500
1,2-Dichloropropane	ND		500	47	ug/L			11/20/13 10:09	500
Ethylbenzene	ND		500	110	ug/L			11/20/13 10:09	500
2-Hexanone	ND		2500	80	ug/L			11/20/13 10:09	500
<b>Methylene Chloride</b>	<b>240</b>	<b>J</b>	500	63	ug/L			11/20/13 10:09	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			11/20/13 10:09	500
Styrene	ND		500	48	ug/L			11/20/13 10:09	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			11/20/13 10:09	500
Tetrachloroethene	ND		500	74	ug/L			11/20/13 10:09	500
Toluene	ND		500	75	ug/L			11/20/13 10:09	500
<b>trans-1,2-Dichloroethene</b>	<b>110</b>	<b>J</b>	500	85	ug/L			11/20/13 10:09	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			11/20/13 10:09	500
1,1,1-Trichloroethane	ND		500	140	ug/L			11/20/13 10:09	500
1,1,2-Trichloroethane	ND		500	100	ug/L			11/20/13 10:09	500
Trichloroethene	ND		500	72	ug/L			11/20/13 10:09	500
<b>Vinyl chloride</b>	<b>19000</b>		500	110	ug/L			11/20/13 10:09	500
Xylenes, Total	ND		1500	240	ug/L			11/20/13 10:09	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	78			70 - 118				11/20/13 10:09	500
Dibromofluoromethane (Surr)	124			70 - 128				11/20/13 10:09	500
1,2-Dichloroethane-d4 (Surr)	120			64 - 135				11/20/13 10:09	500
Toluene-d8 (Surr)	98			71 - 118				11/20/13 10:09	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			11/19/13 12:02	5000
Benzene	ND		5000	530	ug/L			11/19/13 12:02	5000
Bromoform	ND		5000	960	ug/L			11/19/13 12:02	5000
Bromomethane	ND		5000	1600	ug/L			11/19/13 12:02	5000
2-Butanone	ND		25000	2700	ug/L			11/19/13 12:02	5000
Carbon disulfide	ND		5000	1100	ug/L			11/19/13 12:02	5000
Carbon tetrachloride	ND		5000	680	ug/L			11/19/13 12:02	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

**Client Sample ID: MW2**

**Date Collected: 11/13/13 07:00**

**Date Received: 11/14/13 09:15**

**Lab Sample ID: 180-27134-1**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds by GC/MS (Low Level) - DL (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5000	680	ug/L			11/19/13 12:02	5000
Chlorodibromomethane	ND		5000	680	ug/L			11/19/13 12:02	5000
Chloroethane	ND		5000	1100	ug/L			11/19/13 12:02	5000
<b>Chloroform</b>	<b>1500</b>	<b>J B</b>	5000	850	ug/L			11/19/13 12:02	5000
Chloromethane	ND		5000	1400	ug/L			11/19/13 12:02	5000
<b>cis-1,2-Dichloroethene</b>	<b>75000</b>		5000	1200	ug/L			11/19/13 12:02	5000
cis-1,3-Dichloropropene	ND		5000	930	ug/L			11/19/13 12:02	5000
Dichlorobromomethane	ND		5000	650	ug/L			11/19/13 12:02	5000
1,1-Dichloroethane	ND		5000	580	ug/L			11/19/13 12:02	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			11/19/13 12:02	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			11/19/13 12:02	5000
1,2-Dichloropropane	ND		5000	470	ug/L			11/19/13 12:02	5000
Ethylbenzene	ND		5000	1100	ug/L			11/19/13 12:02	5000
2-Hexanone	ND		25000	800	ug/L			11/19/13 12:02	5000
<b>Methylene Chloride</b>	<b>2600</b>	<b>J</b>	5000	630	ug/L			11/19/13 12:02	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			11/19/13 12:02	5000
Styrene	ND		5000	480	ug/L			11/19/13 12:02	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			11/19/13 12:02	5000
Tetrachloroethene	ND		5000	740	ug/L			11/19/13 12:02	5000
Toluene	ND		5000	750	ug/L			11/19/13 12:02	5000
trans-1,2-Dichloroethene	ND		5000	850	ug/L			11/19/13 12:02	5000
trans-1,3-Dichloropropene	ND		5000	740	ug/L			11/19/13 12:02	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			11/19/13 12:02	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			11/19/13 12:02	5000
Trichloroethene	ND		5000	720	ug/L			11/19/13 12:02	5000
<b>Vinyl chloride</b>	<b>18000</b>		5000	1100	ug/L			11/19/13 12:02	5000
Xylenes, Total	ND		15000	2400	ug/L			11/19/13 12:02	5000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	80			70 - 118				11/19/13 12:02	5000
Dibromofluoromethane (Surr)	120			70 - 128				11/19/13 12:02	5000
1,2-Dichloroethane-d4 (Surr)	124			64 - 135				11/19/13 12:02	5000
Toluene-d8 (Surr)	99			71 - 118				11/19/13 12:02	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

**Client Sample ID: MW14**

**Lab Sample ID: 180-27134-2**

Date Collected: 11/13/13 08:00

Matrix: Water

Date Received: 11/14/13 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			11/19/13 12:26	1000
Benzene	ND		1000	110	ug/L			11/19/13 12:26	1000
Bromoform	ND		1000	190	ug/L			11/19/13 12:26	1000
Bromomethane	ND		1000	310	ug/L			11/19/13 12:26	1000
2-Butanone	ND		5000	550	ug/L			11/19/13 12:26	1000
Carbon disulfide	ND		1000	210	ug/L			11/19/13 12:26	1000
Carbon tetrachloride	ND		1000	140	ug/L			11/19/13 12:26	1000
Chlorobenzene	ND		1000	140	ug/L			11/19/13 12:26	1000
Chlorodibromomethane	ND		1000	140	ug/L			11/19/13 12:26	1000
Chloroethane	ND		1000	210	ug/L			11/19/13 12:26	1000
<b>Chloroform</b>	<b>300</b>	<b>J B</b>	1000	170	ug/L			11/19/13 12:26	1000
Chloromethane	ND		1000	280	ug/L			11/19/13 12:26	1000
<b>cis-1,2-Dichloroethene</b>	<b>4100</b>		1000	240	ug/L			11/19/13 12:26	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			11/19/13 12:26	1000
Dichlorobromomethane	ND		1000	130	ug/L			11/19/13 12:26	1000
1,1-Dichloroethane	ND		1000	120	ug/L			11/19/13 12:26	1000
1,2-Dichloroethane	ND		1000	210	ug/L			11/19/13 12:26	1000
1,1-Dichloroethene	ND		1000	300	ug/L			11/19/13 12:26	1000
1,2-Dichloropropene	ND		1000	95	ug/L			11/19/13 12:26	1000
Ethylbenzene	ND		1000	230	ug/L			11/19/13 12:26	1000
2-Hexanone	ND		5000	160	ug/L			11/19/13 12:26	1000
<b>Methylene Chloride</b>	<b>460</b>	<b>J</b>	1000	130	ug/L			11/19/13 12:26	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			11/19/13 12:26	1000
Styrene	ND		1000	97	ug/L			11/19/13 12:26	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			11/19/13 12:26	1000
Tetrachloroethene	ND		1000	150	ug/L			11/19/13 12:26	1000
Toluene	ND		1000	150	ug/L			11/19/13 12:26	1000
trans-1,2-Dichloroethene	ND		1000	170	ug/L			11/19/13 12:26	1000
trans-1,3-Dichloropropene	ND		1000	150	ug/L			11/19/13 12:26	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			11/19/13 12:26	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			11/19/13 12:26	1000
<b>Trichloroethene</b>	<b>13000</b>		1000	140	ug/L			11/19/13 12:26	1000
Vinyl chloride	ND		1000	230	ug/L			11/19/13 12:26	1000
Xylenes, Total	ND		3000	490	ug/L			11/19/13 12:26	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	81		70 - 118					11/19/13 12:26	1000
Dibromofluoromethane (Surr)	123		70 - 128					11/19/13 12:26	1000
1,2-Dichloroethane-d4 (Surr)	125		64 - 135					11/19/13 12:26	1000
Toluene-d8 (Surr)	98		71 - 118					11/19/13 12:26	1000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

## Client Sample ID: EFFLUENT

Date Collected: 11/13/13 09:30  
Date Received: 11/14/13 09:15

## Lab Sample ID: 180-27134-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		11/20/13 04:21		1
Benzene	ND		1.0	0.11	ug/L		11/20/13 04:21		1
Bromoform	ND		1.0	0.19	ug/L		11/20/13 04:21		1
Bromomethane	ND		1.0	0.31	ug/L		11/20/13 04:21		1
2-Butanone	ND		5.0	0.55	ug/L		11/20/13 04:21		1
Carbon disulfide	ND		1.0	0.21	ug/L		11/20/13 04:21		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		11/20/13 04:21		1
Chlorobenzene	ND		1.0	0.14	ug/L		11/20/13 04:21		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		11/20/13 04:21		1
Chloroethane	ND		1.0	0.21	ug/L		11/20/13 04:21		1
Chloroform	ND		1.0	0.17	ug/L		11/20/13 04:21		1
Chloromethane	ND		1.0	0.28	ug/L		11/20/13 04:21		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		11/20/13 04:21		1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L		11/20/13 04:21		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		11/20/13 04:21		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		11/20/13 04:21		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		11/20/13 04:21		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		11/20/13 04:21		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		11/20/13 04:21		1
Ethylbenzene	ND		1.0	0.23	ug/L		11/20/13 04:21		1
2-Hexanone	ND		5.0	0.16	ug/L		11/20/13 04:21		1
Methylene Chloride	ND		1.0	0.13	ug/L		11/20/13 04:21		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		11/20/13 04:21		1
Styrene	ND		1.0	0.097	ug/L		11/20/13 04:21		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		11/20/13 04:21		1
Tetrachloroethene	ND		1.0	0.15	ug/L		11/20/13 04:21		1
Toluene	ND		1.0	0.15	ug/L		11/20/13 04:21		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		11/20/13 04:21		1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L		11/20/13 04:21		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		11/20/13 04:21		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		11/20/13 04:21		1
<b>Trichloroethene</b>	<b>0.37 J</b>		1.0	0.14	ug/L		11/20/13 04:21		1
Vinyl chloride	ND		1.0	0.23	ug/L		11/20/13 04:21		1
Xylenes, Total	ND		3.0	0.49	ug/L		11/20/13 04:21		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 118		11/20/13 04:21	1
Dibromofluoromethane (Surr)	118		70 - 128		11/20/13 04:21	1
1,2-Dichloroethane-d4 (Surr)	123		64 - 135		11/20/13 04:21	1
Toluene-d8 (Surr)	95		71 - 118		11/20/13 04:21	1

### Method: 200.7 - Metals (Custom List) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16 J		200	16	ug/L		11/15/13 11:23	11/20/13 16:40	1
Iron	1200		100	8.5	ug/L		11/15/13 11:23	11/20/13 16:40	1
Zinc	81		20	1.0	ug/L		11/15/13 11:23	11/20/13 16:40	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	2.2 J		5.7	1.7	mg/L		11/15/13 09:12	11/15/13 09:12	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

**Client Sample ID: EFFLUENT**  
**Date Collected: 11/13/13 09:30**  
**Date Received: 11/14/13 09:15**

**Lab Sample ID: 180-27134-3**  
**Matrix: Water**

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.11	HF	0.100	0.100	SU			11/19/13 15:41	1

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 180-27134-4**

**Matrix: Water**

Date Collected: 11/13/13 00:00

Date Received: 11/14/13 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			11/19/13 11:08	1
Benzene	ND		1.0	0.11	ug/L			11/19/13 11:08	1
Bromoform	ND		1.0	0.19	ug/L			11/19/13 11:08	1
Bromomethane	ND		1.0	0.31	ug/L			11/19/13 11:08	1
2-Butanone	ND		5.0	0.55	ug/L			11/19/13 11:08	1
Carbon disulfide	ND		1.0	0.21	ug/L			11/19/13 11:08	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			11/19/13 11:08	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/19/13 11:08	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			11/19/13 11:08	1
Chloroethane	ND		1.0	0.21	ug/L			11/19/13 11:08	1
<b>Chloroform</b>	<b>0.36 JB</b>		1.0	0.17	ug/L			11/19/13 11:08	1
Chloromethane	ND		1.0	0.28	ug/L			11/19/13 11:08	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			11/19/13 11:08	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			11/19/13 11:08	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			11/19/13 11:08	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			11/19/13 11:08	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/19/13 11:08	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			11/19/13 11:08	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			11/19/13 11:08	1
Ethylbenzene	ND		1.0	0.23	ug/L			11/19/13 11:08	1
2-Hexanone	ND		5.0	0.16	ug/L			11/19/13 11:08	1
Methylene Chloride	ND		1.0	0.13	ug/L			11/19/13 11:08	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			11/19/13 11:08	1
Styrene	ND		1.0	0.097	ug/L			11/19/13 11:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			11/19/13 11:08	1
Tetrachloroethene	ND		1.0	0.15	ug/L			11/19/13 11:08	1
Toluene	ND		1.0	0.15	ug/L			11/19/13 11:08	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/19/13 11:08	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			11/19/13 11:08	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			11/19/13 11:08	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			11/19/13 11:08	1
Trichloroethene	ND		1.0	0.14	ug/L			11/19/13 11:08	1
Vinyl chloride	ND		1.0	0.23	ug/L			11/19/13 11:08	1
Xylenes, Total	ND		3.0	0.49	ug/L			11/19/13 11:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 118		11/19/13 11:08	1
Dibromofluoromethane (Surr)	119		70 - 128		11/19/13 11:08	1
1,2-Dichloroethane-d4 (Surr)	126		64 - 135		11/19/13 11:08	1
Toluene-d8 (Surr)	98		71 - 118		11/19/13 11:08	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

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

**Lab Sample ID:** MB 180-90163/3

**Matrix:** Water

**Analysis Batch:** 90163

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Acetone	ND				5.0	2.5	ug/L			11/19/13 01:48	1
Benzene	ND				1.0	0.11	ug/L			11/19/13 01:48	1
Bromoform	ND				1.0	0.19	ug/L			11/19/13 01:48	1
Bromomethane	ND				1.0	0.31	ug/L			11/19/13 01:48	1
2-Butanone	ND				5.0	0.55	ug/L			11/19/13 01:48	1
Carbon disulfide	ND				1.0	0.21	ug/L			11/19/13 01:48	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			11/19/13 01:48	1
Chlorobenzene	ND				1.0	0.14	ug/L			11/19/13 01:48	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			11/19/13 01:48	1
Chloroethane	ND				1.0	0.21	ug/L			11/19/13 01:48	1
Chloroform	0.490	J			1.0	0.17	ug/L			11/19/13 01:48	1
Chloromethane	ND				1.0	0.28	ug/L			11/19/13 01:48	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			11/19/13 01:48	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			11/19/13 01:48	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			11/19/13 01:48	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			11/19/13 01:48	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			11/19/13 01:48	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			11/19/13 01:48	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			11/19/13 01:48	1
Ethylbenzene	ND				1.0	0.23	ug/L			11/19/13 01:48	1
2-Hexanone	ND				5.0	0.16	ug/L			11/19/13 01:48	1
Methylene Chloride	ND				1.0	0.13	ug/L			11/19/13 01:48	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			11/19/13 01:48	1
Styrene	ND				1.0	0.097	ug/L			11/19/13 01:48	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			11/19/13 01:48	1
Tetrachloroethene	ND				1.0	0.15	ug/L			11/19/13 01:48	1
Toluene	ND				1.0	0.15	ug/L			11/19/13 01:48	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			11/19/13 01:48	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			11/19/13 01:48	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			11/19/13 01:48	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			11/19/13 01:48	1
Trichloroethene	ND				1.0	0.14	ug/L			11/19/13 01:48	1
Vinyl chloride	ND				1.0	0.23	ug/L			11/19/13 01:48	1
Xylenes, Total	ND				3.0	0.49	ug/L			11/19/13 01:48	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	87		70 - 118				11/19/13 01:48	1
Dibromofluoromethane (Surr)	114		70 - 128				11/19/13 01:48	1
1,2-Dichloroethane-d4 (Surr)	115		64 - 135				11/19/13 01:48	1
Toluene-d8 (Surr)	97		71 - 118				11/19/13 01:48	1

**Lab Sample ID:** LCS 180-90163/6

**Matrix:** Water

**Analysis Batch:** 90163

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

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	Dil Fac
	Added	Result	Qualifier							
Acetone	10.0	10.6				ug/L		106	22 - 150	
Benzene	10.0	9.86				ug/L		99	80 - 120	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

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

Lab Sample ID: LCS 180-90163/6

Matrix: Water

Analysis Batch: 90163

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Bromoform	10.0	9.27		ug/L	93	46 - 150	
Bromomethane	10.0	9.22		ug/L	92	33 - 150	
2-Butanone	10.0	9.17		ug/L	92	39 - 138	
Carbon disulfide	10.0	8.47		ug/L	85	54 - 132	
Carbon tetrachloride	10.0	8.66		ug/L	87	55 - 150	
Chlorobenzene	10.0	9.93		ug/L	99	80 - 120	
Chlorodibromomethane	10.0	9.87		ug/L	99	60 - 140	
Chloroethane	10.0	10.5		ug/L	105	36 - 142	
Chloroform	10.0	9.43		ug/L	94	72 - 127	
Chloromethane	10.0	10.4		ug/L	104	50 - 139	
cis-1,2-Dichloroethene	10.0	9.43		ug/L	94	70 - 120	
cis-1,3-Dichloropropene	10.0	8.29		ug/L	83	66 - 120	
Dichlorobromomethane	10.0	9.36		ug/L	94	66 - 130	
1,1-Dichloroethane	10.0	9.73		ug/L	97	73 - 126	
1,2-Dichloroethane	10.0	10.3		ug/L	103	68 - 132	
1,1-Dichloroethene	10.0	9.39		ug/L	94	65 - 136	
1,2-Dichloropropane	10.0	9.89		ug/L	99	76 - 124	
Ethylbenzene	10.0	9.54		ug/L	95	72 - 126	
2-Hexanone	10.0	8.18		ug/L	82	25 - 132	
Methylene Chloride	10.0	10.6		ug/L	106	63 - 129	
4-Methyl-2-pentanone	10.0	9.09		ug/L	91	45 - 145	
Styrene	10.0	10.1		ug/L	101	71 - 127	
1,1,2,2-Tetrachloroethane	10.0	10.9		ug/L	109	62 - 125	
Tetrachloroethene	10.0	8.99		ug/L	90	70 - 135	
Toluene	10.0	10.1		ug/L	101	80 - 123	
trans-1,2-Dichloroethene	10.0	9.68		ug/L	97	73 - 126	
trans-1,3-Dichloropropene	10.0	8.96		ug/L	90	65 - 125	
1,1,1-Trichloroethane	10.0	9.32		ug/L	93	63 - 133	
1,1,2-Trichloroethane	10.0	10.1		ug/L	101	77 - 127	
Trichloroethene	10.0	8.98		ug/L	90	73 - 120	
Vinyl chloride	10.0	10.8		ug/L	108	53 - 138	
Xylenes, Total	20.0	19.6		ug/L	98	76 - 128	

### LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 118
Dibromofluoromethane (Surr)	101		70 - 128
1,2-Dichloroethane-d4 (Surr)	103		64 - 135
Toluene-d8 (Surr)	106		71 - 118

Lab Sample ID: MB 180-90300/3

Matrix: Water

Analysis Batch: 90300

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			11/20/13 00:22	1
Benzene	ND		1.0	0.11	ug/L			11/20/13 00:22	1
Bromoform	ND		1.0	0.19	ug/L			11/20/13 00:22	1
Bromomethane	ND		1.0	0.31	ug/L			11/20/13 00:22	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

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

**Lab Sample ID: MB 180-90300/3**

**Matrix: Water**

**Analysis Batch: 90300**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
2-Butanone	ND				5.0	0.55	ug/L			11/20/13 00:22	1
Carbon disulfide	ND				1.0	0.21	ug/L			11/20/13 00:22	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			11/20/13 00:22	1
Chlorobenzene	ND				1.0	0.14	ug/L			11/20/13 00:22	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			11/20/13 00:22	1
Chloroethane	ND				1.0	0.21	ug/L			11/20/13 00:22	1
Chloroform	0.494	J			1.0	0.17	ug/L			11/20/13 00:22	1
Chloromethane	ND				1.0	0.28	ug/L			11/20/13 00:22	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			11/20/13 00:22	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			11/20/13 00:22	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			11/20/13 00:22	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			11/20/13 00:22	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			11/20/13 00:22	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			11/20/13 00:22	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			11/20/13 00:22	1
Ethylbenzene	ND				1.0	0.23	ug/L			11/20/13 00:22	1
2-Hexanone	ND				5.0	0.16	ug/L			11/20/13 00:22	1
Methylene Chloride	ND				1.0	0.13	ug/L			11/20/13 00:22	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			11/20/13 00:22	1
Styrene	ND				1.0	0.097	ug/L			11/20/13 00:22	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			11/20/13 00:22	1
Tetrachloroethene	ND				1.0	0.15	ug/L			11/20/13 00:22	1
Toluene	ND				1.0	0.15	ug/L			11/20/13 00:22	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			11/20/13 00:22	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			11/20/13 00:22	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			11/20/13 00:22	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			11/20/13 00:22	1
Trichloroethene	ND				1.0	0.14	ug/L			11/20/13 00:22	1
Vinyl chloride	ND				1.0	0.23	ug/L			11/20/13 00:22	1
Xylenes, Total	ND				3.0	0.49	ug/L			11/20/13 00:22	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	87				70 - 118			1
Dibromofluoromethane (Surr)	110				70 - 128			1
1,2-Dichloroethane-d4 (Surr)	114				64 - 135			1
Toluene-d8 (Surr)	100				71 - 118			1

**Lab Sample ID: LCS 180-90300/6**

**Matrix: Water**

**Analysis Batch: 90300**

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

Analyte	Spike	LCS	LCS	%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec
Acetone	10.0	8.95		ug/L	89	22 - 150
Benzene	10.0	9.33		ug/L	93	80 - 120
Bromoform	10.0	8.46		ug/L	85	46 - 150
Bromomethane	10.0	9.35		ug/L	93	33 - 150
2-Butanone	10.0	8.53		ug/L	85	39 - 138
Carbon disulfide	10.0	8.81		ug/L	88	54 - 132

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

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

Lab Sample ID: LCS 180-90300/6

Matrix: Water

Analysis Batch: 90300

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Carbon tetrachloride	10.0	9.12		ug/L		91	55 - 150
Chlorobenzene	10.0	9.36		ug/L		94	80 - 120
Chlorodibromomethane	10.0	8.96		ug/L		90	60 - 140
Chloroethane	10.0	10.7		ug/L		107	36 - 142
Chloroform	10.0	9.02		ug/L		90	72 - 127
Chloromethane	10.0	10.7		ug/L		107	50 - 139
cis-1,2-Dichloroethene	10.0	8.71		ug/L		87	70 - 120
cis-1,3-Dichloropropene	10.0	7.70		ug/L		77	66 - 120
Dichlorobromomethane	10.0	8.55		ug/L		86	66 - 130
1,1-Dichloroethane	10.0	9.38		ug/L		94	73 - 126
1,2-Dichloroethane	10.0	9.27		ug/L		93	68 - 132
1,1-Dichloroethene	10.0	9.43		ug/L		94	65 - 136
1,2-Dichloropropane	10.0	9.10		ug/L		91	76 - 124
Ethylbenzene	10.0	9.16		ug/L		92	72 - 126
2-Hexanone	10.0	6.91		ug/L		69	25 - 132
Methylene Chloride	10.0	10.1		ug/L		101	63 - 129
4-Methyl-2-pentanone	10.0	7.80		ug/L		78	45 - 145
Styrene	10.0	9.24		ug/L		92	71 - 127
1,1,2,2-Tetrachloroethane	10.0	9.96		ug/L		100	62 - 125
Tetrachloroethene	10.0	9.52		ug/L		95	70 - 135
Toluene	10.0	9.31		ug/L		93	80 - 123
trans-1,2-Dichloroethene	10.0	9.39		ug/L		94	73 - 126
trans-1,3-Dichloropropene	10.0	8.76		ug/L		88	65 - 125
1,1,1-Trichloroethane	10.0	9.20		ug/L		92	63 - 133
1,1,2-Trichloroethane	10.0	9.80		ug/L		98	77 - 127
Trichloroethene	10.0	8.73		ug/L		87	73 - 120
Vinyl chloride	10.0	10.7		ug/L		107	53 - 138
Xylenes, Total	20.0	18.9		ug/L		94	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	106		70 - 118
Dibromofluoromethane (Surr)	106		70 - 128
1,2-Dichloroethane-d4 (Surr)	108		64 - 135
Toluene-d8 (Surr)	112		71 - 118

## Method: 200.7 - Metals (Custom List)

Lab Sample ID: MB 180-89895/1-A

Matrix: Water

Analysis Batch: 90436

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 89895

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		200	16	ug/L		11/15/13 11:23	11/20/13 15:47	1
Iron	ND		100	8.5	ug/L		11/15/13 11:23	11/20/13 15:47	1
Zinc	ND		20	1.0	ug/L		11/15/13 11:23	11/20/13 15:47	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

## Method: 200.7 - Metals (Custom List) (Continued)

**Lab Sample ID: LCS 180-89895/2-A**

**Matrix: Water**

**Analysis Batch: 90436**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 89895**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aluminum	2000	1980		ug/L	99	85 - 115	
Iron	1000	879		ug/L	88	85 - 115	
Zinc	500	523		ug/L	105	85 - 115	

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 180-89873/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 89932**

**Prep Batch: 89873**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.0	1.5	mg/L		11/15/13 09:12	11/15/13 09:12	1

**Lab Sample ID: LCS 180-89873/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 89932**

**Prep Batch: 89873**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
HEM (Oil and Grease)	40.0	36.0		mg/L	90	78 - 114	

**Lab Sample ID: LCSD 180-89873/3-A**

**Client Sample ID: Lab Control Sample Dup**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 89932**

**Prep Batch: 89873**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD
HEM (Oil and Grease)	40.0	35.6		mg/L	89	78 - 114	1

## Method: SM 4500 H+ B - pH

**Lab Sample ID: LCS 180-90197/1**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 90197**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
pH	7.00	7.030		SU	100	99 - 101	

**Lab Sample ID: 180-27134-3 DU**

**Client Sample ID: EFFLUENT**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 90197**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	8.11	HF	8.130		SU		0.2	2

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27134-1

## GC/MS VOA

### Analysis Batch: 90163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-27134-1 - DL	MW2	Total/NA	Water	8260B	
180-27134-2	MW14	Total/NA	Water	8260B	
180-27134-4	TRIP BLANK	Total/NA	Water	8260B	
LCS 180-90163/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-90163/3	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 90300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-27134-1	MW2	Total/NA	Water	8260B	
180-27134-3	EFFLUENT	Total/NA	Water	8260B	
LCS 180-90300/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-90300/3	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 89895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-27134-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-89895/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-89895/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 90436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-27134-3	EFFLUENT	Total Recoverable	Water	200.7	89895
LCS 180-89895/2-A	Lab Control Sample	Total Recoverable	Water	200.7	89895
MB 180-89895/1-A	Method Blank	Total Recoverable	Water	200.7	89895

## General Chemistry

### Prep Batch: 89873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-27134-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-89873/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-89873/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-89873/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 89932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-27134-3	EFFLUENT	Total/NA	Water	1664A	89873
LCS 180-89873/2-A	Lab Control Sample	Total/NA	Water	1664A	89873
LCSD 180-89873/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	89873
MB 180-89873/1-A	Method Blank	Total/NA	Water	1664A	89873

### Analysis Batch: 90197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-27134-3	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
180-27134-3 DU	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-90197/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	



## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-27134-1

**Login Number:** 27134

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Kovitch, Christina M

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	
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.	False	Received Trip Blank not listed on COC.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	1 VV recx broken for MW14
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").	True	
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 Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-28038-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

12/23/2013 4:31:55 PM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

### LINKS

Review your project  
results through

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The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

### Job ID: 180-28038-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-28038-1

#### Receipt

The samples were received on 12/12/2013 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7° C.

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): TRIP BLANK (180-28038-4). Notation was made to the COC.

#### GC/MS VOA

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-28038-1) and MW14 (180-28038-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

## Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

### 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.
E	Result exceeded calibration range.

#### Metals

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.

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
B	Compound was found in the blank and sample.
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

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## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-14
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13 *
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-14
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

## Sample Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-28038-1	MW2	Water	12/11/13 07:00	12/12/13 09:20
180-28038-2	MW14	Water	12/11/13 08:00	12/12/13 09:20
180-28038-3	EFFLUENT	Water	12/11/13 10:30	12/12/13 09:20
180-28038-4	TRIP BLANK	Water	12/11/13 00:00	12/12/13 09:20

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TestAmerica Pittsburgh

## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664A	HEM and SGT-HEM	1664A	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

## Lab Chronicle

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

**Client Sample ID: MW2**

Date Collected: 12/11/13 07:00

Date Received: 12/12/13 09:20

**Lab Sample ID: 180-28038-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP6	DL	5000	5 mL	5 mL	92904	12/20/13 04:59	MAZ	TAL PIT
Total/NA	Analysis	8260B Instrument ID: HP6		500	5 mL	5 mL	92904	12/20/13 11:07	MAZ	TAL PIT

**Client Sample ID: MW14**

Date Collected: 12/11/13 08:00

Date Received: 12/12/13 09:20

**Lab Sample ID: 180-28038-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP6		500	5 mL	5 mL	92904	12/20/13 05:25	MAZ	TAL PIT

**Client Sample ID: EFFLUENT**

Date Collected: 12/11/13 10:30

Date Received: 12/12/13 09:20

**Lab Sample ID: 180-28038-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP5		1	5 mL	5 mL	92907	12/20/13 02:23	MAZ	TAL PIT
Total Recoverable	Prep	200.7			50 mL	50 mL	92590	12/17/13 07:53	CEH	TAL PIT
Total Recoverable	Analysis	200.7 Instrument ID: T		1	50 mL	50 mL	92797	12/18/13 16:45	RJG	TAL PIT
Total/NA	Analysis	SM 4500 H+ B Instrument ID: NOEQUIP		1		50 mL	92367	12/13/13 14:27	ADW	TAL PIT
Total/NA	Prep	1664A			910 mL	1000 mL	92736	12/18/13 11:29	JWM	TAL PIT
Total/NA	Analysis	1664A Instrument ID: NOEQUIP		1	910 mL	1000 mL	92867	12/18/13 11:29	JWM	TAL PIT

**Client Sample ID: TRIP BLANK**

Date Collected: 12/11/13 00:00

Date Received: 12/12/13 09:20

**Lab Sample ID: 180-28038-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B Instrument ID: HP5		1	5 mL	5 mL	92744	12/18/13 11:02	DLF	TAL PIT

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CEH = Caitlyn Haluck

JWM = Jeremiah McLaughlin

Batch Type: Analysis

ADW = Adam Wolfe

DLF = Donald Ferguson

JWM = Jeremiah McLaughlin

MAZ = Mike Zukowski

RJG = Rob Good

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# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

**Client Sample ID: MW2**

Date Collected: 12/11/13 07:00

Date Received: 12/12/13 09:20

**Lab Sample ID: 180-28038-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			12/20/13 11:07	500
<b>Benzene</b>	<b>82 J</b>		500	53	ug/L			12/20/13 11:07	500
Bromoform	ND		500	96	ug/L			12/20/13 11:07	500
Bromomethane	ND		500	160	ug/L			12/20/13 11:07	500
2-Butanone	ND		2500	270	ug/L			12/20/13 11:07	500
Carbon disulfide	ND		500	110	ug/L			12/20/13 11:07	500
Carbon tetrachloride	ND		500	68	ug/L			12/20/13 11:07	500
Chlorobenzene	ND		500	68	ug/L			12/20/13 11:07	500
Chlorodibromomethane	ND		500	68	ug/L			12/20/13 11:07	500
Chloroethane	ND		500	110	ug/L			12/20/13 11:07	500
<b>Chloroform</b>	<b>280 J</b>		500	85	ug/L			12/20/13 11:07	500
Chloromethane	ND		500	140	ug/L			12/20/13 11:07	500
<b>cis-1,2-Dichloroethene</b>	<b>67000 E</b>		500	120	ug/L			12/20/13 11:07	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			12/20/13 11:07	500
Dichlorobromomethane	ND		500	65	ug/L			12/20/13 11:07	500
1,1-Dichloroethane	ND		500	58	ug/L			12/20/13 11:07	500
1,2-Dichloroethane	ND		500	110	ug/L			12/20/13 11:07	500
<b>1,1-Dichloroethene</b>	<b>210 J</b>		500	150	ug/L			12/20/13 11:07	500
1,2-Dichloropropane	ND		500	47	ug/L			12/20/13 11:07	500
Ethylbenzene	ND		500	110	ug/L			12/20/13 11:07	500
2-Hexanone	ND		2500	80	ug/L			12/20/13 11:07	500
<b>Methylene Chloride</b>	<b>420 J</b>		500	63	ug/L			12/20/13 11:07	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			12/20/13 11:07	500
Styrene	ND		500	48	ug/L			12/20/13 11:07	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			12/20/13 11:07	500
<b>Tetrachloroethene</b>	<b>130 J</b>		500	74	ug/L			12/20/13 11:07	500
Toluene	ND		500	75	ug/L			12/20/13 11:07	500
<b>trans-1,2-Dichloroethene</b>	<b>150 J</b>		500	85	ug/L			12/20/13 11:07	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			12/20/13 11:07	500
1,1,1-Trichloroethane	ND		500	140	ug/L			12/20/13 11:07	500
1,1,2-Trichloroethane	ND		500	100	ug/L			12/20/13 11:07	500
Trichloroethene	ND		500	72	ug/L			12/20/13 11:07	500
<b>Vinyl chloride</b>	<b>17000</b>		500	110	ug/L			12/20/13 11:07	500
Xylenes, Total	ND		1500	240	ug/L			12/20/13 11:07	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101			70 - 118				12/20/13 11:07	500
Dibromofluoromethane (Surr)	93			70 - 128				12/20/13 11:07	500
1,2-Dichloroethane-d4 (Surr)	92			64 - 135				12/20/13 11:07	500
Toluene-d8 (Surr)	106			71 - 118				12/20/13 11:07	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			12/20/13 04:59	5000
Benzene	ND		5000	530	ug/L			12/20/13 04:59	5000
Bromoform	ND		5000	960	ug/L			12/20/13 04:59	5000
Bromomethane	ND		5000	1600	ug/L			12/20/13 04:59	5000
2-Butanone	ND		25000	2700	ug/L			12/20/13 04:59	5000
Carbon disulfide	ND		5000	1100	ug/L			12/20/13 04:59	5000
Carbon tetrachloride	ND		5000	680	ug/L			12/20/13 04:59	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

**Client Sample ID: MW2**

**Date Collected: 12/11/13 07:00**

**Date Received: 12/12/13 09:20**

**Lab Sample ID: 180-28038-1**

**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds by GC/MS (Low Level) - DL (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5000	680	ug/L			12/20/13 04:59	5000
Chlorodibromomethane	ND		5000	680	ug/L			12/20/13 04:59	5000
Chloroethane	ND		5000	1100	ug/L			12/20/13 04:59	5000
<b>Chloroform</b>	<b>2200</b>	<b>J</b>	5000	850	ug/L			12/20/13 04:59	5000
Chloromethane	ND		5000	1400	ug/L			12/20/13 04:59	5000
<b>cis-1,2-Dichloroethene</b>	<b>56000</b>		5000	1200	ug/L			12/20/13 04:59	5000
cis-1,3-Dichloropropene	ND		5000	930	ug/L			12/20/13 04:59	5000
Dichlorobromomethane	ND		5000	650	ug/L			12/20/13 04:59	5000
1,1-Dichloroethane	ND		5000	580	ug/L			12/20/13 04:59	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			12/20/13 04:59	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			12/20/13 04:59	5000
1,2-Dichloropropane	ND		5000	470	ug/L			12/20/13 04:59	5000
Ethylbenzene	ND		5000	1100	ug/L			12/20/13 04:59	5000
2-Hexanone	ND		25000	800	ug/L			12/20/13 04:59	5000
<b>Methylene Chloride</b>	<b>2700</b>	<b>J</b>	5000	630	ug/L			12/20/13 04:59	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			12/20/13 04:59	5000
Styrene	ND		5000	480	ug/L			12/20/13 04:59	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			12/20/13 04:59	5000
Tetrachloroethene	ND		5000	740	ug/L			12/20/13 04:59	5000
Toluene	ND		5000	750	ug/L			12/20/13 04:59	5000
trans-1,2-Dichloroethene	ND		5000	850	ug/L			12/20/13 04:59	5000
trans-1,3-Dichloropropene	ND		5000	740	ug/L			12/20/13 04:59	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			12/20/13 04:59	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			12/20/13 04:59	5000
Trichloroethene	ND		5000	720	ug/L			12/20/13 04:59	5000
<b>Vinyl chloride</b>	<b>13000</b>		5000	1100	ug/L			12/20/13 04:59	5000
Xylenes, Total	ND		15000	2400	ug/L			12/20/13 04:59	5000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	108			70 - 118				12/20/13 04:59	5000
Dibromofluoromethane (Surr)	99			70 - 128				12/20/13 04:59	5000
1,2-Dichloroethane-d4 (Surr)	97			64 - 135				12/20/13 04:59	5000
Toluene-d8 (Surr)	107			71 - 118				12/20/13 04:59	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

**Client Sample ID: MW14**

**Lab Sample ID: 180-28038-2**

Date Collected: 12/11/13 08:00

Matrix: Water

Date Received: 12/12/13 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			12/20/13 05:25	500
Benzene	ND		500	53	ug/L			12/20/13 05:25	500
Bromoform	ND		500	96	ug/L			12/20/13 05:25	500
Bromomethane	ND		500	160	ug/L			12/20/13 05:25	500
2-Butanone	ND		2500	270	ug/L			12/20/13 05:25	500
Carbon disulfide	ND		500	110	ug/L			12/20/13 05:25	500
Carbon tetrachloride	ND		500	68	ug/L			12/20/13 05:25	500
Chlorobenzene	ND		500	68	ug/L			12/20/13 05:25	500
Chlorodibromomethane	ND		500	68	ug/L			12/20/13 05:25	500
Chloroethane	ND		500	110	ug/L			12/20/13 05:25	500
<b>Chloroform</b>	<b>240</b>	<b>J</b>	500	85	ug/L			12/20/13 05:25	500
Chloromethane	ND		500	140	ug/L			12/20/13 05:25	500
<b>cis-1,2-Dichloroethene</b>	<b>2900</b>		500	120	ug/L			12/20/13 05:25	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			12/20/13 05:25	500
Dichlorobromomethane	ND		500	65	ug/L			12/20/13 05:25	500
1,1-Dichloroethane	ND		500	58	ug/L			12/20/13 05:25	500
1,2-Dichloroethane	ND		500	110	ug/L			12/20/13 05:25	500
1,1-Dichloroethene	ND		500	150	ug/L			12/20/13 05:25	500
1,2-Dichloropropane	ND		500	47	ug/L			12/20/13 05:25	500
Ethylbenzene	ND		500	110	ug/L			12/20/13 05:25	500
2-Hexanone	ND		2500	80	ug/L			12/20/13 05:25	500
<b>Methylene Chloride</b>	<b>280</b>	<b>J</b>	500	63	ug/L			12/20/13 05:25	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			12/20/13 05:25	500
Styrene	ND		500	48	ug/L			12/20/13 05:25	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			12/20/13 05:25	500
Tetrachloroethene	ND		500	74	ug/L			12/20/13 05:25	500
Toluene	ND		500	75	ug/L			12/20/13 05:25	500
trans-1,2-Dichloroethene	ND		500	85	ug/L			12/20/13 05:25	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			12/20/13 05:25	500
1,1,1-Trichloroethane	ND		500	140	ug/L			12/20/13 05:25	500
1,1,2-Trichloroethane	ND		500	100	ug/L			12/20/13 05:25	500
<b>Trichloroethene</b>	<b>10000</b>		500	72	ug/L			12/20/13 05:25	500
Vinyl chloride	ND		500	110	ug/L			12/20/13 05:25	500
Xylenes, Total	ND		1500	240	ug/L			12/20/13 05:25	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 118			500
Dibromofluoromethane (Surr)	101		70 - 128			500
1,2-Dichloroethane-d4 (Surr)	99		64 - 135			500
Toluene-d8 (Surr)	105		71 - 118			500

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

**Client Sample ID: EFFLUENT**

**Lab Sample ID: 180-28038-3**

Matrix: Water

Date Collected: 12/11/13 10:30

Date Received: 12/12/13 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			12/20/13 02:23	1
Benzene	ND		1.0	0.11	ug/L			12/20/13 02:23	1
<b>Bromoform</b>	<b>6.6</b>		1.0	0.19	ug/L			12/20/13 02:23	1
Bromomethane	ND		1.0	0.31	ug/L			12/20/13 02:23	1
2-Butanone	ND		5.0	0.55	ug/L			12/20/13 02:23	1
Carbon disulfide	ND		1.0	0.21	ug/L			12/20/13 02:23	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			12/20/13 02:23	1
Chlorobenzene	ND		1.0	0.14	ug/L			12/20/13 02:23	1
<b>Chlorodibromomethane</b>	<b>1.8</b>		1.0	0.14	ug/L			12/20/13 02:23	1
Chloroethane	ND		1.0	0.21	ug/L			12/20/13 02:23	1
Chloroform	ND		1.0	0.17	ug/L			12/20/13 02:23	1
Chloromethane	ND		1.0	0.28	ug/L			12/20/13 02:23	1
<b>cis-1,2-Dichloroethene</b>	<b>9.2</b>		1.0	0.24	ug/L			12/20/13 02:23	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			12/20/13 02:23	1
<b>Dichlorobromomethane</b>	<b>0.53 J</b>		1.0	0.13	ug/L			12/20/13 02:23	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			12/20/13 02:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/20/13 02:23	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			12/20/13 02:23	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			12/20/13 02:23	1
Ethylbenzene	ND		1.0	0.23	ug/L			12/20/13 02:23	1
2-Hexanone	ND		5.0	0.16	ug/L			12/20/13 02:23	1
Methylene Chloride	ND		1.0	0.13	ug/L			12/20/13 02:23	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			12/20/13 02:23	1
Styrene	ND		1.0	0.097	ug/L			12/20/13 02:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			12/20/13 02:23	1
Tetrachloroethene	ND		1.0	0.15	ug/L			12/20/13 02:23	1
Toluene	ND		1.0	0.15	ug/L			12/20/13 02:23	1
<b>trans-1,2-Dichloroethene</b>	<b>0.33 J</b>		1.0	0.17	ug/L			12/20/13 02:23	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			12/20/13 02:23	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			12/20/13 02:23	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			12/20/13 02:23	1
<b>Trichloroethene</b>	<b>13</b>		1.0	0.14	ug/L			12/20/13 02:23	1
<b>Vinyl chloride</b>	<b>14</b>		1.0	0.23	ug/L			12/20/13 02:23	1
Xylenes, Total	ND		3.0	0.49	ug/L			12/20/13 02:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	106		70 - 118					12/20/13 02:23	1
Dibromofluoromethane (Surr)	108		70 - 128					12/20/13 02:23	1
1,2-Dichloroethane-d4 (Surr)	104		64 - 135					12/20/13 02:23	1
Toluene-d8 (Surr)	110		71 - 118					12/20/13 02:23	1

## Method: 200.7 - Metals (Custom List) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aluminum</b>	<b>17 J</b>		200	16	ug/L		12/17/13 07:53	12/18/13 16:45	1
<b>Iron</b>	<b>600</b>		100	8.5	ug/L		12/17/13 07:53	12/18/13 16:45	1
<b>Zinc</b>	<b>28</b>		20	1.0	ug/L		12/17/13 07:53	12/18/13 16:45	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>HEM (Oil and Grease)</b>	<b>2.7 J B</b>		5.5	1.6	mg/L		12/18/13 11:29	12/18/13 11:29	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

**Client Sample ID: EFFLUENT**  
**Date Collected: 12/11/13 10:30**  
**Date Received: 12/12/13 09:20**

**Lab Sample ID: 180-28038-3**  
**Matrix: Water**

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.19	HF	0.100	0.100	SU			12/13/13 14:27	1

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TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 180-28038-4**

**Matrix: Water**

Date Collected: 12/11/13 00:00

Date Received: 12/12/13 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			12/18/13 11:02	1
Benzene	ND		1.0	0.11	ug/L			12/18/13 11:02	1
Bromoform	ND		1.0	0.19	ug/L			12/18/13 11:02	1
Bromomethane	ND		1.0	0.31	ug/L			12/18/13 11:02	1
2-Butanone	ND		5.0	0.55	ug/L			12/18/13 11:02	1
Carbon disulfide	ND		1.0	0.21	ug/L			12/18/13 11:02	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			12/18/13 11:02	1
Chlorobenzene	ND		1.0	0.14	ug/L			12/18/13 11:02	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			12/18/13 11:02	1
Chloroethane	ND		1.0	0.21	ug/L			12/18/13 11:02	1
<b>Chloroform</b>	<b>0.23 J</b>		1.0	0.17	ug/L			12/18/13 11:02	1
Chloromethane	ND		1.0	0.28	ug/L			12/18/13 11:02	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			12/18/13 11:02	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			12/18/13 11:02	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			12/18/13 11:02	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			12/18/13 11:02	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/18/13 11:02	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			12/18/13 11:02	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			12/18/13 11:02	1
Ethylbenzene	ND		1.0	0.23	ug/L			12/18/13 11:02	1
2-Hexanone	ND		5.0	0.16	ug/L			12/18/13 11:02	1
<b>Methylene Chloride</b>	<b>4.7</b>		1.0	0.13	ug/L			12/18/13 11:02	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			12/18/13 11:02	1
Styrene	ND		1.0	0.097	ug/L			12/18/13 11:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			12/18/13 11:02	1
Tetrachloroethene	ND		1.0	0.15	ug/L			12/18/13 11:02	1
Toluene	ND		1.0	0.15	ug/L			12/18/13 11:02	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/18/13 11:02	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			12/18/13 11:02	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			12/18/13 11:02	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			12/18/13 11:02	1
<b>Trichloroethene</b>	<b>0.58 J</b>		1.0	0.14	ug/L			12/18/13 11:02	1
Vinyl chloride	ND		1.0	0.23	ug/L			12/18/13 11:02	1
Xylenes, Total	ND		3.0	0.49	ug/L			12/18/13 11:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 118		12/18/13 11:02	1
Dibromofluoromethane (Surr)	114		70 - 128		12/18/13 11:02	1
1,2-Dichloroethane-d4 (Surr)	104		64 - 135		12/18/13 11:02	1
Toluene-d8 (Surr)	109		71 - 118		12/18/13 11:02	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

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

**Lab Sample ID:** MB 180-92744/3

**Matrix:** Water

**Analysis Batch:** 92744

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Acetone	ND		1	5.0	2.5	ug/L		12/18/13 10:04	
Benzene	ND		1	1.0	0.11	ug/L		12/18/13 10:04	
Bromoform	ND		1	1.0	0.19	ug/L		12/18/13 10:04	
Bromomethane	ND		1	1.0	0.31	ug/L		12/18/13 10:04	
2-Butanone	ND		1	5.0	0.55	ug/L		12/18/13 10:04	
Carbon disulfide	ND		1	1.0	0.21	ug/L		12/18/13 10:04	
Carbon tetrachloride	ND		1	1.0	0.14	ug/L		12/18/13 10:04	
Chlorobenzene	ND		1	1.0	0.14	ug/L		12/18/13 10:04	
Chlorodibromomethane	ND		1	1.0	0.14	ug/L		12/18/13 10:04	
Chloroethane	ND		1	1.0	0.21	ug/L		12/18/13 10:04	
Chloroform	ND		1	1.0	0.17	ug/L		12/18/13 10:04	
Chloromethane	ND		1	1.0	0.28	ug/L		12/18/13 10:04	
cis-1,2-Dichloroethene	ND		1	1.0	0.24	ug/L		12/18/13 10:04	
cis-1,3-Dichloropropene	ND		1	1.0	0.19	ug/L		12/18/13 10:04	
Dichlorobromomethane	ND		1	1.0	0.13	ug/L		12/18/13 10:04	
1,1-Dichloroethane	ND		1	1.0	0.12	ug/L		12/18/13 10:04	
1,2-Dichloroethane	ND		1	1.0	0.21	ug/L		12/18/13 10:04	
1,1-Dichloroethene	ND		1	1.0	0.30	ug/L		12/18/13 10:04	
1,2-Dichloropropane	ND		1	1.0	0.095	ug/L		12/18/13 10:04	
Ethylbenzene	ND		1	1.0	0.23	ug/L		12/18/13 10:04	
2-Hexanone	ND		1	5.0	0.16	ug/L		12/18/13 10:04	
Methylene Chloride	ND		1	1.0	0.13	ug/L		12/18/13 10:04	
4-Methyl-2-pentanone	ND		1	5.0	0.53	ug/L		12/18/13 10:04	
Styrene	ND		1	1.0	0.097	ug/L		12/18/13 10:04	
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.20	ug/L		12/18/13 10:04	
Tetrachloroethene	ND		1	1.0	0.15	ug/L		12/18/13 10:04	
Toluene	ND		1	1.0	0.15	ug/L		12/18/13 10:04	
trans-1,2-Dichloroethene	ND		1	1.0	0.17	ug/L		12/18/13 10:04	
trans-1,3-Dichloropropene	ND		1	1.0	0.15	ug/L		12/18/13 10:04	
1,1,1-Trichloroethane	ND		1	1.0	0.29	ug/L		12/18/13 10:04	
1,1,2-Trichloroethane	ND		1	1.0	0.20	ug/L		12/18/13 10:04	
Trichloroethene	ND		1	1.0	0.14	ug/L		12/18/13 10:04	
Vinyl chloride	ND		1	1.0	0.23	ug/L		12/18/13 10:04	
Xylenes, Total	ND		1	3.0	0.49	ug/L		12/18/13 10:04	

Surrogate	MB	MB	Dil Fac				
	%Recovery	Qualifier		Limits	Prepared	Analyzed	
4-Bromofluorobenzene (Surr)	106		1	70 - 118		12/18/13 10:04	
Dibromofluoromethane (Surr)	106		1	70 - 128		12/18/13 10:04	
1,2-Dichloroethane-d4 (Surr)	103		1	64 - 135		12/18/13 10:04	
Toluene-d8 (Surr)	108		1	71 - 118		12/18/13 10:04	

**Lab Sample ID:** LCS 180-92744/6

**Matrix:** Water

**Analysis Batch:** 92744

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

Analyte	Spike	LCS	LCS	Dil Fac	%Rec.		
	Added	Result	Qualifier		Unit	%Rec	Limits
Acetone	10.0	7.04		70	ug/L	22 - 150	
Benzene	10.0	10.0		100	ug/L	80 - 120	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

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

Lab Sample ID: LCS 180-92744/6

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 92744

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Bromoform	10.0	10.6		ug/L	106	46 - 150	
Bromomethane	10.0	9.98		ug/L	100	33 - 150	
2-Butanone	10.0	8.12		ug/L	81	39 - 138	
Carbon disulfide	10.0	11.5		ug/L	115	54 - 132	
Carbon tetrachloride	10.0	10.9		ug/L	109	55 - 150	
Chlorobenzene	10.0	10.0		ug/L	100	80 - 120	
Chlorodibromomethane	10.0	10.7		ug/L	107	60 - 140	
Chloroethane	10.0	10.2		ug/L	102	36 - 142	
Chloroform	10.0	10.1		ug/L	101	72 - 127	
Chloromethane	10.0	10.6		ug/L	106	50 - 139	
cis-1,2-Dichloroethene	10.0	9.76		ug/L	98	70 - 120	
cis-1,3-Dichloropropene	10.0	10.4		ug/L	104	66 - 120	
Dichlorobromomethane	10.0	10.2		ug/L	102	66 - 130	
1,1-Dichloroethane	10.0	10.2		ug/L	102	73 - 126	
1,2-Dichloroethane	10.0	9.62		ug/L	96	68 - 132	
1,1-Dichloroethene	10.0	10.1		ug/L	101	65 - 136	
1,2-Dichloropropane	10.0	9.93		ug/L	99	76 - 124	
Ethylbenzene	10.0	10.0		ug/L	100	72 - 126	
2-Hexanone	10.0	8.19		ug/L	82	25 - 132	
Methylene Chloride	10.0	10.4		ug/L	104	63 - 129	
4-Methyl-2-pentanone	10.0	9.97		ug/L	100	45 - 145	
Styrene	10.0	10.0		ug/L	100	71 - 127	
1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L	101	62 - 125	
Tetrachloroethene	10.0	10.0		ug/L	100	70 - 135	
Toluene	10.0	10.1		ug/L	101	80 - 123	
trans-1,2-Dichloroethene	10.0	10.3		ug/L	103	73 - 126	
trans-1,3-Dichloropropene	10.0	10.6		ug/L	106	65 - 125	
1,1,1-Trichloroethane	10.0	10.9		ug/L	109	63 - 133	
1,1,2-Trichloroethane	10.0	9.81		ug/L	98	77 - 127	
Trichloroethene	10.0	9.58		ug/L	96	73 - 120	
Vinyl chloride	10.0	10.1		ug/L	101	53 - 138	
Xylenes, Total	20.0	19.8		ug/L	99	76 - 128	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		70 - 118
Dibromofluoromethane (Surr)	99		70 - 128
1,2-Dichloroethane-d4 (Surr)	95		64 - 135
Toluene-d8 (Surr)	102		71 - 118

Lab Sample ID: MB 180-92904/3

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 92904

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			12/20/13 00:36	1
Benzene	ND		1.0	0.11	ug/L			12/20/13 00:36	1
Bromoform	ND		1.0	0.19	ug/L			12/20/13 00:36	1
Bromomethane	ND		1.0	0.31	ug/L			12/20/13 00:36	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

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

**Lab Sample ID: MB 180-92904/3**

**Matrix: Water**

**Analysis Batch: 92904**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
2-Butanone	ND				5.0	0.55	ug/L			12/20/13 00:36	1
Carbon disulfide	ND				1.0	0.21	ug/L			12/20/13 00:36	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			12/20/13 00:36	1
Chlorobenzene	ND				1.0	0.14	ug/L			12/20/13 00:36	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			12/20/13 00:36	1
Chloroethane	ND				1.0	0.21	ug/L			12/20/13 00:36	1
Chloroform	ND				1.0	0.17	ug/L			12/20/13 00:36	1
Chloromethane	ND				1.0	0.28	ug/L			12/20/13 00:36	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			12/20/13 00:36	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			12/20/13 00:36	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			12/20/13 00:36	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			12/20/13 00:36	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			12/20/13 00:36	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			12/20/13 00:36	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			12/20/13 00:36	1
Ethylbenzene	ND				1.0	0.23	ug/L			12/20/13 00:36	1
2-Hexanone	ND				5.0	0.16	ug/L			12/20/13 00:36	1
Methylene Chloride	ND				1.0	0.13	ug/L			12/20/13 00:36	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			12/20/13 00:36	1
Styrene	ND				1.0	0.097	ug/L			12/20/13 00:36	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			12/20/13 00:36	1
Tetrachloroethene	ND				1.0	0.15	ug/L			12/20/13 00:36	1
Toluene	ND				1.0	0.15	ug/L			12/20/13 00:36	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			12/20/13 00:36	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			12/20/13 00:36	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			12/20/13 00:36	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			12/20/13 00:36	1
Trichloroethene	ND				1.0	0.14	ug/L			12/20/13 00:36	1
Vinyl chloride	ND				1.0	0.23	ug/L			12/20/13 00:36	1
Xylenes, Total	ND				3.0	0.49	ug/L			12/20/13 00:36	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	108		108		70 - 118			1
Dibromofluoromethane (Surr)	100		100		70 - 128			1
1,2-Dichloroethane-d4 (Surr)	96		96		64 - 135			1
Toluene-d8 (Surr)	105		105		71 - 118			1

**Lab Sample ID: LCS 180-92904/6**

**Matrix: Water**

**Analysis Batch: 92904**

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

Analyte	Spike	LCS	LCS	%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec
Acetone	10.0	10.5		ug/L	105	22 - 150
Benzene	10.0	9.56		ug/L	96	80 - 120
Bromoform	10.0	8.63		ug/L	86	46 - 150
Bromomethane	10.0	8.54		ug/L	85	33 - 150
2-Butanone	10.0	9.97		ug/L	100	39 - 138
Carbon disulfide	10.0	10.2		ug/L	102	54 - 132

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

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

**Lab Sample ID: LCS 180-92904/6**

**Matrix: Water**

**Analysis Batch: 92904**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Carbon tetrachloride	10.0	10.0		ug/L		100	55 - 150
Chlorobenzene	10.0	9.77		ug/L		98	80 - 120
Chlorodibromomethane	10.0	8.97		ug/L		90	60 - 140
Chloroethane	10.0	9.29		ug/L		93	36 - 142
Chloroform	10.0	10.3		ug/L		103	72 - 127
Chloromethane	10.0	9.71		ug/L		97	50 - 139
cis-1,2-Dichloroethene	10.0	9.75		ug/L		97	70 - 120
cis-1,3-Dichloropropene	10.0	9.53		ug/L		95	66 - 120
Dichlorobromomethane	10.0	9.39		ug/L		94	66 - 130
1,1-Dichloroethane	10.0	9.53		ug/L		95	73 - 126
1,2-Dichloroethane	10.0	9.57		ug/L		96	68 - 132
1,1-Dichloroethene	10.0	10.1		ug/L		101	65 - 136
1,2-Dichloropropane	10.0	9.30		ug/L		93	76 - 124
Ethylbenzene	10.0	10.1		ug/L		101	72 - 126
2-Hexanone	10.0	9.43		ug/L		94	25 - 132
Methylene Chloride	10.0	10.0		ug/L		100	63 - 129
4-Methyl-2-pentanone	10.0	9.19		ug/L		92	45 - 145
Styrene	10.0	9.35		ug/L		93	71 - 127
1,1,2,2-Tetrachloroethane	10.0	9.82		ug/L		98	62 - 125
Tetrachloroethene	10.0	9.91		ug/L		99	70 - 135
Toluene	10.0	9.74		ug/L		97	80 - 123
trans-1,2-Dichloroethene	10.0	9.91		ug/L		99	73 - 126
trans-1,3-Dichloropropene	10.0	9.37		ug/L		94	65 - 125
1,1,1-Trichloroethane	10.0	9.90		ug/L		99	63 - 133
1,1,2-Trichloroethane	10.0	9.24		ug/L		92	77 - 127
Trichloroethene	10.0	9.57		ug/L		96	73 - 120
Vinyl chloride	10.0	10.2		ug/L		102	53 - 138
Xylenes, Total	20.0	20.3		ug/L		101	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		70 - 118
Dibromofluoromethane (Surr)	95		70 - 128
1,2-Dichloroethane-d4 (Surr)	96		64 - 135
Toluene-d8 (Surr)	98		71 - 118

**Lab Sample ID: MB 180-92907/4**

**Matrix: Water**

**Analysis Batch: 92907**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			12/20/13 01:59	1
Benzene	ND		1.0	0.11	ug/L			12/20/13 01:59	1
Bromoform	ND		1.0	0.19	ug/L			12/20/13 01:59	1
Bromomethane	ND		1.0	0.31	ug/L			12/20/13 01:59	1
2-Butanone	ND		5.0	0.55	ug/L			12/20/13 01:59	1
Carbon disulfide	ND		1.0	0.21	ug/L			12/20/13 01:59	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			12/20/13 01:59	1
Chlorobenzene	ND		1.0	0.14	ug/L			12/20/13 01:59	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

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

**Lab Sample ID: MB 180-92907/4**

**Matrix: Water**

**Analysis Batch: 92907**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND	ND									
Chlorodibromomethane	ND	ND			1.0	0.14	ug/L			12/20/13 01:59	1
Chloroethane	ND	ND			1.0	0.21	ug/L			12/20/13 01:59	1
Chloroform	ND	ND			1.0	0.17	ug/L			12/20/13 01:59	1
Chloromethane	ND	ND			1.0	0.28	ug/L			12/20/13 01:59	1
cis-1,2-Dichloroethene	ND	ND			1.0	0.24	ug/L			12/20/13 01:59	1
cis-1,3-Dichloropropene	ND	ND			1.0	0.19	ug/L			12/20/13 01:59	1
Dichlorobromomethane	ND	ND			1.0	0.13	ug/L			12/20/13 01:59	1
1,1-Dichloroethane	ND	ND			1.0	0.12	ug/L			12/20/13 01:59	1
1,2-Dichloroethane	ND	ND			1.0	0.21	ug/L			12/20/13 01:59	1
1,1-Dichloroethene	ND	ND			1.0	0.30	ug/L			12/20/13 01:59	1
1,2-Dichloropropane	ND	ND			1.0	0.095	ug/L			12/20/13 01:59	1
Ethylbenzene	ND	ND			1.0	0.23	ug/L			12/20/13 01:59	1
2-Hexanone	ND	ND			5.0	0.16	ug/L			12/20/13 01:59	1
Methylene Chloride	ND	ND			1.0	0.13	ug/L			12/20/13 01:59	1
4-Methyl-2-pentanone	ND	ND			5.0	0.53	ug/L			12/20/13 01:59	1
Styrene	ND	ND			1.0	0.097	ug/L			12/20/13 01:59	1
1,1,2,2-Tetrachloroethane	ND	ND			1.0	0.20	ug/L			12/20/13 01:59	1
Tetrachloroethene	ND	ND			1.0	0.15	ug/L			12/20/13 01:59	1
Toluene	ND	ND			1.0	0.15	ug/L			12/20/13 01:59	1
trans-1,2-Dichloroethene	ND	ND			1.0	0.17	ug/L			12/20/13 01:59	1
trans-1,3-Dichloropropene	ND	ND			1.0	0.15	ug/L			12/20/13 01:59	1
1,1,1-Trichloroethane	ND	ND			1.0	0.29	ug/L			12/20/13 01:59	1
1,1,2-Trichloroethane	ND	ND			1.0	0.20	ug/L			12/20/13 01:59	1
Trichloroethene	ND	ND			1.0	0.14	ug/L			12/20/13 01:59	1
Vinyl chloride	ND	ND			1.0	0.23	ug/L			12/20/13 01:59	1
Xylenes, Total	ND	ND			3.0	0.49	ug/L			12/20/13 01:59	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Surrogate	%Recovery						
4-Bromofluorobenzene (Surr)	105	105	105		70 - 118			1
Dibromofluoromethane (Surr)	105	105	105		70 - 128			1
1,2-Dichloroethane-d4 (Surr)	103	103	103		64 - 135			1
Toluene-d8 (Surr)	107	107	107		71 - 118			1

**Lab Sample ID: LCS 180-92907/7**

**Matrix: Water**

**Analysis Batch: 92907**

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	10.0	7.47		ug/L		75	22 - 150
Benzene	10.0	10.9		ug/L		109	80 - 120
Bromoform	10.0	10.5		ug/L		105	46 - 150
Bromomethane	10.0	10.8		ug/L		108	33 - 150
2-Butanone	10.0	8.78		ug/L		88	39 - 138
Carbon disulfide	10.0	9.49		ug/L		95	54 - 132
Carbon tetrachloride	10.0	11.3		ug/L		113	55 - 150
Chlorobenzene	10.0	10.9		ug/L		109	80 - 120
Chlorodibromomethane	10.0	10.8		ug/L		108	60 - 140
Chloroethane	10.0	10.8		ug/L		108	36 - 142

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

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

**Lab Sample ID: LCS 180-92907/7**

**Matrix: Water**

**Analysis Batch: 92907**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Chloroform	10.0	10.4		ug/L		104	72 - 127
Chloromethane	10.0	11.4		ug/L		114	50 - 139
cis-1,2-Dichloroethene	10.0	10.7		ug/L		107	70 - 120
cis-1,3-Dichloropropene	10.0	10.7		ug/L		107	66 - 120
Dichlorobromomethane	10.0	10.0		ug/L		100	66 - 130
1,1-Dichloroethane	10.0	10.6		ug/L		106	73 - 126
1,2-Dichloroethane	10.0	10.5		ug/L		105	68 - 132
1,1-Dichloroethene	10.0	11.1		ug/L		111	65 - 136
1,2-Dichloropropane	10.0	11.0		ug/L		110	76 - 124
Ethylbenzene	10.0	10.7		ug/L		107	72 - 126
2-Hexanone	10.0	9.41		ug/L		94	25 - 132
Methylene Chloride	10.0	10.9		ug/L		109	63 - 129
4-Methyl-2-pentanone	10.0	10.8		ug/L		108	45 - 145
Styrene	10.0	10.9		ug/L		109	71 - 127
1,1,2,2-Tetrachloroethane	10.0	11.4		ug/L		114	62 - 125
Tetrachloroethene	10.0	10.5		ug/L		105	70 - 135
Toluene	10.0	11.1		ug/L		111	80 - 123
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	73 - 126
trans-1,3-Dichloropropene	10.0	11.0		ug/L		110	65 - 125
1,1,1-Trichloroethane	10.0	11.7		ug/L		117	63 - 133
1,1,2-Trichloroethane	10.0	11.1		ug/L		111	77 - 127
Trichloroethene	10.0	10.2		ug/L		102	73 - 120
Vinyl chloride	10.0	10.8		ug/L		108	53 - 138
Xylenes, Total	20.0	21.3		ug/L		107	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	106		70 - 118
Dibromofluoromethane (Surr)	104		70 - 128
1,2-Dichloroethane-d4 (Surr)	104		64 - 135
Toluene-d8 (Surr)	110		71 - 118

**Lab Sample ID: LCSD 180-92907/8**

**Matrix: Water**

**Analysis Batch: 92907**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike	LCSD		Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Acetone	10.0	6.70		ug/L		67	22 - 150	11	35
Benzene	10.0	10.7		ug/L		107	80 - 120	1	32
Bromoform	10.0	10.5		ug/L		105	46 - 150	0	35
Bromomethane	10.0	10.8		ug/L		108	33 - 150	0	35
2-Butanone	10.0	8.30		ug/L		83	39 - 138	6	35
Carbon disulfide	10.0	10.1		ug/L		101	54 - 132	6	35
Carbon tetrachloride	10.0	12.1		ug/L		121	55 - 150	7	35
Chlorobenzene	10.0	10.4		ug/L		104	80 - 120	5	29
Chlorodibromomethane	10.0	10.4		ug/L		104	60 - 140	3	35
Chloroethane	10.0	10.6		ug/L		106	36 - 142	1	35
Chloroform	10.0	9.98		ug/L		100	72 - 127	4	35
Chloromethane	10.0	11.3		ug/L		113	50 - 139	1	35

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

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

Lab Sample ID: LCSD 180-92907/8

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 92907

Analyte	Spike Added	LCSD		Unit	D	%Rec.		RPD	RPD Limit
		Result	Qualifier			%Rec	Limits		
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	70 - 120	4	35
cis-1,3-Dichloropropene	10.0	11.6		ug/L		116	66 - 120	8	35
Dichlorobromomethane	10.0	10.4		ug/L		104	66 - 130	4	35
1,1-Dichloroethane	10.0	10.5		ug/L		105	73 - 126	1	35
1,2-Dichloroethane	10.0	10.6		ug/L		106	68 - 132	1	32
1,1-Dichloroethene	10.0	10.9		ug/L		109	65 - 136	2	35
1,2-Dichloropropane	10.0	10.8		ug/L		108	76 - 124	2	34
Ethylbenzene	10.0	10.5		ug/L		105	72 - 126	2	33
2-Hexanone	10.0	9.32		ug/L		93	25 - 132	1	35
Methylene Chloride	10.0	10.4		ug/L		104	63 - 129	5	35
4-Methyl-2-pentanone	10.0	10.5		ug/L		105	45 - 145	3	35
Styrene	10.0	10.7		ug/L		107	71 - 127	3	34
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	62 - 125	9	35
Tetrachloroethene	10.0	10.3		ug/L		103	70 - 135	1	35
Toluene	10.0	10.6		ug/L		106	80 - 123	5	35
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	73 - 126	1	35
trans-1,3-Dichloropropene	10.0	11.6		ug/L		116	65 - 125	5	35
1,1,1-Trichloroethane	10.0	12.1		ug/L		121	63 - 133	3	35
1,1,2-Trichloroethane	10.0	10.7		ug/L		107	77 - 127	4	35
Trichloroethene	10.0	10.2		ug/L		102	73 - 120	0	35
Vinyl chloride	10.0	11.4		ug/L		114	53 - 138	6	35
Xylenes, Total	20.0	20.8		ug/L		104	76 - 128	3	32

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		70 - 118
Dibromofluoromethane (Surr)	93		70 - 128
1,2-Dichloroethane-d4 (Surr)	97		64 - 135
Toluene-d8 (Surr)	97		71 - 118

## Method: 200.7 - Metals (Custom List)

Lab Sample ID: MB 180-92590/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total Recoverable

Analysis Batch: 92797

Prep Batch: 92590

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		200	16	ug/L		12/17/13 07:53	12/18/13 16:13	1
Iron	ND		100	8.5	ug/L		12/17/13 07:53	12/18/13 16:13	1
Zinc	ND		20	1.0	ug/L		12/17/13 07:53	12/18/13 16:13	1

Lab Sample ID: LCS 180-92590/2-A

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total Recoverable

Analysis Batch: 92797

Prep Batch: 92590

Analyte	Spike		LCS	LCS	Unit	D	%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Aluminum	2000	2050		ug/L		103	85 - 115		
Iron	1000	948		ug/L		95	85 - 115		
Zinc	500	547		ug/L		109	85 - 115		

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 180-92736/1-A

Matrix: Water

Analysis Batch: 92867

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 92736

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	2.00	J	5.0	1.5	mg/L		12/18/13 11:29	12/18/13 11:29	1

Lab Sample ID: LCS 180-92736/2-A

Matrix: Water

Analysis Batch: 92867

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 92736

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
HEM (Oil and Grease)	40.0	32.6		mg/L		82	78 - 114

Lab Sample ID: LCSD 180-92736/3-A

Matrix: Water

Analysis Batch: 92867

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 92736

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	Limit
HEM (Oil and Grease)	40.0	33.1		mg/L		83	78 - 114	2 18

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 180-92367/1

Matrix: Water

Analysis Batch: 92367

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
pH	7.00	7.010		SU		100	99 - 101

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

## GC/MS VOA

### Analysis Batch: 92744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28038-4	TRIP BLANK	Total/NA	Water	8260B	
LCS 180-92744/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-92744/3	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 92904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28038-1 - DL	MW2	Total/NA	Water	8260B	
180-28038-1	MW2	Total/NA	Water	8260B	
180-28038-2	MW14	Total/NA	Water	8260B	
LCS 180-92904/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-92904/3	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 92907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28038-3	EFFLUENT	Total/NA	Water	8260B	
LCS 180-92907/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 180-92907/8	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 180-92907/4	Method Blank	Total/NA	Water	8260B	

## Metals

### Prep Batch: 92590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28038-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-92590/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-92590/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 92797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28038-3	EFFLUENT	Total Recoverable	Water	200.7	92590
LCS 180-92590/2-A	Lab Control Sample	Total Recoverable	Water	200.7	92590
MB 180-92590/1-A	Method Blank	Total Recoverable	Water	200.7	92590

## General Chemistry

### Analysis Batch: 92367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28038-3	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-92367/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 92736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28038-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-92736/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-92736/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-92736/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 92867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28038-3	EFFLUENT	Total/NA	Water	1664A	92736

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28038-1

## General Chemistry (Continued)

### Analysis Batch: 92867 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-92736/2-A	Lab Control Sample	Total/NA	Water	1664A	92736
LCSD 180-92736/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	92736
MB 180-92736/1-A	Method Blank	Total/NA	Water	1664A	92736

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### **Chain of Custody Record**

**TestAmerica**

THE LEADERS IN ENVIRONMENTAL TESTING

## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-28038-1

**Login Number:** 28038

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Lonzo, Michael A

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	
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.	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").	True	
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 Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-28545-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

1/8/2014 10:25:01 AM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

### Job ID: 180-28545-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-28545-1

#### Receipt

The sample was received on 12/31/2013 9:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7° C.

#### GC/MS VOA

Method(s) 8260B: The matrix spike duplicate (MSD) recovery and RPD between the spikes of sample EFFLUENT RESAMPLE (180-28545-1) were outside of the control limits for styrene. The recovery of the matrix spike and laboratory control sample were within the control limits.

No other analytical or quality issues were noted.

## Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits

### 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-14 *
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-14
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-14
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-14 *
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-28545-1	EFFLUENT RESAMPLE	Water	12/30/13 11:00	12/31/13 09:30

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TestAmerica Pittsburgh

## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL PIT

**Protocol References:**

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

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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## Lab Chronicle

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

**Client Sample ID: EFFLUENT RESAMPLE**

**Lab Sample ID: 180-28545-1**

Date Collected: 12/30/13 11:00

Matrix: Water

Date Received: 12/31/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	93788	01/05/14 22:57	MAZ	TAL PIT

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

**Analyst References:**

Lab: TAL PIT

Batch Type: Analysis

MAZ = Mike Zukowski

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

**Client Sample ID: EFFLUENT RESAMPLE**

**Lab Sample ID: 180-28545-1**

Date Collected: 12/30/13 11:00

Matrix: Water

Date Received: 12/31/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		01/05/14 22:57		1
Benzene	ND		1.0	0.11	ug/L		01/05/14 22:57		1
<b>Bromoform</b>	<b>2.6</b>		1.0	0.19	ug/L		01/05/14 22:57		1
Bromomethane	ND		1.0	0.31	ug/L		01/05/14 22:57		1
2-Butanone	ND		5.0	0.55	ug/L		01/05/14 22:57		1
Carbon disulfide	ND		1.0	0.21	ug/L		01/05/14 22:57		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		01/05/14 22:57		1
Chlorobenzene	ND		1.0	0.14	ug/L		01/05/14 22:57		1
<b>Chlorodibromomethane</b>	<b>1.2</b>		1.0	0.14	ug/L		01/05/14 22:57		1
Chloroethane	ND		1.0	0.21	ug/L		01/05/14 22:57		1
Chloroform	ND		1.0	0.17	ug/L		01/05/14 22:57		1
Chloromethane	ND		1.0	0.28	ug/L		01/05/14 22:57		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		01/05/14 22:57		1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L		01/05/14 22:57		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		01/05/14 22:57		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		01/05/14 22:57		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		01/05/14 22:57		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		01/05/14 22:57		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		01/05/14 22:57		1
Ethylbenzene	ND		1.0	0.23	ug/L		01/05/14 22:57		1
2-Hexanone	ND		5.0	0.16	ug/L		01/05/14 22:57		1
Methylene Chloride	ND		1.0	0.13	ug/L		01/05/14 22:57		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		01/05/14 22:57		1
Styrene	ND		1.0	0.097	ug/L		01/05/14 22:57		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		01/05/14 22:57		1
Tetrachloroethene	ND		1.0	0.15	ug/L		01/05/14 22:57		1
Toluene	ND		1.0	0.15	ug/L		01/05/14 22:57		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		01/05/14 22:57		1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L		01/05/14 22:57		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		01/05/14 22:57		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		01/05/14 22:57		1
Trichloroethene	ND		1.0	0.14	ug/L		01/05/14 22:57		1
Vinyl chloride	ND		1.0	0.23	ug/L		01/05/14 22:57		1
Xylenes, Total	ND		3.0	0.49	ug/L		01/05/14 22:57		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	109		70 - 118				01/05/14 22:57		1
Dibromofluoromethane (Surr)	107		70 - 128				01/05/14 22:57		1
1,2-Dichloroethane-d4 (Surr)	110		64 - 135				01/05/14 22:57		1
Toluene-d8 (Surr)	108		71 - 118				01/05/14 22:57		1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

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

**Lab Sample ID:** MB 180-93788/4

**Matrix:** Water

**Analysis Batch:** 93788

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Acetone	ND		1	5.0	2.5	ug/L		01/05/14 22:33	
Benzene	ND		1	1.0	0.11	ug/L		01/05/14 22:33	
Bromoform	ND		1	1.0	0.19	ug/L		01/05/14 22:33	
Bromomethane	ND		1	1.0	0.31	ug/L		01/05/14 22:33	
2-Butanone	ND		1	5.0	0.55	ug/L		01/05/14 22:33	
Carbon disulfide	ND		1	1.0	0.21	ug/L		01/05/14 22:33	
Carbon tetrachloride	ND		1	1.0	0.14	ug/L		01/05/14 22:33	
Chlorobenzene	ND		1	1.0	0.14	ug/L		01/05/14 22:33	
Chlorodibromomethane	ND		1	1.0	0.14	ug/L		01/05/14 22:33	
Chloroethane	ND		1	1.0	0.21	ug/L		01/05/14 22:33	
Chloroform	ND		1	1.0	0.17	ug/L		01/05/14 22:33	
Chloromethane	ND		1	1.0	0.28	ug/L		01/05/14 22:33	
cis-1,2-Dichloroethene	ND		1	1.0	0.24	ug/L		01/05/14 22:33	
cis-1,3-Dichloropropene	ND		1	1.0	0.19	ug/L		01/05/14 22:33	
Dichlorobromomethane	ND		1	1.0	0.13	ug/L		01/05/14 22:33	
1,1-Dichloroethane	ND		1	1.0	0.12	ug/L		01/05/14 22:33	
1,2-Dichloroethane	ND		1	1.0	0.21	ug/L		01/05/14 22:33	
1,1-Dichloroethene	ND		1	1.0	0.30	ug/L		01/05/14 22:33	
1,2-Dichloropropane	ND		1	1.0	0.095	ug/L		01/05/14 22:33	
Ethylbenzene	ND		1	1.0	0.23	ug/L		01/05/14 22:33	
2-Hexanone	ND		1	5.0	0.16	ug/L		01/05/14 22:33	
Methylene Chloride	ND		1	1.0	0.13	ug/L		01/05/14 22:33	
4-Methyl-2-pentanone	ND		1	5.0	0.53	ug/L		01/05/14 22:33	
Styrene	ND		1	1.0	0.097	ug/L		01/05/14 22:33	
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.20	ug/L		01/05/14 22:33	
Tetrachloroethene	ND		1	1.0	0.15	ug/L		01/05/14 22:33	
Toluene	ND		1	1.0	0.15	ug/L		01/05/14 22:33	
trans-1,2-Dichloroethene	ND		1	1.0	0.17	ug/L		01/05/14 22:33	
trans-1,3-Dichloropropene	ND		1	1.0	0.15	ug/L		01/05/14 22:33	
1,1,1-Trichloroethane	ND		1	1.0	0.29	ug/L		01/05/14 22:33	
1,1,2-Trichloroethane	ND		1	1.0	0.20	ug/L		01/05/14 22:33	
Trichloroethene	ND		1	1.0	0.14	ug/L		01/05/14 22:33	
Vinyl chloride	ND		1	1.0	0.23	ug/L		01/05/14 22:33	
Xylenes, Total	ND		1	3.0	0.49	ug/L		01/05/14 22:33	

Surrogate	MB	MB	Dil Fac				
	%Recovery	Qualifier		Limits	Prepared	Analyzed	
4-Bromofluorobenzene (Surr)	112		1	70 - 118		01/05/14 22:33	
Dibromofluoromethane (Surr)	113		1	70 - 128		01/05/14 22:33	
1,2-Dichloroethane-d4 (Surr)	113		1	64 - 135		01/05/14 22:33	
Toluene-d8 (Surr)	111		1	71 - 118		01/05/14 22:33	

**Lab Sample ID:** LCS 180-93788/7

**Matrix:** Water

**Analysis Batch:** 93788

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

Analyte	Spike	LCS	LCS	Dil Fac	%Rec.	Limits
	Added	Result	Qualifier		%Rec	
Acetone	10.0	9.58		1	96	22 - 150
Benzene	10.0	10.7		1	107	80 - 120

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

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

Lab Sample ID: LCS 180-93788/7

Matrix: Water

Analysis Batch: 93788

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

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Bromoform	10.0	9.29		ug/L		93	46 - 150
Bromomethane	10.0	10.5		ug/L		105	33 - 150
2-Butanone	10.0	9.84		ug/L		98	39 - 138
Carbon disulfide	10.0	7.64		ug/L		76	54 - 132
Carbon tetrachloride	10.0	9.75		ug/L		97	55 - 150
Chlorobenzene	10.0	11.1		ug/L		111	80 - 120
Chlorodibromomethane	10.0	9.22		ug/L		92	60 - 140
Chloroethane	10.0	9.77		ug/L		98	36 - 142
Chloroform	10.0	10.7		ug/L		107	72 - 127
Chloromethane	10.0	9.89		ug/L		99	50 - 139
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	70 - 120
cis-1,3-Dichloropropene	10.0	9.12		ug/L		91	66 - 120
Dichlorobromomethane	10.0	9.83		ug/L		98	66 - 130
1,1-Dichloroethane	10.0	10.4		ug/L		104	73 - 126
1,2-Dichloroethane	10.0	10.8		ug/L		108	68 - 132
1,1-Dichloroethene	10.0	10.7		ug/L		107	65 - 136
1,2-Dichloropropane	10.0	10.6		ug/L		106	76 - 124
Ethylbenzene	10.0	11.0		ug/L		110	72 - 126
2-Hexanone	10.0	9.23		ug/L		92	25 - 132
Methylene Chloride	10.0	11.5		ug/L		115	63 - 129
4-Methyl-2-pentanone	10.0	10.4		ug/L		104	45 - 145
Styrene	10.0	11.2		ug/L		112	71 - 127
1,1,2,2-Tetrachloroethane	10.0	11.3		ug/L		113	62 - 125
Tetrachloroethene	10.0	11.0		ug/L		110	70 - 135
Toluene	10.0	11.4		ug/L		114	80 - 123
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	73 - 126
trans-1,3-Dichloropropene	10.0	9.57		ug/L		96	65 - 125
1,1,1-Trichloroethane	10.0	9.77		ug/L		98	63 - 133
1,1,2-Trichloroethane	10.0	11.2		ug/L		112	77 - 127
Trichloroethene	10.0	10.0		ug/L		100	73 - 120
Vinyl chloride	10.0	9.96		ug/L		100	53 - 138
Xylenes, Total	20.0	21.7		ug/L		109	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	110		70 - 118
Dibromofluoromethane (Surr)	103		70 - 128
1,2-Dichloroethane-d4 (Surr)	107		64 - 135
Toluene-d8 (Surr)	108		71 - 118

Lab Sample ID: 180-28545-1 MS

Matrix: Water

Analysis Batch: 93788

Client Sample ID: EFFLUENT RESAMPLE  
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		10.0	9.38		ug/L		94	22 - 150
Benzene	ND		10.0	10.3		ug/L		103	80 - 120
Bromoform	2.6		10.0	15.1		ug/L		125	46 - 150
Bromomethane	ND		10.0	10.1		ug/L		101	33 - 150

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

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

Lab Sample ID: 180-28545-1 MS

Client Sample ID: EFFLUENT RESAMPLE

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 93788

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
2-Butanone	ND		10.0	10.6		ug/L		106	39 - 138		
Carbon disulfide	ND		10.0	7.32		ug/L		73	54 - 132		
Carbon tetrachloride	ND		10.0	9.15		ug/L		92	55 - 150		
Chlorobenzene	ND		10.0	10.6		ug/L		106	80 - 120		
Chlorodibromomethane	1.2		10.0	11.4		ug/L		102	60 - 140		
Chloroethane	ND		10.0	9.41		ug/L		94	36 - 142		
Chloroform	ND		10.0	10.2		ug/L		102	72 - 127		
Chloromethane	ND		10.0	10.2		ug/L		102	50 - 139		
cis-1,2-Dichloroethene	ND		10.0	9.98		ug/L		100	70 - 120		
cis-1,3-Dichloropropene	ND		10.0	8.65		ug/L		87	66 - 120		
Dichlorobromomethane	ND		10.0	9.91		ug/L		99	66 - 130		
1,1-Dichloroethane	ND		10.0	9.79		ug/L		98	73 - 126		
1,2-Dichloroethane	ND		10.0	10.3		ug/L		103	68 - 132		
1,1-Dichloroethene	ND		10.0	10.0		ug/L		100	65 - 136		
1,2-Dichloropropane	ND		10.0	9.92		ug/L		99	76 - 124		
Ethylbenzene	ND		10.0	10.2		ug/L		102	72 - 126		
2-Hexanone	ND		10.0	9.64		ug/L		96	25 - 132		
Methylene Chloride	ND		10.0	10.1		ug/L		101	63 - 129		
4-Methyl-2-pentanone	ND		10.0	9.91		ug/L		99	45 - 145		
Styrene	ND		10.0	10.5		ug/L		105	71 - 127		
1,1,2,2-Tetrachloroethane	ND		10.0	10.6		ug/L		106	62 - 125		
Tetrachloroethene	ND		10.0	10.4		ug/L		104	70 - 135		
Toluene	ND		10.0	11.1		ug/L		111	80 - 123		
trans-1,2-Dichloroethene	ND		10.0	9.88		ug/L		99	73 - 126		
trans-1,3-Dichloropropene	ND		10.0	9.28		ug/L		93	65 - 125		
1,1,1-Trichloroethane	ND		10.0	9.89		ug/L		99	63 - 133		
1,1,2-Trichloroethane	ND		10.0	10.5		ug/L		105	77 - 127		
Trichloroethene	ND		10.0	10.0		ug/L		100	73 - 120		
Vinyl chloride	ND		10.0	9.43		ug/L		94	53 - 138		
Xylenes, Total	ND		20.0	21.0		ug/L		105	76 - 128		

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		70 - 118
Dibromofluoromethane (Surr)	98		70 - 128
1,2-Dichloroethane-d4 (Surr)	101		64 - 135
Toluene-d8 (Surr)	107		71 - 118

Lab Sample ID: 180-28545-1 MSD

Client Sample ID: EFFLUENT RESAMPLE

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 93788

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Acetone	ND		10.0	11.1		ug/L		111	22 - 150	17	35
Benzene	ND		10.0	11.0		ug/L		110	80 - 120	7	32
Bromoform	2.6		10.0	16.2		ug/L		136	46 - 150	7	35
Bromomethane	ND		10.0	10.5		ug/L		105	33 - 150	4	35
2-Butanone	ND		10.0	10.7		ug/L		107	39 - 138	2	35
Carbon disulfide	ND		10.0	7.66		ug/L		77	54 - 132	5	35

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

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

Lab Sample ID: 180-28545-1 MSD

Matrix: Water

Analysis Batch: 93788

Client Sample ID: EFFLUENT RESAMPLE

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Carbon tetrachloride	ND		10.0	9.62		ug/L		96	55 - 150	5	35	
Chlorobenzene	ND		10.0	11.7		ug/L		117	80 - 120	10	29	
Chlorodibromomethane	1.2		10.0	12.1		ug/L		109	60 - 140	6	35	
Chloroethane	ND		10.0	9.64		ug/L		96	36 - 142	2	35	
Chloroform	ND		10.0	11.0		ug/L		110	72 - 127	8	35	
Chloromethane	ND		10.0	10.6		ug/L		106	50 - 139	4	35	
cis-1,2-Dichloroethene	ND		10.0	10.6		ug/L		106	70 - 120	6	35	
cis-1,3-Dichloropropene	ND		10.0	9.88		ug/L		99	66 - 120	13	35	
Dichlorobromomethane	ND		10.0	10.3		ug/L		103	66 - 130	4	35	
1,1-Dichloroethane	ND		10.0	10.5		ug/L		105	73 - 126	7	35	
1,2-Dichloroethane	ND		10.0	11.3		ug/L		113	68 - 132	9	32	
1,1-Dichloroethene	ND		10.0	10.8		ug/L		108	65 - 136	8	35	
1,2-Dichloropropane	ND		10.0	11.1		ug/L		111	76 - 124	11	34	
Ethylbenzene	ND		10.0	11.2		ug/L		112	72 - 126	9	33	
2-Hexanone	ND		10.0	10.4		ug/L		104	25 - 132	8	35	
Methylene Chloride	ND		10.0	10.9		ug/L		109	63 - 129	7	35	
4-Methyl-2-pentanone	ND		10.0	11.2		ug/L		112	45 - 145	12	35	
Styrene	ND		10.0	2.69	F1 F2	ug/L		27	71 - 127	118	34	
1,1,2,2-Tetrachloroethane	ND		10.0	11.7		ug/L		117	62 - 125	10	35	
Tetrachloroethene	ND		10.0	11.4		ug/L		114	70 - 135	9	35	
Toluene	ND		10.0	11.7		ug/L		117	80 - 123	5	35	
trans-1,2-Dichloroethene	ND		10.0	10.9		ug/L		109	73 - 126	10	35	
trans-1,3-Dichloropropene	ND		10.0	9.69		ug/L		97	65 - 125	4	35	
1,1,1-Trichloroethane	ND		10.0	10.4		ug/L		104	63 - 133	5	35	
1,1,2-Trichloroethane	ND		10.0	11.4		ug/L		114	77 - 127	8	35	
Trichloroethene	ND		10.0	10.9		ug/L		109	73 - 120	8	35	
Vinyl chloride	ND		10.0	10.1		ug/L		101	53 - 138	6	35	
Xylenes, Total	ND		20.0	22.4		ug/L		112	76 - 128	7	32	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	114		70 - 118
Dibromofluoromethane (Surr)	105		70 - 128
1,2-Dichloroethane-d4 (Surr)	110		64 - 135
Toluene-d8 (Surr)	113		71 - 118

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28545-1

## GC/MS VOA

Analysis Batch: 93788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28545-1	EFFLUENT RESAMPLE	Total/NA	Water	8260B	
180-28545-1 MS	EFFLUENT RESAMPLE	Total/NA	Water	8260B	
180-28545-1 MSD	EFFLUENT RESAMPLE	Total/NA	Water	8260B	
LCS 180-93788/7	Lab Control Sample	Total/NA	Water	8260B	
MB 180-93788/4	Method Blank	Total/NA	Water	8260B	

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*Chain of Custody Record*

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

*Temperature on Receipt* —

*Drinking Water? Yes*  *No*

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1/8/2014

## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-28545-1

**Login Number:** 28545

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Kovitch, Christina M

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	
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.	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").	True	
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 Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-28927-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

1/27/2014 3:32:50 PM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

### LINKS

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results through

**TotalAccess**

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Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

### Job ID: 180-28927-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-28927-1

#### Receipt

The samples were received on 1/15/2014 11:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): TRIP BLANK (180-28927-4). Notation was made to the COC.

#### GC/MS VOA

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-28927-1) and MW14 (180-28927-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

## Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

### Qualifiers

#### GC/MS VOA

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

#### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
B	Compound was found in the blank and sample.
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

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## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-14 *
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-14
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-14
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	03-31-14 *
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-28927-1	MW2	Water	01/14/14 07:15	01/15/14 11:00
180-28927-2	MW14	Water	01/14/14 08:30	01/15/14 11:00
180-28927-3	EFFLUENT	Water	01/14/14 09:30	01/15/14 11:00
180-28927-4	TRIP BLANK	Water	01/14/14 00:00	01/15/14 11:00

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TestAmerica Pittsburgh

## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664A	HEM and SGT-HEM	1664A	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

## Lab Chronicle

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

### Client Sample ID: MW2

Date Collected: 01/14/14 07:15

Date Received: 01/15/14 11:00

### Lab Sample ID: 180-28927-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	5000	5 mL	5 mL	94884	01/18/14 19:29	JER	TAL PIT
		Instrument ID: HP5								
Total/NA	Analysis	8260C		500	5 mL	5 mL	94884	01/18/14 20:17	JER	TAL PIT
		Instrument ID: HP5								

### Client Sample ID: MW14

Date Collected: 01/14/14 08:30

Date Received: 01/15/14 11:00

### Lab Sample ID: 180-28927-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1000	5 mL	5 mL	94884	01/18/14 18:41	JER	TAL PIT
		Instrument ID: HP5								

### Client Sample ID: EFFLUENT

Date Collected: 01/14/14 09:30

Date Received: 01/15/14 11:00

### Lab Sample ID: 180-28927-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	94884	01/18/14 17:53	JER	TAL PIT
		Instrument ID: HP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	94919	01/20/14 07:21	RJR	TAL PIT
Total Recoverable	Analysis	200.7		1	50 mL	50 mL	95585	01/24/14 17:02	RJG	TAL PIT
		Instrument ID: Q								
Total/NA	Analysis	SM 4500 H+ B		1		50 mL	95131	01/22/14 11:30	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	1664A			870 mL	1000 mL	95418	01/24/14 08:00	MTW	TAL PIT
Total/NA	Analysis	1664A		1	870 mL	1000 mL	95525	01/24/14 08:00	MTW	TAL PIT
		Instrument ID: NOEQUIP								

### Client Sample ID: TRIP BLANK

Date Collected: 01/14/14 00:00

Date Received: 01/15/14 11:00

### Lab Sample ID: 180-28927-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	94884	01/18/14 19:05	JER	TAL PIT
		Instrument ID: HP5								

#### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

MTW = Michael Wesoloski

RJR = Ron Rosenbaum

Batch Type: Analysis

HRA = Hannah Anderson

JER = Jessica Ryan

MTW = Michael Wesoloski

RJG = Rob Good

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# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

**Client Sample ID: MW2**

Date Collected: 01/14/14 07:15

Date Received: 01/15/14 11:00

**Lab Sample ID: 180-28927-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			01/18/14 20:17	500
Benzene	ND		500	53	ug/L			01/18/14 20:17	500
Bromoform	ND		500	96	ug/L			01/18/14 20:17	500
Bromomethane	ND		500	160	ug/L			01/18/14 20:17	500
2-Butanone	ND		2500	270	ug/L			01/18/14 20:17	500
Carbon disulfide	ND		500	110	ug/L			01/18/14 20:17	500
Carbon tetrachloride	ND		500	68	ug/L			01/18/14 20:17	500
Chlorobenzene	ND		500	68	ug/L			01/18/14 20:17	500
Chlorodibromomethane	ND		500	68	ug/L			01/18/14 20:17	500
Chloroethane	ND		500	110	ug/L			01/18/14 20:17	500
Chloroform	ND		500	85	ug/L			01/18/14 20:17	500
Chloromethane	ND		500	140	ug/L			01/18/14 20:17	500
<b>cis-1,2-Dichloroethene</b>	<b>53000</b>	<b>E</b>	500	120	ug/L			01/18/14 20:17	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			01/18/14 20:17	500
Dichlorobromomethane	ND		500	65	ug/L			01/18/14 20:17	500
1,1-Dichloroethane	ND		500	58	ug/L			01/18/14 20:17	500
1,2-Dichloroethane	ND		500	110	ug/L			01/18/14 20:17	500
1,1-Dichloroethene	ND		500	150	ug/L			01/18/14 20:17	500
1,2-Dichloropropane	ND		500	47	ug/L			01/18/14 20:17	500
Ethylbenzene	ND		500	110	ug/L			01/18/14 20:17	500
2-Hexanone	ND		2500	80	ug/L			01/18/14 20:17	500
Methylene Chloride	ND		500	63	ug/L			01/18/14 20:17	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			01/18/14 20:17	500
Styrene	ND		500	48	ug/L			01/18/14 20:17	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			01/18/14 20:17	500
Tetrachloroethene	ND		500	74	ug/L			01/18/14 20:17	500
Toluene	ND		500	75	ug/L			01/18/14 20:17	500
trans-1,2-Dichloroethene	ND		500	85	ug/L			01/18/14 20:17	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			01/18/14 20:17	500
1,1,1-Trichloroethane	ND		500	140	ug/L			01/18/14 20:17	500
1,1,2-Trichloroethane	ND		500	100	ug/L			01/18/14 20:17	500
Trichloroethene	ND		500	72	ug/L			01/18/14 20:17	500
<b>Vinyl chloride</b>	<b>7500</b>		500	110	ug/L			01/18/14 20:17	500
Xylenes, Total	ND		1500	240	ug/L			01/18/14 20:17	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	104			70 - 118				01/18/14 20:17	500
Dibromofluoromethane (Surr)	115			70 - 128				01/18/14 20:17	500
1,2-Dichloroethane-d4 (Surr)	118			64 - 135				01/18/14 20:17	500
Toluene-d8 (Surr)	108			71 - 118				01/18/14 20:17	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			01/18/14 19:29	5000
Benzene	ND		5000	530	ug/L			01/18/14 19:29	5000
Bromoform	ND		5000	960	ug/L			01/18/14 19:29	5000
Bromomethane	ND		5000	1600	ug/L			01/18/14 19:29	5000
2-Butanone	ND		25000	2700	ug/L			01/18/14 19:29	5000
Carbon disulfide	ND		5000	1100	ug/L			01/18/14 19:29	5000
Carbon tetrachloride	ND		5000	680	ug/L			01/18/14 19:29	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

**Client Sample ID: MW2**

**Date Collected: 01/14/14 07:15**

**Date Received: 01/15/14 11:00**

**Lab Sample ID: 180-28927-1**

**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5000	680	ug/L			01/18/14 19:29	5000
Chlorodibromomethane	ND		5000	680	ug/L			01/18/14 19:29	5000
Chloroethane	ND		5000	1100	ug/L			01/18/14 19:29	5000
Chloroform	ND		5000	850	ug/L			01/18/14 19:29	5000
Chloromethane	ND		5000	1400	ug/L			01/18/14 19:29	5000
<b>cis-1,2-Dichloroethene</b>	<b>53000</b>		5000	1200	ug/L			01/18/14 19:29	5000
cis-1,3-Dichloropropene	ND		5000	930	ug/L			01/18/14 19:29	5000
Dichlorobromomethane	ND		5000	650	ug/L			01/18/14 19:29	5000
1,1-Dichloroethane	ND		5000	580	ug/L			01/18/14 19:29	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			01/18/14 19:29	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			01/18/14 19:29	5000
1,2-Dichloropropane	ND		5000	470	ug/L			01/18/14 19:29	5000
Ethylbenzene	ND		5000	1100	ug/L			01/18/14 19:29	5000
2-Hexanone	ND		25000	800	ug/L			01/18/14 19:29	5000
Methylene Chloride	ND		5000	630	ug/L			01/18/14 19:29	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			01/18/14 19:29	5000
Styrene	ND		5000	480	ug/L			01/18/14 19:29	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			01/18/14 19:29	5000
Tetrachloroethene	ND		5000	740	ug/L			01/18/14 19:29	5000
Toluene	ND		5000	750	ug/L			01/18/14 19:29	5000
trans-1,2-Dichloroethene	ND		5000	850	ug/L			01/18/14 19:29	5000
trans-1,3-Dichloropropene	ND		5000	740	ug/L			01/18/14 19:29	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			01/18/14 19:29	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			01/18/14 19:29	5000
Trichloroethene	ND		5000	720	ug/L			01/18/14 19:29	5000
<b>Vinyl chloride</b>	<b>8000</b>		5000	1100	ug/L			01/18/14 19:29	5000
Xylenes, Total	ND		15000	2400	ug/L			01/18/14 19:29	5000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	109			70 - 118				01/18/14 19:29	5000
Dibromofluoromethane (Surr)	119			70 - 128				01/18/14 19:29	5000
1,2-Dichloroethane-d4 (Surr)	124			64 - 135				01/18/14 19:29	5000
Toluene-d8 (Surr)	110			71 - 118				01/18/14 19:29	5000

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

**Client Sample ID: MW14**

Date Collected: 01/14/14 08:30

Date Received: 01/15/14 11:00

**Lab Sample ID: 180-28927-2**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			01/18/14 18:41	1000
Benzene	ND		1000	110	ug/L			01/18/14 18:41	1000
Bromoform	ND		1000	190	ug/L			01/18/14 18:41	1000
Bromomethane	ND		1000	310	ug/L			01/18/14 18:41	1000
2-Butanone	ND		5000	550	ug/L			01/18/14 18:41	1000
Carbon disulfide	ND		1000	210	ug/L			01/18/14 18:41	1000
Carbon tetrachloride	ND		1000	140	ug/L			01/18/14 18:41	1000
Chlorobenzene	ND		1000	140	ug/L			01/18/14 18:41	1000
Chlorodibromomethane	ND		1000	140	ug/L			01/18/14 18:41	1000
Chloroethane	ND		1000	210	ug/L			01/18/14 18:41	1000
Chloroform	ND		1000	170	ug/L			01/18/14 18:41	1000
Chloromethane	ND		1000	280	ug/L			01/18/14 18:41	1000
<b>cis-1,2-Dichloroethene</b>	<b>4000</b>		1000	240	ug/L			01/18/14 18:41	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			01/18/14 18:41	1000
Dichlorobromomethane	ND		1000	130	ug/L			01/18/14 18:41	1000
1,1-Dichloroethane	ND		1000	120	ug/L			01/18/14 18:41	1000
1,2-Dichloroethane	ND		1000	210	ug/L			01/18/14 18:41	1000
1,1-Dichloroethene	ND		1000	300	ug/L			01/18/14 18:41	1000
1,2-Dichloropropane	ND		1000	95	ug/L			01/18/14 18:41	1000
Ethylbenzene	ND		1000	230	ug/L			01/18/14 18:41	1000
2-Hexanone	ND		5000	160	ug/L			01/18/14 18:41	1000
Methylene Chloride	ND		1000	130	ug/L			01/18/14 18:41	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			01/18/14 18:41	1000
Styrene	ND		1000	97	ug/L			01/18/14 18:41	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			01/18/14 18:41	1000
Tetrachloroethene	ND		1000	150	ug/L			01/18/14 18:41	1000
Toluene	ND		1000	150	ug/L			01/18/14 18:41	1000
trans-1,2-Dichloroethene	ND		1000	170	ug/L			01/18/14 18:41	1000
trans-1,3-Dichloropropene	ND		1000	150	ug/L			01/18/14 18:41	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			01/18/14 18:41	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			01/18/14 18:41	1000
<b>Trichloroethene</b>	<b>13000</b>		1000	140	ug/L			01/18/14 18:41	1000
Vinyl chloride	ND		1000	230	ug/L			01/18/14 18:41	1000
Xylenes, Total	ND		3000	490	ug/L			01/18/14 18:41	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	102			70 - 118				01/18/14 18:41	1000
Dibromofluoromethane (Surr)	115			70 - 128				01/18/14 18:41	1000
1,2-Dichloroethane-d4 (Surr)	120			64 - 135				01/18/14 18:41	1000
Toluene-d8 (Surr)	109			71 - 118				01/18/14 18:41	1000

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TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

## Client Sample ID: EFFLUENT

Date Collected: 01/14/14 09:30

Date Received: 01/15/14 11:00

## Lab Sample ID: 180-28927-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			01/18/14 17:53	1
Benzene	ND		1.0	0.11	ug/L			01/18/14 17:53	1
<b>Bromoform</b>	<b>2.4</b>		1.0	0.19	ug/L			01/18/14 17:53	1
Bromomethane	ND		1.0	0.31	ug/L			01/18/14 17:53	1
2-Butanone	ND		5.0	0.55	ug/L			01/18/14 17:53	1
Carbon disulfide	ND		1.0	0.21	ug/L			01/18/14 17:53	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			01/18/14 17:53	1
Chlorobenzene	ND		1.0	0.14	ug/L			01/18/14 17:53	1
<b>Chlorodibromomethane</b>	<b>1.2</b>		1.0	0.14	ug/L			01/18/14 17:53	1
Chloroethane	ND		1.0	0.21	ug/L			01/18/14 17:53	1
Chloroform	ND		1.0	0.17	ug/L			01/18/14 17:53	1
Chloromethane	ND		1.0	0.28	ug/L			01/18/14 17:53	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			01/18/14 17:53	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			01/18/14 17:53	1
<b>Dichlorobromomethane</b>	<b>0.26 J</b>		1.0	0.13	ug/L			01/18/14 17:53	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			01/18/14 17:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/18/14 17:53	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			01/18/14 17:53	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			01/18/14 17:53	1
Ethylbenzene	ND		1.0	0.23	ug/L			01/18/14 17:53	1
2-Hexanone	ND		5.0	0.16	ug/L			01/18/14 17:53	1
Methylene Chloride	ND		1.0	0.13	ug/L			01/18/14 17:53	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			01/18/14 17:53	1
Styrene	ND		1.0	0.097	ug/L			01/18/14 17:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			01/18/14 17:53	1
Tetrachloroethene	ND		1.0	0.15	ug/L			01/18/14 17:53	1
Toluene	ND		1.0	0.15	ug/L			01/18/14 17:53	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			01/18/14 17:53	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			01/18/14 17:53	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			01/18/14 17:53	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			01/18/14 17:53	1
Trichloroethene	ND		1.0	0.14	ug/L			01/18/14 17:53	1
Vinyl chloride	ND		1.0	0.23	ug/L			01/18/14 17:53	1
Xylenes, Total	ND		3.0	0.49	ug/L			01/18/14 17:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	105			70 - 118				01/18/14 17:53	1
Dibromofluoromethane (Surr)	114			70 - 128				01/18/14 17:53	1
1,2-Dichloroethane-d4 (Surr)	121			64 - 135				01/18/14 17:53	1
Toluene-d8 (Surr)	110			71 - 118				01/18/14 17:53	1

### Method: 200.7 - Metals (Custom List) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	16	ug/L		01/20/14 07:21	01/24/14 17:02	1
<b>Iron</b>	<b>160</b>		100	8.5	ug/L		01/20/14 07:21	01/24/14 17:02	1
<b>Zinc</b>	<b>62 B</b>		20	1.0	ug/L		01/20/14 07:21	01/24/14 17:02	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	2.5	J B	5.7	1.7	mg/L		01/24/14 08:00	01/24/14 08:00	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

**Client Sample ID: EFFLUENT**  
**Date Collected: 01/14/14 09:30**  
**Date Received: 01/15/14 11:00**

**Lab Sample ID: 180-28927-3**  
**Matrix: Water**

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.04	HF	0.100	0.100	SU			01/22/14 11:30	1

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TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 180-28927-4**

**Matrix: Water**

Date Collected: 01/14/14 00:00

Date Received: 01/15/14 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			01/18/14 19:05	1
Benzene	ND		1.0	0.11	ug/L			01/18/14 19:05	1
Bromoform	ND		1.0	0.19	ug/L			01/18/14 19:05	1
Bromomethane	ND		1.0	0.31	ug/L			01/18/14 19:05	1
2-Butanone	ND		5.0	0.55	ug/L			01/18/14 19:05	1
Carbon disulfide	ND		1.0	0.21	ug/L			01/18/14 19:05	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			01/18/14 19:05	1
Chlorobenzene	ND		1.0	0.14	ug/L			01/18/14 19:05	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			01/18/14 19:05	1
Chloroethane	ND		1.0	0.21	ug/L			01/18/14 19:05	1
<b>Chloroform</b>	<b>0.31 J</b>		1.0	0.17	ug/L			01/18/14 19:05	1
Chloromethane	ND		1.0	0.28	ug/L			01/18/14 19:05	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			01/18/14 19:05	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			01/18/14 19:05	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			01/18/14 19:05	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			01/18/14 19:05	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/18/14 19:05	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			01/18/14 19:05	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			01/18/14 19:05	1
Ethylbenzene	ND		1.0	0.23	ug/L			01/18/14 19:05	1
2-Hexanone	ND		5.0	0.16	ug/L			01/18/14 19:05	1
Methylene Chloride	ND		1.0	0.13	ug/L			01/18/14 19:05	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			01/18/14 19:05	1
Styrene	ND		1.0	0.097	ug/L			01/18/14 19:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			01/18/14 19:05	1
Tetrachloroethene	ND		1.0	0.15	ug/L			01/18/14 19:05	1
Toluene	ND		1.0	0.15	ug/L			01/18/14 19:05	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			01/18/14 19:05	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			01/18/14 19:05	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			01/18/14 19:05	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			01/18/14 19:05	1
<b>Trichloroethene</b>	<b>0.39 J</b>		1.0	0.14	ug/L			01/18/14 19:05	1
Vinyl chloride	ND		1.0	0.23	ug/L			01/18/14 19:05	1
Xylenes, Total	ND		3.0	0.49	ug/L			01/18/14 19:05	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100			70 - 118				01/18/14 19:05	1
Dibromofluoromethane (Surr)	120			70 - 128				01/18/14 19:05	1
1,2-Dichloroethane-d4 (Surr)	119			64 - 135				01/18/14 19:05	1
Toluene-d8 (Surr)	108			71 - 118				01/18/14 19:05	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

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

**Lab Sample ID:** MB 180-94884/3

**Matrix:** Water

**Analysis Batch:** 94884

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Acetone	ND		1	5.0	2.5	ug/L		01/18/14 11:08	
Benzene	ND		1	1.0	0.11	ug/L		01/18/14 11:08	
Bromoform	ND		1	1.0	0.19	ug/L		01/18/14 11:08	
Bromomethane	ND		1	1.0	0.31	ug/L		01/18/14 11:08	
2-Butanone	ND		1	5.0	0.55	ug/L		01/18/14 11:08	
Carbon disulfide	ND		1	1.0	0.21	ug/L		01/18/14 11:08	
Carbon tetrachloride	ND		1	1.0	0.14	ug/L		01/18/14 11:08	
Chlorobenzene	ND		1	1.0	0.14	ug/L		01/18/14 11:08	
Chlorodibromomethane	ND		1	1.0	0.14	ug/L		01/18/14 11:08	
Chloroethane	ND		1	1.0	0.21	ug/L		01/18/14 11:08	
Chloroform	ND		1	1.0	0.17	ug/L		01/18/14 11:08	
Chloromethane	ND		1	1.0	0.28	ug/L		01/18/14 11:08	
cis-1,2-Dichloroethene	ND		1	1.0	0.24	ug/L		01/18/14 11:08	
cis-1,3-Dichloropropene	ND		1	1.0	0.19	ug/L		01/18/14 11:08	
Dichlorobromomethane	ND		1	1.0	0.13	ug/L		01/18/14 11:08	
1,1-Dichloroethane	ND		1	1.0	0.12	ug/L		01/18/14 11:08	
1,2-Dichloroethane	ND		1	1.0	0.21	ug/L		01/18/14 11:08	
1,1-Dichloroethene	ND		1	1.0	0.30	ug/L		01/18/14 11:08	
1,2-Dichloropropane	ND		1	1.0	0.095	ug/L		01/18/14 11:08	
Ethylbenzene	ND		1	1.0	0.23	ug/L		01/18/14 11:08	
2-Hexanone	ND		1	5.0	0.16	ug/L		01/18/14 11:08	
Methylene Chloride	ND		1	1.0	0.13	ug/L		01/18/14 11:08	
4-Methyl-2-pentanone	ND		1	5.0	0.53	ug/L		01/18/14 11:08	
Styrene	ND		1	1.0	0.097	ug/L		01/18/14 11:08	
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.20	ug/L		01/18/14 11:08	
Tetrachloroethene	ND		1	1.0	0.15	ug/L		01/18/14 11:08	
Toluene	ND		1	1.0	0.15	ug/L		01/18/14 11:08	
trans-1,2-Dichloroethene	ND		1	1.0	0.17	ug/L		01/18/14 11:08	
trans-1,3-Dichloropropene	ND		1	1.0	0.15	ug/L		01/18/14 11:08	
1,1,1-Trichloroethane	ND		1	1.0	0.29	ug/L		01/18/14 11:08	
1,1,2-Trichloroethane	ND		1	1.0	0.20	ug/L		01/18/14 11:08	
Trichloroethene	ND		1	1.0	0.14	ug/L		01/18/14 11:08	
Vinyl chloride	ND		1	1.0	0.23	ug/L		01/18/14 11:08	
Xylenes, Total	ND		1	3.0	0.49	ug/L		01/18/14 11:08	

Surrogate	MB	MB	Dil Fac				
	%Recovery	Qualifier		Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		1	70 - 118		01/18/14 11:08	
Dibromofluoromethane (Surr)	111		1	70 - 128		01/18/14 11:08	
1,2-Dichloroethane-d4 (Surr)	117		1	64 - 135		01/18/14 11:08	
Toluene-d8 (Surr)	112		1	71 - 118		01/18/14 11:08	

**Lab Sample ID:** LCS 180-94884/6

**Matrix:** Water

**Analysis Batch:** 94884

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

Analyte	Spike	LCS	LCS	Dil Fac	%Rec.	Limits
	Added	Result	Qualifier		%Rec	
Acetone	10.0	7.51		1	75	22 - 150
Benzene	10.0	9.78		1	98	80 - 120

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

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

Lab Sample ID: LCS 180-94884/6

Matrix: Water

Analysis Batch: 94884

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Bromoform	10.0	9.86		ug/L		99	46 - 150
Bromomethane	10.0	10.0		ug/L		100	33 - 150
2-Butanone	10.0	6.94		ug/L		69	39 - 138
Carbon disulfide	10.0	9.37		ug/L		94	54 - 132
Carbon tetrachloride	10.0	9.92		ug/L		99	55 - 150
Chlorobenzene	10.0	10.0		ug/L		100	80 - 120
Chlorodibromomethane	10.0	9.85		ug/L		98	60 - 140
Chloroethane	10.0	10.3		ug/L		103	36 - 142
Chloroform	10.0	9.61		ug/L		96	72 - 127
Chloromethane	10.0	9.99		ug/L		100	50 - 139
cis-1,2-Dichloroethene	10.0	9.53		ug/L		95	70 - 120
cis-1,3-Dichloropropene	10.0	8.38		ug/L		84	66 - 120
Dichlorobromomethane	10.0	9.09		ug/L		91	66 - 130
1,1-Dichloroethane	10.0	9.90		ug/L		99	73 - 126
1,2-Dichloroethane	10.0	9.55		ug/L		96	68 - 132
1,1-Dichloroethene	10.0	9.46		ug/L		95	65 - 136
1,2-Dichloropropane	10.0	9.16		ug/L		92	76 - 124
Ethylbenzene	10.0	10.1		ug/L		101	72 - 126
2-Hexanone	10.0	7.97		ug/L		80	25 - 132
Methylene Chloride	10.0	8.92		ug/L		89	63 - 129
4-Methyl-2-pentanone	10.0	9.19		ug/L		92	45 - 145
Styrene	10.0	10.1		ug/L		101	71 - 127
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	62 - 125
Tetrachloroethene	10.0	10.6		ug/L		106	70 - 135
Toluene	10.0	10.3		ug/L		103	80 - 123
trans-1,2-Dichloroethene	10.0	10.0		ug/L		100	73 - 126
trans-1,3-Dichloropropene	10.0	9.64		ug/L		96	65 - 125
1,1,1-Trichloroethane	10.0	9.60		ug/L		96	63 - 133
1,1,2-Trichloroethane	10.0	9.91		ug/L		99	77 - 127
Trichloroethene	10.0	9.95		ug/L		100	73 - 120
Vinyl chloride	10.0	10.1		ug/L		101	53 - 138
Xylenes, Total	20.0	20.1		ug/L		101	76 - 128

### LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 118
Dibromofluoromethane (Surr)	98		70 - 128
1,2-Dichloroethane-d4 (Surr)	99		64 - 135
Toluene-d8 (Surr)	99		71 - 118

## Method: 200.7 - Metals (Custom List)

Lab Sample ID: MB 180-94919/1-A

Matrix: Water

Analysis Batch: 95585

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 94919

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		200	16	ug/L		01/20/14 07:21	01/24/14 16:24	1
Iron	ND		100	8.5	ug/L		01/20/14 07:21	01/24/14 16:24	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

## Method: 200.7 - Metals (Custom List) (Continued)

**Lab Sample ID:** MB 180-94919/1-A

**Matrix:** Water

**Analysis Batch:** 95585

**Client Sample ID:** Method Blank

**Prep Type:** Total Recoverable

**Prep Batch:** 94919

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc			3.49	J	20	1.0	ug/L		01/20/14 07:21	01/24/14 16:24	1

**Lab Sample ID:** LCS 180-94919/2-A

**Matrix:** Water

**Analysis Batch:** 95585

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total Recoverable

**Prep Batch:** 94919

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec.	Limits	%Rec.	Limits
	Added										
Aluminum	2000		2020			ug/L		101	85 - 115		
Iron	1000		1030			ug/L		103	85 - 115		
Zinc	500		506			ug/L		101	85 - 115		

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID:** MB 180-95418/1-A

**Matrix:** Water

**Analysis Batch:** 95525

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 95418

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)			1.70	J		5.0	1.5	mg/L	01/24/14 08:00	01/24/14 08:00	1

**Lab Sample ID:** LCS 180-95418/2-A

**Matrix:** Water

**Analysis Batch:** 95525

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 95418

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec.	Limits	%Rec.	Limits
	Added										
HEM (Oil and Grease)	40.0		35.9			mg/L		90	78 - 114		

**Lab Sample ID:** LCSD 180-95418/3-A

**Matrix:** Water

**Analysis Batch:** 95525

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 95418

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
	Added										
HEM (Oil and Grease)	40.0		36.7			mg/L		92	78 - 114	2	18

## Method: SM 4500 H+ B - pH

**Lab Sample ID:** LCS 180-95131/1

**Matrix:** Water

**Analysis Batch:** 95131

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
	Added										
pH	7.00		7.010			SU		100	99 - 101		

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-28927-1

## GC/MS VOA

### Analysis Batch: 94884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28927-1 - DL	MW2	Total/NA	Water	8260C	
180-28927-1	MW2	Total/NA	Water	8260C	
180-28927-2	MW14	Total/NA	Water	8260C	
180-28927-3	EFFLUENT	Total/NA	Water	8260C	
180-28927-4	TRIP BLANK	Total/NA	Water	8260C	
LCS 180-94884/6	Lab Control Sample	Total/NA	Water	8260C	
MB 180-94884/3	Method Blank	Total/NA	Water	8260C	

## Metals

### Prep Batch: 94919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28927-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-94919/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-94919/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 95585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28927-3	EFFLUENT	Total Recoverable	Water	200.7	94919
LCS 180-94919/2-A	Lab Control Sample	Total Recoverable	Water	200.7	94919
MB 180-94919/1-A	Method Blank	Total Recoverable	Water	200.7	94919

## General Chemistry

### Analysis Batch: 95131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28927-3	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-95131/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 95418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28927-3	EFFLUENT	Total/NA	Water	1664A	
LCS 180-95418/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 180-95418/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 180-95418/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 95525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-28927-3	EFFLUENT	Total/NA	Water	1664A	95418
LCS 180-95418/2-A	Lab Control Sample	Total/NA	Water	1664A	95418
LCSD 180-95418/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	95418
MB 180-95418/1-A	Method Blank	Total/NA	Water	1664A	95418

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## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-28927-1

**Login Number: 28927**

**List Source: TestAmerica Pittsburgh**

**List Number: 1**

**Creator: Skowronek, Elyse N**

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	
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.	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").	True	
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 Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-29992-1

Client Project/Site: Frewsburg

For:

SGK Ventures, LLC-fka Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

3/13/2014 9:12:42 AM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

### LINKS

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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: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

### Job ID: 180-29992-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-29992-1

#### Receipt

The samples were received on 2/20/2014 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8° C.

#### GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-29992-1) and MW14 (180-29992-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The 500x dilution analysis of sample MW2 (180-29992-1) was started 8 minutes past the 12 hour BFB tune criteria. This analysis was an additional 10x less dilute analysis as requested by the client. As re-analysis within the 12 hour BFB tune criteria would have been completed past the 14 day holding time, the results were reported. A compliant analysis at a 5000x dilution was also completed and reported.

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

#### Metals

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

#### General Chemistry

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

## Definitions/Glossary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery exceeds the control limits

#### Metals

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.
B	Compound was found in the blank and sample.

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
B	Compound was found in the blank and sample.
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

## Certification Summary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14 *
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	04-01-14 *
Louisiana	NELAP	6	04041	06-30-14
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14 *
North Carolina DENR	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-14
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	03-31-14 *
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-29992-1	MW2	Water	02/19/14 07:00	02/20/14 10:00
180-29992-2	MW14	Water	02/19/14 08:00	02/20/14 10:00
180-29992-3	EFFLUENT	Water	02/19/14 10:30	02/20/14 10:00
180-29992-4	T/B	Water	02/19/14 00:00	02/20/14 10:00

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TestAmerica Pittsburgh

## Method Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664B	HEM and SGT-HEM	1664B	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664B = 1664B

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

## Client Sample ID: MW2

Date Collected: 02/19/14 07:00  
 Date Received: 02/20/14 10:00

Lab Sample ID: 180-29992-1  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	5000	5 mL	5 mL	98830	03/05/14 17:06	MAZ	TAL PIT
		Instrument ID: HP6								
Total/NA	Analysis	8260C		500	5 mL	5 mL	98830	03/05/14 20:30	MAZ	TAL PIT
		Instrument ID: HP6								

## Client Sample ID: MW14

Date Collected: 02/19/14 08:00  
 Date Received: 02/20/14 10:00

Lab Sample ID: 180-29992-2  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	5 mL	5 mL	98830	03/05/14 13:37	MAZ	TAL PIT
		Instrument ID: HP6								

## Client Sample ID: EFFLUENT

Date Collected: 02/19/14 10:30  
 Date Received: 02/20/14 10:00

Lab Sample ID: 180-29992-3  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	98584	03/03/14 13:40	DLF	TAL PIT
		Instrument ID: HP6								
Total Recoverable	Prep	200.7			50 mL	50 mL	97987	02/24/14 11:14	CEH	TAL PIT
Total Recoverable	Analysis	200.7		1	50 mL	50 mL	98284	02/26/14 14:33	RJG	TAL PIT
		Instrument ID: Q								
Total/NA	Analysis	1664B		1	970 mL	1000 mL	99143	03/10/14 11:30	JWM	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	1664B			970 mL	1000 mL	99124	03/10/14 11:30	JWM	TAL PIT
Total/NA	Analysis	SM 4500 H+ B		1		50 mL	97625	02/21/14 10:20	HRA	TAL PIT
		Instrument ID: NOEQUIP								

## Client Sample ID: T/B

Date Collected: 02/19/14 00:00  
 Date Received: 02/20/14 10:00

Lab Sample ID: 180-29992-4  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	98584	03/03/14 14:05	DLF	TAL PIT
		Instrument ID: HP6								

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CEH = Caitlyn Haluck

JWM = Jeremiah McLaughlin

Batch Type: Analysis

DLF = Donald Ferguson

HRA = Hannah Anderson

JWM = Jeremiah McLaughlin

MAZ = Mike Zukowski

RJG = Rob Good

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# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

**Client Sample ID: MW2**

Date Collected: 02/19/14 07:00

Date Received: 02/20/14 10:00

**Lab Sample ID: 180-29992-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			03/05/14 20:30	500
Benzene	ND		500	53	ug/L			03/05/14 20:30	500
Bromoform	ND		500	96	ug/L			03/05/14 20:30	500
Bromomethane	ND		500	160	ug/L			03/05/14 20:30	500
2-Butanone	ND		2500	270	ug/L			03/05/14 20:30	500
Carbon disulfide	ND		500	110	ug/L			03/05/14 20:30	500
Carbon tetrachloride	ND		500	68	ug/L			03/05/14 20:30	500
Chlorobenzene	ND		500	68	ug/L			03/05/14 20:30	500
Chlorodibromomethane	ND		500	68	ug/L			03/05/14 20:30	500
Chloroethane	ND		500	110	ug/L			03/05/14 20:30	500
Chloroform	ND		500	85	ug/L			03/05/14 20:30	500
Chloromethane	ND		500	140	ug/L			03/05/14 20:30	500
<b>cis-1,2-Dichloroethene</b>	<b>170000</b>	<b>E</b>	500	120	ug/L			03/05/14 20:30	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			03/05/14 20:30	500
Dichlorobromomethane	ND		500	65	ug/L			03/05/14 20:30	500
1,1-Dichloroethane	ND		500	58	ug/L			03/05/14 20:30	500
1,2-Dichloroethane	ND		500	110	ug/L			03/05/14 20:30	500
<b>1,1-Dichloroethene</b>	<b>340</b>	<b>J</b>	500	150	ug/L			03/05/14 20:30	500
1,2-Dichloropropane	ND		500	47	ug/L			03/05/14 20:30	500
Ethylbenzene	ND		500	110	ug/L			03/05/14 20:30	500
2-Hexanone	ND		2500	80	ug/L			03/05/14 20:30	500
Methylene Chloride	ND		500	63	ug/L			03/05/14 20:30	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			03/05/14 20:30	500
Styrene	ND		500	48	ug/L			03/05/14 20:30	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			03/05/14 20:30	500
Tetrachloroethene	ND		500	74	ug/L			03/05/14 20:30	500
Toluene	ND		500	75	ug/L			03/05/14 20:30	500
<b>trans-1,2-Dichloroethene</b>	<b>260</b>	<b>J</b>	500	85	ug/L			03/05/14 20:30	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			03/05/14 20:30	500
1,1,1-Trichloroethane	ND		500	140	ug/L			03/05/14 20:30	500
1,1,2-Trichloroethane	ND		500	100	ug/L			03/05/14 20:30	500
<b>Trichloroethene</b>	<b>540</b>		500	72	ug/L			03/05/14 20:30	500
<b>Vinyl chloride</b>	<b>40000</b>	<b>E</b>	500	110	ug/L			03/05/14 20:30	500
Xylenes, Total	ND		1500	240	ug/L			03/05/14 20:30	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	102			70 - 118				03/05/14 20:30	500
Dibromofluoromethane (Surr)	114			70 - 128				03/05/14 20:30	500
1,2-Dichloroethane-d4 (Surr)	123			64 - 135				03/05/14 20:30	500
Toluene-d8 (Surr)	114			71 - 118				03/05/14 20:30	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			03/05/14 17:06	5000
Benzene	ND		5000	530	ug/L			03/05/14 17:06	5000
Bromoform	ND		5000	960	ug/L			03/05/14 17:06	5000
Bromomethane	ND		5000	1600	ug/L			03/05/14 17:06	5000
2-Butanone	ND		25000	2700	ug/L			03/05/14 17:06	5000
Carbon disulfide	ND		5000	1100	ug/L			03/05/14 17:06	5000
Carbon tetrachloride	ND		5000	680	ug/L			03/05/14 17:06	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

**Client Sample ID: MW2**

**Lab Sample ID: 180-29992-1**

Date Collected: 02/19/14 07:00  
 Date Received: 02/20/14 10:00

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5000	680	ug/L			03/05/14 17:06	5000
Chlorodibromomethane	ND		5000	680	ug/L			03/05/14 17:06	5000
Chloroethane	ND		5000	1100	ug/L			03/05/14 17:06	5000
Chloroform	ND		5000	850	ug/L			03/05/14 17:06	5000
Chloromethane	ND		5000	1400	ug/L			03/05/14 17:06	5000
<b>cis-1,2-Dichloroethene</b>	<b>120000</b>		5000	1200	ug/L			03/05/14 17:06	5000
cis-1,3-Dichloropropene	ND		5000	930	ug/L			03/05/14 17:06	5000
Dichlorobromomethane	ND		5000	650	ug/L			03/05/14 17:06	5000
1,1-Dichloroethane	ND		5000	580	ug/L			03/05/14 17:06	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			03/05/14 17:06	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			03/05/14 17:06	5000
1,2-Dichloropropane	ND		5000	470	ug/L			03/05/14 17:06	5000
Ethylbenzene	ND		5000	1100	ug/L			03/05/14 17:06	5000
2-Hexanone	ND		25000	800	ug/L			03/05/14 17:06	5000
Methylene Chloride	ND		5000	630	ug/L			03/05/14 17:06	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			03/05/14 17:06	5000
Styrene	ND		5000	480	ug/L			03/05/14 17:06	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			03/05/14 17:06	5000
Tetrachloroethene	ND		5000	740	ug/L			03/05/14 17:06	5000
Toluene	ND		5000	750	ug/L			03/05/14 17:06	5000
trans-1,2-Dichloroethene	ND		5000	850	ug/L			03/05/14 17:06	5000
trans-1,3-Dichloropropene	ND		5000	740	ug/L			03/05/14 17:06	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			03/05/14 17:06	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			03/05/14 17:06	5000
Trichloroethene	ND		5000	720	ug/L			03/05/14 17:06	5000
<b>Vinyl chloride</b>	<b>35000</b>		5000	1100	ug/L			03/05/14 17:06	5000
Xylenes, Total	ND		15000	2400	ug/L			03/05/14 17:06	5000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98			70 - 118				03/05/14 17:06	5000
Dibromofluoromethane (Surr)	103			70 - 128				03/05/14 17:06	5000
1,2-Dichloroethane-d4 (Surr)	115			64 - 135				03/05/14 17:06	5000
Toluene-d8 (Surr)	107			71 - 118				03/05/14 17:06	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

**Client Sample ID: MW14**

**Lab Sample ID: 180-29992-2**

**Matrix: Water**

Date Collected: 02/19/14 08:00  
 Date Received: 02/20/14 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			03/05/14 13:37	500
Benzene	ND		500	53	ug/L			03/05/14 13:37	500
Bromoform	ND		500	96	ug/L			03/05/14 13:37	500
Bromomethane	ND		500	160	ug/L			03/05/14 13:37	500
2-Butanone	ND		2500	270	ug/L			03/05/14 13:37	500
Carbon disulfide	ND		500	110	ug/L			03/05/14 13:37	500
Carbon tetrachloride	ND		500	68	ug/L			03/05/14 13:37	500
Chlorobenzene	ND		500	68	ug/L			03/05/14 13:37	500
Chlorodibromomethane	ND		500	68	ug/L			03/05/14 13:37	500
Chloroethane	ND		500	110	ug/L			03/05/14 13:37	500
Chloroform	ND		500	85	ug/L			03/05/14 13:37	500
Chloromethane	ND		500	140	ug/L			03/05/14 13:37	500
<b>cis-1,2-Dichloroethene</b>	<b>3800</b>		500	120	ug/L			03/05/14 13:37	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			03/05/14 13:37	500
Dichlorobromomethane	ND		500	65	ug/L			03/05/14 13:37	500
1,1-Dichloroethane	ND		500	58	ug/L			03/05/14 13:37	500
1,2-Dichloroethane	ND		500	110	ug/L			03/05/14 13:37	500
1,1-Dichloroethene	ND		500	150	ug/L			03/05/14 13:37	500
1,2-Dichloropropane	ND		500	47	ug/L			03/05/14 13:37	500
Ethylbenzene	ND		500	110	ug/L			03/05/14 13:37	500
2-Hexanone	ND		2500	80	ug/L			03/05/14 13:37	500
Methylene Chloride	ND		500	63	ug/L			03/05/14 13:37	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			03/05/14 13:37	500
Styrene	ND		500	48	ug/L			03/05/14 13:37	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			03/05/14 13:37	500
Tetrachloroethene	ND		500	74	ug/L			03/05/14 13:37	500
Toluene	ND		500	75	ug/L			03/05/14 13:37	500
trans-1,2-Dichloroethene	ND		500	85	ug/L			03/05/14 13:37	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			03/05/14 13:37	500
1,1,1-Trichloroethane	ND		500	140	ug/L			03/05/14 13:37	500
1,1,2-Trichloroethane	ND		500	100	ug/L			03/05/14 13:37	500
<b>Trichloroethene</b>	<b>17000</b>		500	72	ug/L			03/05/14 13:37	500
Vinyl chloride	ND		500	110	ug/L			03/05/14 13:37	500
Xylenes, Total	ND		1500	240	ug/L			03/05/14 13:37	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 118		03/05/14 13:37	500
Dibromofluoromethane (Surr)	105		70 - 128		03/05/14 13:37	500
1,2-Dichloroethane-d4 (Surr)	118		64 - 135		03/05/14 13:37	500
Toluene-d8 (Surr)	115		71 - 118		03/05/14 13:37	500

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

## Client Sample ID: EFFLUENT

Date Collected: 02/19/14 10:30

Date Received: 02/20/14 10:00

## Lab Sample ID: 180-29992-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			03/03/14 13:40	1
Benzene	ND		1.0	0.11	ug/L			03/03/14 13:40	1
<b>Bromoform</b>	<b>4.2</b>		1.0	0.19	ug/L			03/03/14 13:40	1
Bromomethane	ND		1.0	0.31	ug/L			03/03/14 13:40	1
2-Butanone	ND		5.0	0.55	ug/L			03/03/14 13:40	1
Carbon disulfide	ND		1.0	0.21	ug/L			03/03/14 13:40	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			03/03/14 13:40	1
Chlorobenzene	ND		1.0	0.14	ug/L			03/03/14 13:40	1
<b>Chlorodibromomethane</b>	<b>1.4</b>		1.0	0.14	ug/L			03/03/14 13:40	1
Chloroethane	ND		1.0	0.21	ug/L			03/03/14 13:40	1
<b>Chloroform</b>	<b>0.18 J</b>		1.0	0.17	ug/L			03/03/14 13:40	1
Chloromethane	ND		1.0	0.28	ug/L			03/03/14 13:40	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			03/03/14 13:40	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			03/03/14 13:40	1
<b>Dichlorobromomethane</b>	<b>0.62 J</b>		1.0	0.13	ug/L			03/03/14 13:40	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			03/03/14 13:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/03/14 13:40	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/03/14 13:40	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			03/03/14 13:40	1
Ethylbenzene	ND		1.0	0.23	ug/L			03/03/14 13:40	1
2-Hexanone	ND		5.0	0.16	ug/L			03/03/14 13:40	1
Methylene Chloride	ND		1.0	0.13	ug/L			03/03/14 13:40	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			03/03/14 13:40	1
Styrene	ND		1.0	0.097	ug/L			03/03/14 13:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			03/03/14 13:40	1
Tetrachloroethene	ND		1.0	0.15	ug/L			03/03/14 13:40	1
Toluene	ND		1.0	0.15	ug/L			03/03/14 13:40	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			03/03/14 13:40	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			03/03/14 13:40	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			03/03/14 13:40	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			03/03/14 13:40	1
<b>Trichloroethene</b>	<b>0.21 J</b>		1.0	0.14	ug/L			03/03/14 13:40	1
Vinyl chloride	ND		1.0	0.23	ug/L			03/03/14 13:40	1
Xylenes, Total	ND		3.0	0.49	ug/L			03/03/14 13:40	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	110			70 - 118				03/03/14 13:40	1
Dibromofluoromethane (Surr)	121			70 - 128				03/03/14 13:40	1
1,2-Dichloroethane-d4 (Surr)	130			64 - 135				03/03/14 13:40	1
Toluene-d8 (Surr)	107			71 - 118				03/03/14 13:40	1

### Method: 200.7 - Metals (Custom List) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aluminum</b>	<b>25 J</b>		200	16	ug/L		02/24/14 11:14	02/26/14 14:33	1
<b>Iron</b>	<b>15 J</b>		100	8.5	ug/L		02/24/14 11:14	02/26/14 14:33	1
<b>Zinc</b>	<b>75 B</b>		20	1.0	ug/L		02/24/14 11:14	02/26/14 14:33	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>HEM (Oil &amp; Grease)</b>	<b>2.0 J B</b>		5.2	1.5	mg/L		03/10/14 11:30	03/10/14 11:30	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

**Client Sample ID: EFFLUENT**

**Lab Sample ID: 180-29992-3**

Date Collected: 02/19/14 10:30

Matrix: Water

Date Received: 02/20/14 10:00

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.95	HF	0.100	0.100	SU			02/21/14 10:20	1

1

2

3

4

5

6

7

8

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10

11

12

13

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

**Client Sample ID: T/B**

Date Collected: 02/19/14 00:00

Date Received: 02/20/14 10:00

**Lab Sample ID: 180-29992-4**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		03/03/14 14:05		1
Benzene	ND		1.0	0.11	ug/L		03/03/14 14:05		1
Bromoform	ND		1.0	0.19	ug/L		03/03/14 14:05		1
Bromomethane	ND		1.0	0.31	ug/L		03/03/14 14:05		1
2-Butanone	ND		5.0	0.55	ug/L		03/03/14 14:05		1
Carbon disulfide	ND		1.0	0.21	ug/L		03/03/14 14:05		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		03/03/14 14:05		1
Chlorobenzene	ND		1.0	0.14	ug/L		03/03/14 14:05		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		03/03/14 14:05		1
Chloroethane	ND		1.0	0.21	ug/L		03/03/14 14:05		1
Chloroform	ND		1.0	0.17	ug/L		03/03/14 14:05		1
Chloromethane	ND		1.0	0.28	ug/L		03/03/14 14:05		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		03/03/14 14:05		1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L		03/03/14 14:05		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		03/03/14 14:05		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		03/03/14 14:05		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		03/03/14 14:05		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		03/03/14 14:05		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		03/03/14 14:05		1
Ethylbenzene	ND		1.0	0.23	ug/L		03/03/14 14:05		1
2-Hexanone	ND		5.0	0.16	ug/L		03/03/14 14:05		1
Methylene Chloride	ND		1.0	0.13	ug/L		03/03/14 14:05		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		03/03/14 14:05		1
Styrene	ND		1.0	0.097	ug/L		03/03/14 14:05		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		03/03/14 14:05		1
Tetrachloroethene	ND		1.0	0.15	ug/L		03/03/14 14:05		1
Toluene	ND		1.0	0.15	ug/L		03/03/14 14:05		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		03/03/14 14:05		1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L		03/03/14 14:05		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		03/03/14 14:05		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		03/03/14 14:05		1
<b>Trichloroethene</b>	<b>0.92 J</b>		1.0	0.14	ug/L		03/03/14 14:05		1
Vinyl chloride	ND		1.0	0.23	ug/L		03/03/14 14:05		1
Xylenes, Total	ND		3.0	0.49	ug/L		03/03/14 14:05		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 118		03/03/14 14:05	1
Dibromofluoromethane (Surr)	126		70 - 128		03/03/14 14:05	1
1,2-Dichloroethane-d4 (Surr)	125		64 - 135		03/03/14 14:05	1
Toluene-d8 (Surr)	104		71 - 118		03/03/14 14:05	1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

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

**Lab Sample ID:** MB 180-98584/2

**Matrix:** Water

**Analysis Batch:** 98584

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			03/03/14 13:02	1
Benzene	ND		1.0	0.11	ug/L			03/03/14 13:02	1
Bromoform	ND		1.0	0.19	ug/L			03/03/14 13:02	1
Bromomethane	ND		1.0	0.31	ug/L			03/03/14 13:02	1
2-Butanone	ND		5.0	0.55	ug/L			03/03/14 13:02	1
Carbon disulfide	ND		1.0	0.21	ug/L			03/03/14 13:02	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			03/03/14 13:02	1
Chlorobenzene	ND		1.0	0.14	ug/L			03/03/14 13:02	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			03/03/14 13:02	1
Chloroethane	ND		1.0	0.21	ug/L			03/03/14 13:02	1
Chloroform	ND		1.0	0.17	ug/L			03/03/14 13:02	1
Chloromethane	ND		1.0	0.28	ug/L			03/03/14 13:02	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			03/03/14 13:02	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			03/03/14 13:02	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			03/03/14 13:02	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			03/03/14 13:02	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/03/14 13:02	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/03/14 13:02	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			03/03/14 13:02	1
Ethylbenzene	ND		1.0	0.23	ug/L			03/03/14 13:02	1
2-Hexanone	ND		5.0	0.16	ug/L			03/03/14 13:02	1
Methylene Chloride	ND		1.0	0.13	ug/L			03/03/14 13:02	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			03/03/14 13:02	1
Styrene	ND		1.0	0.097	ug/L			03/03/14 13:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			03/03/14 13:02	1
Tetrachloroethene	ND		1.0	0.15	ug/L			03/03/14 13:02	1
Toluene	ND		1.0	0.15	ug/L			03/03/14 13:02	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			03/03/14 13:02	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			03/03/14 13:02	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			03/03/14 13:02	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			03/03/14 13:02	1
Trichloroethene	ND		1.0	0.14	ug/L			03/03/14 13:02	1
Vinyl chloride	ND		1.0	0.23	ug/L			03/03/14 13:02	1
Xylenes, Total	ND		3.0	0.49	ug/L			03/03/14 13:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 118			1
Dibromofluoromethane (Surr)	114		70 - 128			1
1,2-Dichloroethane-d4 (Surr)	121		64 - 135			1
Toluene-d8 (Surr)	109		71 - 118			1

**Lab Sample ID:** LCS 180-98584/5

**Matrix:** Water

**Analysis Batch:** 98584

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Acetone	10.0	8.84		ug/L		88	22 - 150
Benzene	10.0	10.9		ug/L		109	80 - 120

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

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

**Lab Sample ID: LCS 180-98584/5**

**Matrix: Water**

**Analysis Batch: 98584**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike		LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier					
Bromoform	10.0	12.5		ug/L		125	46 - 150	
Bromomethane	10.0	11.6		ug/L		116	33 - 150	
2-Butanone	10.0	11.1		ug/L		111	39 - 138	
Carbon disulfide	10.0	11.8		ug/L		118	54 - 132	
Carbon tetrachloride	10.0	12.5		ug/L		125	55 - 150	
Chlorobenzene	10.0	10.6		ug/L		106	80 - 120	
Chlorodibromomethane	10.0	12.6		ug/L		126	60 - 140	
Chloroethane	10.0	10.5		ug/L		105	36 - 142	
Chloroform	10.0	12.0		ug/L		120	72 - 127	
Chloromethane	10.0	9.75		ug/L		98	50 - 139	
cis-1,2-Dichloroethene	10.0	10.9		ug/L		109	70 - 120	
cis-1,3-Dichloropropene	10.0	10.9		ug/L		109	66 - 120	
Dichlorobromomethane	10.0	11.7		ug/L		117	66 - 130	
1,1-Dichloroethane	10.0	11.6		ug/L		116	73 - 126	
1,2-Dichloroethane	10.0	12.7		ug/L		127	68 - 132	
1,1-Dichloroethene	10.0	10.9		ug/L		109	65 - 136	
1,2-Dichloropropane	10.0	10.6		ug/L		106	76 - 124	
Ethylbenzene	10.0	10.1		ug/L		101	72 - 126	
2-Hexanone	10.0	9.98		ug/L		100	25 - 132	
Methylene Chloride	10.0	12.7		ug/L		127	63 - 129	
4-Methyl-2-pentanone	10.0	9.34		ug/L		93	45 - 145	
Styrene	10.0	10.5		ug/L		105	71 - 127	
1,1,2,2-Tetrachloroethane	10.0	10.6		ug/L		106	62 - 125	
Tetrachloroethene	10.0	11.1		ug/L		111	70 - 135	
Toluene	10.0	10.8		ug/L		108	80 - 123	
trans-1,2-Dichloroethene	10.0	11.7		ug/L		117	73 - 126	
trans-1,3-Dichloropropene	10.0	12.1		ug/L		121	65 - 125	
1,1,1-Trichloroethane	10.0	12.4		ug/L		124	63 - 133	
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	77 - 127	
Trichloroethene	10.0	11.3		ug/L		113	73 - 120	
Vinyl chloride	10.0	8.78		ug/L		88	53 - 138	
Xylenes, Total	20.0	20.7		ug/L		103	76 - 128	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		70 - 118
Dibromofluoromethane (Surr)	112		70 - 128
1,2-Dichloroethane-d4 (Surr)	120		64 - 135
Toluene-d8 (Surr)	101		71 - 118

**Lab Sample ID: 180-29992-3 MS**

**Matrix: Water**

**Analysis Batch: 98584**

**Client Sample ID: EFFLUENT**

**Prep Type: Total/NA**

Analyte	Sample		Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Added	Result				
Acetone	ND		10.0	10.2		ug/L		102	22 - 150
Benzene	ND		10.0	9.98		ug/L		100	80 - 120
Bromoform	4.2		10.0	17.9		ug/L		137	46 - 150
Bromomethane	ND		10.0	9.95		ug/L		99	33 - 150

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

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

Lab Sample ID: 180-29992-3 MS

Client Sample ID: EFFLUENT  
 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 98584

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
2-Butanone	ND		10.0	11.7		ug/L		117	39 - 138		
Carbon disulfide	ND		10.0	10.9		ug/L		109	54 - 132		
Carbon tetrachloride	ND		10.0	11.5		ug/L		115	55 - 150		
Chlorobenzene	ND		10.0	10.3		ug/L		103	80 - 120		
Chlorodibromomethane	1.4		10.0	14.3		ug/L		128	60 - 140		
Chloroethane	ND		10.0	9.22		ug/L		92	36 - 142		
Chloroform	0.18	J	10.0	11.4		ug/L		113	72 - 127		
Chloromethane	ND		10.0	8.47		ug/L		85	50 - 139		
cis-1,2-Dichloroethene	ND		10.0	10.5		ug/L		105	70 - 120		
cis-1,3-Dichloropropene	ND		10.0	10.3		ug/L		103	66 - 120		
Dichlorobromomethane	0.62	J	10.0	11.9		ug/L		113	66 - 130		
1,1-Dichloroethane	ND		10.0	10.7		ug/L		107	73 - 126		
1,2-Dichloroethane	ND		10.0	11.9		ug/L		119	68 - 132		
1,1-Dichloroethene	ND		10.0	10.0		ug/L		100	65 - 136		
1,2-Dichloropropane	ND		10.0	9.92		ug/L		99	76 - 124		
Ethylbenzene	ND		10.0	10.1		ug/L		101	72 - 126		
2-Hexanone	ND		10.0	10.3		ug/L		103	25 - 132		
Methylene Chloride	ND		10.0	11.1		ug/L		111	63 - 129		
4-Methyl-2-pentanone	ND		10.0	10.3		ug/L		103	45 - 145		
Styrene	ND		10.0	10.2		ug/L		102	71 - 127		
1,1,2,2-Tetrachloroethane	ND		10.0	10.8		ug/L		108	62 - 125		
Tetrachloroethene	ND		10.0	10.9		ug/L		109	70 - 135		
Toluene	ND		10.0	10.5		ug/L		105	80 - 123		
trans-1,2-Dichloroethene	ND		10.0	10.5		ug/L		105	73 - 126		
trans-1,3-Dichloropropene	ND		10.0	11.9		ug/L		119	65 - 125		
1,1,1-Trichloroethane	ND		10.0	11.1		ug/L		111	63 - 133		
1,1,2-Trichloroethane	ND		10.0	10.7		ug/L		107	77 - 127		
Trichloroethene	0.21	J	10.0	10.4		ug/L		102	73 - 120		
Vinyl chloride	ND		10.0	8.48		ug/L		85	53 - 138		
Xylenes, Total	ND		20.0	20.7		ug/L		104	76 - 128		

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		70 - 118
Dibromofluoromethane (Surr)	97		70 - 128
1,2-Dichloroethane-d4 (Surr)	108		64 - 135
Toluene-d8 (Surr)	101		71 - 118

Lab Sample ID: 180-29992-3 MSD

Client Sample ID: EFFLUENT  
 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 98584

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Acetone	ND		10.0	9.10		ug/L		91	22 - 150	12	35
Benzene	ND		10.0	9.71		ug/L		97	80 - 120	3	32
Bromoform	4.2		10.0	17.8		ug/L		136	46 - 150	1	35
Bromomethane	ND		10.0	9.52		ug/L		95	33 - 150	4	35
2-Butanone	ND		10.0	10.4		ug/L		104	39 - 138	12	35
Carbon disulfide	ND		10.0	10.4		ug/L		104	54 - 132	5	35

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

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

Lab Sample ID: 180-29992-3 MSD

Matrix: Water

Analysis Batch: 98584

Client Sample ID: EFFLUENT  
 Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Carbon tetrachloride	ND		10.0	10.7		ug/L		107	55 - 150	7	35
Chlorobenzene	ND		10.0	10.1		ug/L		101	80 - 120	1	29
Chlorodibromomethane	1.4		10.0	13.6		ug/L		121	60 - 140	5	35
Chloroethane	ND		10.0	9.78		ug/L		98	36 - 142	6	35
Chloroform	0.18	J	10.0	10.7		ug/L		105	72 - 127	7	35
Chloromethane	ND		10.0	8.12		ug/L		81	50 - 139	4	35
cis-1,2-Dichloroethene	ND		10.0	10.4		ug/L		104	70 - 120	2	35
cis-1,3-Dichloropropene	ND		10.0	10.5		ug/L		105	66 - 120	1	35
Dichlorobromomethane	0.62	J	10.0	11.0		ug/L		103	66 - 130	8	35
1,1-Dichloroethane	ND		10.0	10.3		ug/L		103	73 - 126	5	35
1,2-Dichloroethane	ND		10.0	11.8		ug/L		118	68 - 132	1	32
1,1-Dichloroethene	ND		10.0	9.38		ug/L		94	65 - 136	7	35
1,2-Dichloropropane	ND		10.0	10.1		ug/L		101	76 - 124	2	34
Ethylbenzene	ND		10.0	10.1		ug/L		101	72 - 126	0	33
2-Hexanone	ND		10.0	10.3		ug/L		103	25 - 132	0	35
Methylene Chloride	ND		10.0	10.8		ug/L		108	63 - 129	2	35
4-Methyl-2-pentanone	ND		10.0	10.4		ug/L		104	45 - 145	1	35
Styrene	ND		10.0	10.1		ug/L		101	71 - 127	1	34
1,1,2,2-Tetrachloroethane	ND		10.0	10.5		ug/L		105	62 - 125	3	35
Tetrachloroethene	ND		10.0	9.98		ug/L		100	70 - 135	9	35
Toluene	ND		10.0	10.2		ug/L		102	80 - 123	3	35
trans-1,2-Dichloroethene	ND		10.0	10.2		ug/L		102	73 - 126	3	35
trans-1,3-Dichloropropene	ND		10.0	12.1		ug/L		121	65 - 125	1	35
1,1,1-Trichloroethane	ND		10.0	10.8		ug/L		108	63 - 133	2	35
1,1,2-Trichloroethane	ND		10.0	9.91		ug/L		99	77 - 127	7	35
Trichloroethene	0.21	J	10.0	10.5		ug/L		103	73 - 120	1	35
Vinyl chloride	ND		10.0	8.36		ug/L		84	53 - 138	1	35
Xylenes, Total	ND		20.0	19.9		ug/L		99	76 - 128	4	32

### MSD MSD

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		70 - 118
Dibromofluoromethane (Surr)	101		70 - 128
1,2-Dichloroethane-d4 (Surr)	109		64 - 135
Toluene-d8 (Surr)	106		71 - 118

Lab Sample ID: MB 180-98830/3

Matrix: Water

Analysis Batch: 98830

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			03/05/14 13:12	1
Benzene	ND		1.0	0.11	ug/L			03/05/14 13:12	1
Bromoform	ND		1.0	0.19	ug/L			03/05/14 13:12	1
Bromomethane	ND		1.0	0.31	ug/L			03/05/14 13:12	1
2-Butanone	ND		5.0	0.55	ug/L			03/05/14 13:12	1
Carbon disulfide	ND		1.0	0.21	ug/L			03/05/14 13:12	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			03/05/14 13:12	1
Chlorobenzene	ND		1.0	0.14	ug/L			03/05/14 13:12	1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

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

**Lab Sample ID: MB 180-98830/3**

**Matrix: Water**

**Analysis Batch: 98830**

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

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chlorodibromomethane	ND		1.0	0.14	ug/L			03/05/14 13:12	1
Chloroethane	ND		1.0	0.21	ug/L			03/05/14 13:12	1
Chloroform	ND		1.0	0.17	ug/L			03/05/14 13:12	1
Chloromethane	ND		1.0	0.28	ug/L			03/05/14 13:12	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			03/05/14 13:12	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			03/05/14 13:12	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			03/05/14 13:12	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			03/05/14 13:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/05/14 13:12	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/05/14 13:12	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			03/05/14 13:12	1
Ethylbenzene	ND		1.0	0.23	ug/L			03/05/14 13:12	1
2-Hexanone	ND		5.0	0.16	ug/L			03/05/14 13:12	1
Methylene Chloride	ND		1.0	0.13	ug/L			03/05/14 13:12	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			03/05/14 13:12	1
Styrene	ND		1.0	0.097	ug/L			03/05/14 13:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			03/05/14 13:12	1
Tetrachloroethene	ND		1.0	0.15	ug/L			03/05/14 13:12	1
Toluene	ND		1.0	0.15	ug/L			03/05/14 13:12	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			03/05/14 13:12	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			03/05/14 13:12	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			03/05/14 13:12	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			03/05/14 13:12	1
Trichloroethene	ND		1.0	0.14	ug/L			03/05/14 13:12	1
Vinyl chloride	ND		1.0	0.23	ug/L			03/05/14 13:12	1
Xylenes, Total	ND		3.0	0.49	ug/L			03/05/14 13:12	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	101		70 - 118		03/05/14 13:12	1
Dibromofluoromethane (Surr)	104		70 - 128		03/05/14 13:12	1
1,2-Dichloroethane-d4 (Surr)	115		64 - 135		03/05/14 13:12	1
Toluene-d8 (Surr)	118		71 - 118		03/05/14 13:12	1

**Lab Sample ID: LCS 180-98830/6**

**Matrix: Water**

**Analysis Batch: 98830**

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

Analyte	Spike		LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier	Unit				
Acetone	10.0	8.34		ug/L		83	22 - 150	
Benzene	10.0	9.35		ug/L		93	80 - 120	
Bromoform	10.0	10.3		ug/L		103	46 - 150	
Bromomethane	10.0	9.17		ug/L		92	33 - 150	
2-Butanone	10.0	10.7		ug/L		107	39 - 138	
Carbon disulfide	10.0	9.55		ug/L		95	54 - 132	
Carbon tetrachloride	10.0	9.72		ug/L		97	55 - 150	
Chlorobenzene	10.0	10.6		ug/L		106	80 - 120	
Chlorodibromomethane	10.0	11.5		ug/L		115	60 - 140	
Chloroethane	10.0	10.2		ug/L		102	36 - 142	

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

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

**Lab Sample ID: LCS 180-98830/6**

**Matrix: Water**

**Analysis Batch: 98830**

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

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
Chloroform	10.0	9.74		ug/L		97	72 - 127
Chloromethane	10.0	11.2		ug/L		112	50 - 139
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	70 - 120
cis-1,3-Dichloropropene	10.0	9.65		ug/L		96	66 - 120
Dichlorobromomethane	10.0	9.54		ug/L		95	66 - 130
1,1-Dichloroethane	10.0	11.3		ug/L		113	73 - 126
1,2-Dichloroethane	10.0	10.6		ug/L		106	68 - 132
1,1-Dichloroethene	10.0	10.0		ug/L		100	65 - 136
1,2-Dichloropropane	10.0	11.5		ug/L		115	76 - 124
Ethylbenzene	10.0	10.5		ug/L		105	72 - 126
2-Hexanone	10.0	10.6		ug/L		106	25 - 132
Methylene Chloride	10.0	10.2		ug/L		102	63 - 129
4-Methyl-2-pentanone	10.0	10.9		ug/L		109	45 - 145
Styrene	10.0	10.3		ug/L		103	71 - 127
1,1,2,2-Tetrachloroethane	10.0	10.8		ug/L		108	62 - 125
Tetrachloroethene	10.0	9.26		ug/L		93	70 - 135
Toluene	10.0	10.7		ug/L		107	80 - 123
trans-1,2-Dichloroethene	10.0	10.6		ug/L		106	73 - 126
trans-1,3-Dichloropropene	10.0	11.3		ug/L		113	65 - 125
1,1,1-Trichloroethane	10.0	9.59		ug/L		96	63 - 133
1,1,2-Trichloroethane	10.0	10.5		ug/L		105	77 - 127
Trichloroethene	10.0	10.0		ug/L		100	73 - 120
Vinyl chloride	10.0	10.8		ug/L		108	53 - 138
Xylenes, Total	20.0	20.4		ug/L		102	76 - 128

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		70 - 118
Dibromofluoromethane (Surr)	90		70 - 128
1,2-Dichloroethane-d4 (Surr)	99		64 - 135
Toluene-d8 (Surr)	99		71 - 118

**Lab Sample ID: 180-29992-2 MS**

**Matrix: Water**

**Analysis Batch: 98830**

**Client Sample ID: MW14**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		5000	4090		ug/L		82	22 - 150
Benzene	ND		5000	4770		ug/L		95	80 - 120
Bromoform	ND		5000	5090		ug/L		102	46 - 150
Bromomethane	ND		5000	4310		ug/L		86	33 - 150
2-Butanone	ND		5000	5480		ug/L		110	39 - 138
Carbon disulfide	ND		5000	4250		ug/L		85	54 - 132
Carbon tetrachloride	ND		5000	4440		ug/L		89	55 - 150
Chlorobenzene	ND		5000	4820		ug/L		96	80 - 120
Chlorodibromomethane	ND		5000	5090		ug/L		102	60 - 140
Chloroethane	ND		5000	4930		ug/L		99	36 - 142
Chloroform	ND		5000	4740		ug/L		95	72 - 127
Chloromethane	ND		5000	5280		ug/L		106	50 - 139

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

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

**Lab Sample ID: 180-29992-2 MS**

**Matrix: Water**

**Analysis Batch: 98830**

**Client Sample ID: MW14**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
cis-1,2-Dichloroethene	3800		5000	8830		ug/L		101	70 - 120
cis-1,3-Dichloropropene	ND		5000	4890		ug/L		98	66 - 120
Dichlorobromomethane	ND		5000	4800		ug/L		96	66 - 130
1,1-Dichloroethane	ND		5000	5680		ug/L		114	73 - 126
1,2-Dichloroethane	ND		5000	5520		ug/L		110	68 - 132
1,1-Dichloroethene	ND		5000	4530		ug/L		91	65 - 136
1,2-Dichloropropane	ND		5000	5570		ug/L		111	76 - 124
Ethylbenzene	ND		5000	4780		ug/L		96	72 - 126
2-Hexanone	ND		5000	5110		ug/L		102	25 - 132
Methylene Chloride	ND		5000	5160		ug/L		103	63 - 129
4-Methyl-2-pentanone	ND		5000	5330		ug/L		107	45 - 145
Styrene	ND		5000	4750		ug/L		95	71 - 127
1,1,2,2-Tetrachloroethane	ND		5000	5100		ug/L		102	62 - 125
Tetrachloroethene	ND		5000	4210		ug/L		84	70 - 135
Toluene	ND		5000	4770		ug/L		95	80 - 123
trans-1,2-Dichloroethene	ND		5000	5050		ug/L		101	73 - 126
trans-1,3-Dichloropropene	ND		5000	5190		ug/L		104	65 - 125
1,1,1-Trichloroethane	ND		5000	4470		ug/L		89	63 - 133
1,1,2-Trichloroethane	ND		5000	4940		ug/L		99	77 - 127
Trichloroethene	17000		5000	19400	F1	ug/L		58	73 - 120
Vinyl chloride	ND		5000	5110		ug/L		102	53 - 138
Xylenes, Total	ND		10000	9320		ug/L		93	76 - 128

**MS**

**MS**

Surrogate	MS	MS	<b>Limits</b>
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	89		70 - 118
Dibromofluoromethane (Surr)	90		70 - 128
1,2-Dichloroethane-d4 (Surr)	98		64 - 135
Toluene-d8 (Surr)	92		71 - 118

**Lab Sample ID: 180-29992-2 MSD**

**Matrix: Water**

**Analysis Batch: 98830**

**Client Sample ID: MW14**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		5000	4470		ug/L		89	22 - 150
Benzene	ND		5000	4500		ug/L		90	80 - 120
Bromoform	ND		5000	5050		ug/L		101	46 - 150
Bromomethane	ND		5000	4470		ug/L		89	33 - 150
2-Butanone	ND		5000	5780		ug/L		116	39 - 138
Carbon disulfide	ND		5000	3950		ug/L		79	54 - 132
Carbon tetrachloride	ND		5000	4020		ug/L		80	55 - 150
Chlorobenzene	ND		5000	4760		ug/L		95	80 - 120
Chlorodibromomethane	ND		5000	5170		ug/L		103	60 - 140
Chloroethane	ND		5000	4720		ug/L		94	36 - 142
Chloroform	ND		5000	4630		ug/L		93	72 - 127
Chloromethane	ND		5000	4990		ug/L		100	50 - 139
cis-1,2-Dichloroethene	3800		5000	9010		ug/L		104	70 - 120
cis-1,3-Dichloropropene	ND		5000	4880		ug/L		98	66 - 120

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

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

Lab Sample ID: 180-29992-2 MSD

Matrix: Water

Analysis Batch: 98830

Client Sample ID: MW14

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Dichlorobromomethane	ND		5000	4500		ug/L		90	66 - 130	6	35
1,1-Dichloroethane	ND		5000	5360		ug/L		107	73 - 126	6	35
1,2-Dichloroethane	ND		5000	5410		ug/L		108	68 - 132	2	32
1,1-Dichloroethene	ND		5000	4040		ug/L		81	65 - 136	11	35
1,2-Dichloropropane	ND		5000	5660		ug/L		113	76 - 124	1	34
Ethylbenzene	ND		5000	4490		ug/L		90	72 - 126	6	33
2-Hexanone	ND		5000	5360		ug/L		107	25 - 132	5	35
Methylene Chloride	ND		5000	5330		ug/L		107	63 - 129	3	35
4-Methyl-2-pentanone	ND		5000	5640		ug/L		113	45 - 145	6	35
Styrene	ND		5000	4740		ug/L		95	71 - 127	0	34
1,1,2,2-Tetrachloroethane	ND		5000	5370		ug/L		107	62 - 125	5	35
Tetrachloroethene	ND		5000	3820		ug/L		76	70 - 135	10	35
Toluene	ND		5000	4740		ug/L		95	80 - 123	0	35
trans-1,2-Dichloroethene	ND		5000	4590		ug/L		92	73 - 126	10	35
trans-1,3-Dichloropropene	ND		5000	5500		ug/L		110	65 - 125	6	35
1,1,1-Trichloroethane	ND		5000	4300		ug/L		86	63 - 133	4	35
1,1,2-Trichloroethane	ND		5000	5180		ug/L		104	77 - 127	5	35
Trichloroethene	17000		5000	21500	E	ug/L		100	73 - 120	10	35
Vinyl chloride	ND		5000	4450		ug/L		89	53 - 138	14	35
Xylenes, Total	ND		10000	9090		ug/L		91	76 - 128	3	32

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		70 - 118
Dibromofluoromethane (Surr)	101		70 - 128
1,2-Dichloroethane-d4 (Surr)	111		64 - 135
Toluene-d8 (Surr)	109		71 - 118

## Method: 200.7 - Metals (Custom List)

Lab Sample ID: MB 180-97987/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total Recoverable

Analysis Batch: 98284

Prep Batch: 97987

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		200	16	ug/L		02/24/14 11:14	02/26/14 13:49	1
Iron	ND		100	8.5	ug/L		02/24/14 11:14	02/26/14 13:49	1
Zinc	1.94	J	20	1.0	ug/L		02/24/14 11:14	02/26/14 13:49	1

Lab Sample ID: LCS 180-97987/2-A

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total Recoverable

Analysis Batch: 98284

Prep Batch: 97987

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Aluminum	2000	2010		ug/L		100	85 - 115
Iron	1000	1050		ug/L		105	85 - 115
Zinc	500	517		ug/L		103	85 - 115

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

## Method: 1664B - HEM and SGT-HEM

**Lab Sample ID:** MB 180-99124/1-A

**Matrix:** Water

**Analysis Batch:** 99143

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 99124

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	2.10	J	5.0	1.5	mg/L		03/10/14 11:30	03/10/14 11:30	1

**Lab Sample ID:** LCS 180-99124/2-A

**Matrix:** Water

**Analysis Batch:** 99143

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 99124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
HEM (Oil & Grease)	40.0	36.8		mg/L		92	78 - 114

**Lab Sample ID:** LCSD 180-99124/3-A

**Matrix:** Water

**Analysis Batch:** 99143

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 99124

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	Limit
HEM (Oil & Grease)	40.0	34.6		mg/L		86	78 - 114	6 18

## Method: SM 4500 H+ B - pH

**Lab Sample ID:** LCS 180-97625/1

**Matrix:** Water

**Analysis Batch:** 97625

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
pH	7.00	7.010		SU		100	99 - 101

# QC Association Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

## GC/MS VOA

### Analysis Batch: 98584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-29992-3	EFFLUENT	Total/NA	Water	8260C	
180-29992-3 MS	EFFLUENT	Total/NA	Water	8260C	
180-29992-3 MSD	EFFLUENT	Total/NA	Water	8260C	
180-29992-4	T/B	Total/NA	Water	8260C	
LCS 180-98584/5	Lab Control Sample	Total/NA	Water	8260C	
MB 180-98584/2	Method Blank	Total/NA	Water	8260C	

### Analysis Batch: 98830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-29992-1 - DL	MW2	Total/NA	Water	8260C	
180-29992-1	MW2	Total/NA	Water	8260C	
180-29992-2	MW14	Total/NA	Water	8260C	
180-29992-2 MS	MW14	Total/NA	Water	8260C	
180-29992-2 MSD	MW14	Total/NA	Water	8260C	
LCS 180-98830/6	Lab Control Sample	Total/NA	Water	8260C	
MB 180-98830/3	Method Blank	Total/NA	Water	8260C	

## Metals

### Prep Batch: 97987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-29992-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-97987/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-97987/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 98284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-29992-3	EFFLUENT	Total Recoverable	Water	200.7	97987
LCS 180-97987/2-A	Lab Control Sample	Total Recoverable	Water	200.7	97987
MB 180-97987/1-A	Method Blank	Total Recoverable	Water	200.7	97987

## General Chemistry

### Analysis Batch: 97625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-29992-3	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-97625/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 99124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-29992-3	EFFLUENT	Total/NA	Water	1664B	
LCS 180-99124/2-A	Lab Control Sample	Total/NA	Water	1664B	
LCSD 180-99124/3-A	Lab Control Sample Dup	Total/NA	Water	1664B	
MB 180-99124/1-A	Method Blank	Total/NA	Water	1664B	

### Analysis Batch: 99143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-29992-3	EFFLUENT	Total/NA	Water	1664B	
LCS 180-99124/2-A	Lab Control Sample	Total/NA	Water	1664B	
LCSD 180-99124/3-A	Lab Control Sample Dup	Total/NA	Water	1664B	

TestAmerica Pittsburgh

## QC Association Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-29992-1

### General Chemistry (Continued)

#### Analysis Batch: 99143 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-99124/1-A	Method Blank	Total/NA	Water	1664B	99124

1

2

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## Login Sample Receipt Checklist

Client: SGK Ventures, LLC

Job Number: 180-29992-1

**Login Number: 29992**

**List Source: TestAmerica Pittsburgh**

**List Number: 1**

**Creator: Watson, Debbie**

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	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	no relinquished time on COC
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	coc lists 3 TB vials, only rec. 2
Samples are received within Holding Time.	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").	True	
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

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Pittsburgh, PA 15238

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TestAmerica Job ID: 180-30855-1

Client Project/Site: Frewsburg

For:

SGK Ventures, LLC-fka Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

3/31/2014 12:06:34 PM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

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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: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

### Job ID: 180-30855-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-30855-1

#### Receipt

The samples were received on 3/21/2014 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.3° C.

#### GC/MS VOA

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-30855-1) and MW14 (180-30855-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Metals

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

#### General Chemistry

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

## Definitions/Glossary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

### 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.
E	Result exceeded calibration range.

#### Metals

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.
B	Compound was found in the blank and sample.

#### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
HF	Field parameter with a holding time of 15 minutes

### 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

## Certification Summary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14 *
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	04-01-14 *
Louisiana	NELAP	6	04041	06-30-14
New Hampshire	NELAP	1	203011	04-05-14 *
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14 *
North Carolina DENR	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-14 *
South Carolina	State Program	4	89014	04-30-14 *
Texas	NELAP	6	T104704528	03-31-15
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14 *
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	03-31-14 *
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-30855-1	MW2	Water	03/20/14 07:00	03/21/14 08:50
180-30855-2	MW14	Water	03/20/14 08:00	03/21/14 08:50
180-30855-3	EFFFLUENT	Water	03/20/14 09:20	03/21/14 08:50
180-30855-4	TRIP BLANK	Water	03/20/14 00:00	03/21/14 08:50

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TestAmerica Pittsburgh

## Method Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664B	HEM and SGT-HEM	1664B	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664B = 1664B

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

## Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

### Client Sample ID: MW2

Date Collected: 03/20/14 07:00  
 Date Received: 03/21/14 08:50

### Lab Sample ID: 180-30855-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	5000	5 mL	5 mL	100654	03/26/14 17:52	DLF	TAL PIT
		Instrument ID: CHHP6								
Total/NA	Analysis	8260C		500	5 mL	5 mL	100943	03/28/14 17:08	DLF	TAL PIT
		Instrument ID: CHHP6								

### Client Sample ID: MW14

Date Collected: 03/20/14 08:00  
 Date Received: 03/21/14 08:50

### Lab Sample ID: 180-30855-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	5 mL	5 mL	100654	03/26/14 18:16	DLF	TAL PIT
		Instrument ID: CHHP6								

### Client Sample ID: EFFFFLUENT

Date Collected: 03/20/14 09:20  
 Date Received: 03/21/14 08:50

### Lab Sample ID: 180-30855-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	100654	03/26/14 17:28	DLF	TAL PIT
		Instrument ID: CHHP6								
Total Recoverable	Prep	200.7			50 mL	50 mL	100557	03/25/14 12:27	CEH	TAL PIT
Total Recoverable	Analysis	200.7		1	50 mL	50 mL	100751	03/26/14 11:39	RJG	TAL PIT
		Instrument ID: Q								
Total/NA	Analysis	1664B		1	970 mL	1000 mL	100832	03/26/14 09:18	JWM	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	1664B			970 mL	1000 mL	100664	03/26/14 09:18	CLL	TAL PIT
Total/NA	Analysis	SM 4500 H+ B		1		50 mL	100834	03/27/14 11:53	ADW	TAL PIT
		Instrument ID: NOEQUIP								

### Client Sample ID: TRIP BLANK

Date Collected: 03/20/14 00:00  
 Date Received: 03/21/14 08:50

### Lab Sample ID: 180-30855-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	100654	03/26/14 18:40	DLF	TAL PIT
		Instrument ID: CHHP6								

#### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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## Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CEH = Caitlyn Haluck

CLL = Cheryl Loheyde

Batch Type: Analysis

ADW = Adam Wolfe

DLF = Donald Ferguson

JWM = Jeremiah McLaughlin

RJG = Rob Good

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# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

**Client Sample ID: MW2**

Date Collected: 03/20/14 07:00

Date Received: 03/21/14 08:50

**Lab Sample ID: 180-30855-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			03/28/14 17:08	500
Benzene	ND		500	53	ug/L			03/28/14 17:08	500
Bromoform	ND		500	96	ug/L			03/28/14 17:08	500
Bromomethane	ND		500	160	ug/L			03/28/14 17:08	500
2-Butanone	ND		2500	270	ug/L			03/28/14 17:08	500
Carbon disulfide	ND		500	110	ug/L			03/28/14 17:08	500
Carbon tetrachloride	ND		500	68	ug/L			03/28/14 17:08	500
Chlorobenzene	ND		500	68	ug/L			03/28/14 17:08	500
Chlorodibromomethane	ND		500	68	ug/L			03/28/14 17:08	500
Chloroethane	ND		500	110	ug/L			03/28/14 17:08	500
Chloroform	ND		500	85	ug/L			03/28/14 17:08	500
Chloromethane	ND		500	140	ug/L			03/28/14 17:08	500
<b>cis-1,2-Dichloroethene</b>	<b>66000</b>	<b>E</b>	500	120	ug/L			03/28/14 17:08	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			03/28/14 17:08	500
Dichlorobromomethane	ND		500	65	ug/L			03/28/14 17:08	500
1,1-Dichloroethane	ND		500	58	ug/L			03/28/14 17:08	500
1,2-Dichloroethane	ND		500	110	ug/L			03/28/14 17:08	500
<b>1,1-Dichloroethene</b>	<b>240</b>	<b>J</b>	500	150	ug/L			03/28/14 17:08	500
1,2-Dichloropropane	ND		500	47	ug/L			03/28/14 17:08	500
Ethylbenzene	ND		500	110	ug/L			03/28/14 17:08	500
2-Hexanone	ND		2500	80	ug/L			03/28/14 17:08	500
<b>Methylene Chloride</b>	<b>150</b>	<b>J</b>	500	63	ug/L			03/28/14 17:08	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			03/28/14 17:08	500
Styrene	ND		500	48	ug/L			03/28/14 17:08	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			03/28/14 17:08	500
Tetrachloroethene	ND		500	74	ug/L			03/28/14 17:08	500
Toluene	ND		500	75	ug/L			03/28/14 17:08	500
<b>trans-1,2-Dichloroethene</b>	<b>130</b>	<b>J</b>	500	85	ug/L			03/28/14 17:08	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			03/28/14 17:08	500
1,1,1-Trichloroethane	ND		500	140	ug/L			03/28/14 17:08	500
1,1,2-Trichloroethane	ND		500	100	ug/L			03/28/14 17:08	500
<b>Trichloroethene</b>	<b>540</b>		500	72	ug/L			03/28/14 17:08	500
<b>Vinyl chloride</b>	<b>15000</b>		500	110	ug/L			03/28/14 17:08	500
Xylenes, Total	ND		1500	240	ug/L			03/28/14 17:08	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98			70 - 118				03/28/14 17:08	500
Dibromofluoromethane (Surr)	95			70 - 128				03/28/14 17:08	500
1,2-Dichloroethane-d4 (Surr)	93			64 - 135				03/28/14 17:08	500
Toluene-d8 (Surr)	102			71 - 118				03/28/14 17:08	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			03/26/14 17:52	5000
Benzene	ND		5000	530	ug/L			03/26/14 17:52	5000
Bromoform	ND		5000	960	ug/L			03/26/14 17:52	5000
Bromomethane	ND		5000	1600	ug/L			03/26/14 17:52	5000
2-Butanone	ND		25000	2700	ug/L			03/26/14 17:52	5000
Carbon disulfide	ND		5000	1100	ug/L			03/26/14 17:52	5000
Carbon tetrachloride	ND		5000	680	ug/L			03/26/14 17:52	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

**Client Sample ID: MW2**

**Lab Sample ID: 180-30855-1**

Date Collected: 03/20/14 07:00

Matrix: Water

Date Received: 03/21/14 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5000	680	ug/L			03/26/14 17:52	5000
Chlorodibromomethane	ND		5000	680	ug/L			03/26/14 17:52	5000
Chloroethane	ND		5000	1100	ug/L			03/26/14 17:52	5000
Chloroform	ND		5000	850	ug/L			03/26/14 17:52	5000
Chloromethane	ND		5000	1400	ug/L			03/26/14 17:52	5000
<b>cis-1,2-Dichloroethene</b>	<b>110000</b>		5000	1200	ug/L			03/26/14 17:52	5000
cis-1,3-Dichloropropene	ND		5000	930	ug/L			03/26/14 17:52	5000
Dichlorobromomethane	ND		5000	650	ug/L			03/26/14 17:52	5000
1,1-Dichloroethane	ND		5000	580	ug/L			03/26/14 17:52	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			03/26/14 17:52	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			03/26/14 17:52	5000
1,2-Dichloropropane	ND		5000	470	ug/L			03/26/14 17:52	5000
Ethylbenzene	ND		5000	1100	ug/L			03/26/14 17:52	5000
2-Hexanone	ND		25000	800	ug/L			03/26/14 17:52	5000
<b>Methylene Chloride</b>	<b>1300 J</b>		5000	630	ug/L			03/26/14 17:52	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			03/26/14 17:52	5000
Styrene	ND		5000	480	ug/L			03/26/14 17:52	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			03/26/14 17:52	5000
Tetrachloroethene	ND		5000	740	ug/L			03/26/14 17:52	5000
Toluene	ND		5000	750	ug/L			03/26/14 17:52	5000
trans-1,2-Dichloroethene	ND		5000	850	ug/L			03/26/14 17:52	5000
trans-1,3-Dichloropropene	ND		5000	740	ug/L			03/26/14 17:52	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			03/26/14 17:52	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			03/26/14 17:52	5000
Trichloroethene	ND		5000	720	ug/L			03/26/14 17:52	5000
<b>Vinyl chloride</b>	<b>18000</b>		5000	1100	ug/L			03/26/14 17:52	5000
Xylenes, Total	ND		15000	2400	ug/L			03/26/14 17:52	5000
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		70 - 118				03/26/14 17:52	5000	
Dibromofluoromethane (Surr)	102		70 - 128				03/26/14 17:52	5000	
1,2-Dichloroethane-d4 (Surr)	95		64 - 135				03/26/14 17:52	5000	
Toluene-d8 (Surr)	91		71 - 118				03/26/14 17:52	5000	

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

**Client Sample ID: MW14**

Date Collected: 03/20/14 08:00

Date Received: 03/21/14 08:50

**Lab Sample ID: 180-30855-2**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			03/26/14 18:16	500
Benzene	ND		500	53	ug/L			03/26/14 18:16	500
Bromoform	ND		500	96	ug/L			03/26/14 18:16	500
Bromomethane	ND		500	160	ug/L			03/26/14 18:16	500
2-Butanone	ND		2500	270	ug/L			03/26/14 18:16	500
Carbon disulfide	ND		500	110	ug/L			03/26/14 18:16	500
Carbon tetrachloride	ND		500	68	ug/L			03/26/14 18:16	500
Chlorobenzene	ND		500	68	ug/L			03/26/14 18:16	500
Chlorodibromomethane	ND		500	68	ug/L			03/26/14 18:16	500
Chloroethane	ND		500	110	ug/L			03/26/14 18:16	500
Chloroform	ND		500	85	ug/L			03/26/14 18:16	500
Chloromethane	ND		500	140	ug/L			03/26/14 18:16	500
<b>cis-1,2-Dichloroethene</b>	<b>3500</b>		500	120	ug/L			03/26/14 18:16	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			03/26/14 18:16	500
Dichlorobromomethane	ND		500	65	ug/L			03/26/14 18:16	500
1,1-Dichloroethane	ND		500	58	ug/L			03/26/14 18:16	500
1,2-Dichloroethane	ND		500	110	ug/L			03/26/14 18:16	500
1,1-Dichloroethene	ND		500	150	ug/L			03/26/14 18:16	500
1,2-Dichloropropane	ND		500	47	ug/L			03/26/14 18:16	500
Ethylbenzene	ND		500	110	ug/L			03/26/14 18:16	500
2-Hexanone	ND		2500	80	ug/L			03/26/14 18:16	500
<b>Methylene Chloride</b>	<b>150 J</b>		500	63	ug/L			03/26/14 18:16	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			03/26/14 18:16	500
Styrene	ND		500	48	ug/L			03/26/14 18:16	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			03/26/14 18:16	500
Tetrachloroethene	ND		500	74	ug/L			03/26/14 18:16	500
Toluene	ND		500	75	ug/L			03/26/14 18:16	500
trans-1,2-Dichloroethene	ND		500	85	ug/L			03/26/14 18:16	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			03/26/14 18:16	500
1,1,1-Trichloroethane	ND		500	140	ug/L			03/26/14 18:16	500
1,1,2-Trichloroethane	ND		500	100	ug/L			03/26/14 18:16	500
<b>Trichloroethene</b>	<b>15000</b>		500	72	ug/L			03/26/14 18:16	500
Vinyl chloride	ND		500	110	ug/L			03/26/14 18:16	500
Xylenes, Total	ND		1500	240	ug/L			03/26/14 18:16	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	105			70 - 118				03/26/14 18:16	500
Dibromofluoromethane (Surr)	100			70 - 128				03/26/14 18:16	500
1,2-Dichloroethane-d4 (Surr)	95			64 - 135				03/26/14 18:16	500
Toluene-d8 (Surr)	93			71 - 118				03/26/14 18:16	500

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

**Client Sample ID: EFFFLUENT**

**Lab Sample ID: 180-30855-3**

**Matrix: Water**

Date Collected: 03/20/14 09:20

Date Received: 03/21/14 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			03/26/14 17:28	1
Benzene	ND		1.0	0.11	ug/L			03/26/14 17:28	1
<b>Bromoform</b>	<b>1.3</b>		1.0	0.19	ug/L			03/26/14 17:28	1
Bromomethane	ND		1.0	0.31	ug/L			03/26/14 17:28	1
2-Butanone	ND		5.0	0.55	ug/L			03/26/14 17:28	1
Carbon disulfide	ND		1.0	0.21	ug/L			03/26/14 17:28	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			03/26/14 17:28	1
Chlorobenzene	ND		1.0	0.14	ug/L			03/26/14 17:28	1
<b>Chlorodibromomethane</b>	<b>0.83 J</b>		1.0	0.14	ug/L			03/26/14 17:28	1
Chloroethane	ND		1.0	0.21	ug/L			03/26/14 17:28	1
Chloroform	ND		1.0	0.17	ug/L			03/26/14 17:28	1
Chloromethane	ND		1.0	0.28	ug/L			03/26/14 17:28	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			03/26/14 17:28	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			03/26/14 17:28	1
<b>Dichlorobromomethane</b>	<b>0.33 J</b>		1.0	0.13	ug/L			03/26/14 17:28	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			03/26/14 17:28	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/26/14 17:28	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/26/14 17:28	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			03/26/14 17:28	1
Ethylbenzene	ND		1.0	0.23	ug/L			03/26/14 17:28	1
2-Hexanone	ND		5.0	0.16	ug/L			03/26/14 17:28	1
Methylene Chloride	ND		1.0	0.13	ug/L			03/26/14 17:28	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			03/26/14 17:28	1
Styrene	ND		1.0	0.097	ug/L			03/26/14 17:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			03/26/14 17:28	1
Tetrachloroethene	ND		1.0	0.15	ug/L			03/26/14 17:28	1
Toluene	ND		1.0	0.15	ug/L			03/26/14 17:28	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			03/26/14 17:28	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			03/26/14 17:28	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			03/26/14 17:28	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			03/26/14 17:28	1
Trichloroethene	ND		1.0	0.14	ug/L			03/26/14 17:28	1
Vinyl chloride	ND		1.0	0.23	ug/L			03/26/14 17:28	1
Xylenes, Total	ND		3.0	0.49	ug/L			03/26/14 17:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	104			70 - 118				03/26/14 17:28	1
Dibromofluoromethane (Surr)	100			70 - 128				03/26/14 17:28	1
1,2-Dichloroethane-d4 (Surr)	94			64 - 135				03/26/14 17:28	1
Toluene-d8 (Surr)	91			71 - 118				03/26/14 17:28	1

## Method: 200.7 - Metals (Custom List) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	16	ug/L		03/25/14 12:27	03/26/14 11:39	1
<b>Iron</b>	<b>14 J</b>		100	9.5	ug/L		03/25/14 12:27	03/26/14 11:39	1
<b>Zinc</b>	<b>24 B</b>		20	1.0	ug/L		03/25/14 12:27	03/26/14 11:39	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>HEM (Oil &amp; Grease)</b>	<b>2.9 JB</b>		5.2	1.5	mg/L		03/26/14 09:18	03/26/14 09:18	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

**Client Sample ID: EFFFLUENT**  
**Date Collected: 03/20/14 09:20**  
**Date Received: 03/21/14 08:50**

**Lab Sample ID: 180-30855-3**  
**Matrix: Water**

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.56	HF	0.100	0.100	SU			03/27/14 11:53	1

1

2

3

4

5

6

7

8

9

10

11

12

13

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 180-30855-4**

**Matrix: Water**

Date Collected: 03/20/14 00:00

Date Received: 03/21/14 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.6	J	5.0	2.5	ug/L		03/26/14 18:40		1
Benzene	ND		1.0	0.11	ug/L		03/26/14 18:40		1
Bromoform	ND		1.0	0.19	ug/L		03/26/14 18:40		1
Bromomethane	ND		1.0	0.31	ug/L		03/26/14 18:40		1
2-Butanone	ND		5.0	0.55	ug/L		03/26/14 18:40		1
Carbon disulfide	ND		1.0	0.21	ug/L		03/26/14 18:40		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		03/26/14 18:40		1
Chlorobenzene	ND		1.0	0.14	ug/L		03/26/14 18:40		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		03/26/14 18:40		1
Chloroethane	ND		1.0	0.21	ug/L		03/26/14 18:40		1
Chloroform	ND		1.0	0.17	ug/L		03/26/14 18:40		1
Chloromethane	ND		1.0	0.28	ug/L		03/26/14 18:40		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		03/26/14 18:40		1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L		03/26/14 18:40		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		03/26/14 18:40		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		03/26/14 18:40		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		03/26/14 18:40		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		03/26/14 18:40		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		03/26/14 18:40		1
Ethylbenzene	ND		1.0	0.23	ug/L		03/26/14 18:40		1
2-Hexanone	ND		5.0	0.16	ug/L		03/26/14 18:40		1
<b>Methylene Chloride</b>	<b>5.1</b>		1.0	0.13	ug/L		03/26/14 18:40		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		03/26/14 18:40		1
Styrene	ND		1.0	0.097	ug/L		03/26/14 18:40		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		03/26/14 18:40		1
Tetrachloroethene	ND		1.0	0.15	ug/L		03/26/14 18:40		1
Toluene	ND		1.0	0.15	ug/L		03/26/14 18:40		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		03/26/14 18:40		1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L		03/26/14 18:40		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		03/26/14 18:40		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		03/26/14 18:40		1
Trichloroethene	ND		1.0	0.14	ug/L		03/26/14 18:40		1
Vinyl chloride	ND		1.0	0.23	ug/L		03/26/14 18:40		1
Xylenes, Total	ND		3.0	0.49	ug/L		03/26/14 18:40		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	106			70 - 118			03/26/14 18:40		1
Dibromofluoromethane (Surr)	100			70 - 128			03/26/14 18:40		1
1,2-Dichloroethane-d4 (Surr)	94			64 - 135			03/26/14 18:40		1
Toluene-d8 (Surr)	92			71 - 118			03/26/14 18:40		1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

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

**Lab Sample ID:** MB 180-100654/4

**Matrix:** Water

**Analysis Batch:** 100654

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Acetone	ND		1	5.0	2.5	ug/L		03/26/14 10:23	
Benzene	ND		1	1.0	0.11	ug/L		03/26/14 10:23	
Bromoform	ND		1	1.0	0.19	ug/L		03/26/14 10:23	
Bromomethane	ND		1	1.0	0.31	ug/L		03/26/14 10:23	
2-Butanone	ND		1	5.0	0.55	ug/L		03/26/14 10:23	
Carbon disulfide	ND		1	1.0	0.21	ug/L		03/26/14 10:23	
Carbon tetrachloride	ND		1	1.0	0.14	ug/L		03/26/14 10:23	
Chlorobenzene	ND		1	1.0	0.14	ug/L		03/26/14 10:23	
Chlorodibromomethane	ND		1	1.0	0.14	ug/L		03/26/14 10:23	
Chloroethane	ND		1	1.0	0.21	ug/L		03/26/14 10:23	
Chloroform	ND		1	1.0	0.17	ug/L		03/26/14 10:23	
Chloromethane	ND		1	1.0	0.28	ug/L		03/26/14 10:23	
cis-1,2-Dichloroethene	ND		1	1.0	0.24	ug/L		03/26/14 10:23	
cis-1,3-Dichloropropene	ND		1	1.0	0.19	ug/L		03/26/14 10:23	
Dichlorobromomethane	ND		1	1.0	0.13	ug/L		03/26/14 10:23	
1,1-Dichloroethane	ND		1	1.0	0.12	ug/L		03/26/14 10:23	
1,2-Dichloroethane	ND		1	1.0	0.21	ug/L		03/26/14 10:23	
1,1-Dichloroethene	ND		1	1.0	0.30	ug/L		03/26/14 10:23	
1,2-Dichloropropane	ND		1	1.0	0.095	ug/L		03/26/14 10:23	
Ethylbenzene	ND		1	1.0	0.23	ug/L		03/26/14 10:23	
2-Hexanone	ND		1	5.0	0.16	ug/L		03/26/14 10:23	
Methylene Chloride	ND		1	1.0	0.13	ug/L		03/26/14 10:23	
4-Methyl-2-pentanone	ND		1	5.0	0.53	ug/L		03/26/14 10:23	
Styrene	ND		1	1.0	0.097	ug/L		03/26/14 10:23	
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.20	ug/L		03/26/14 10:23	
Tetrachloroethene	ND		1	1.0	0.15	ug/L		03/26/14 10:23	
Toluene	ND		1	1.0	0.15	ug/L		03/26/14 10:23	
trans-1,2-Dichloroethene	ND		1	1.0	0.17	ug/L		03/26/14 10:23	
trans-1,3-Dichloropropene	ND		1	1.0	0.15	ug/L		03/26/14 10:23	
1,1,1-Trichloroethane	ND		1	1.0	0.29	ug/L		03/26/14 10:23	
1,1,2-Trichloroethane	ND		1	1.0	0.20	ug/L		03/26/14 10:23	
Trichloroethene	ND		1	1.0	0.14	ug/L		03/26/14 10:23	
Vinyl chloride	ND		1	1.0	0.23	ug/L		03/26/14 10:23	
Xylenes, Total	ND		1	3.0	0.49	ug/L		03/26/14 10:23	

Surrogate	MB	MB	Dil Fac				
	%Recovery	Qualifier		Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		1	70 - 118		03/26/14 10:23	
Dibromofluoromethane (Surr)	102		1	70 - 128		03/26/14 10:23	
1,2-Dichloroethane-d4 (Surr)	93		1	64 - 135		03/26/14 10:23	
Toluene-d8 (Surr)	92		1	71 - 118		03/26/14 10:23	

**Lab Sample ID:** LCS 180-100654/8

**Matrix:** Water

**Analysis Batch:** 100654

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

Analyte	Spike	LCS	LCS	Dil Fac	%Rec.	Limits
	Added	Result	Qualifier		%Rec	
Acetone	10.0	9.88		1	99	22 - 150
Benzene	10.0	11.0		1	110	80 - 120

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

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

**Lab Sample ID: LCS 180-100654/8**

**Matrix: Water**

**Analysis Batch: 100654**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Bromoform	10.0	9.57		ug/L		96	46 - 150
Bromomethane	10.0	8.12		ug/L		81	33 - 150
2-Butanone	10.0	11.2		ug/L		112	39 - 138
Carbon disulfide	10.0	10.6		ug/L		106	54 - 132
Carbon tetrachloride	10.0	10.6		ug/L		106	55 - 150
Chlorobenzene	10.0	10.9		ug/L		109	80 - 120
Chlorodibromomethane	10.0	10.4		ug/L		104	60 - 140
Chloroethane	10.0	8.73		ug/L		87	36 - 142
Chloroform	10.0	10.8		ug/L		108	72 - 127
Chloromethane	10.0	9.39		ug/L		94	50 - 139
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	70 - 120
cis-1,3-Dichloropropene	10.0	10.5		ug/L		105	66 - 120
Dichlorobromomethane	10.0	10.2		ug/L		102	66 - 130
1,1-Dichloroethane	10.0	10.9		ug/L		109	73 - 126
1,2-Dichloroethane	10.0	10.5		ug/L		105	68 - 132
1,1-Dichloroethene	10.0	10.6		ug/L		106	65 - 136
1,2-Dichloropropane	10.0	10.3		ug/L		103	76 - 124
Ethylbenzene	10.0	11.0		ug/L		110	72 - 126
2-Hexanone	10.0	10.6		ug/L		106	25 - 132
Methylene Chloride	10.0	9.81		ug/L		98	63 - 129
4-Methyl-2-pentanone	10.0	9.77		ug/L		98	45 - 145
Styrene	10.0	10.8		ug/L		108	71 - 127
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	62 - 125
Tetrachloroethene	10.0	11.2		ug/L		112	70 - 135
Toluene	10.0	11.1		ug/L		111	80 - 123
trans-1,2-Dichloroethene	10.0	10.9		ug/L		109	73 - 126
trans-1,3-Dichloropropene	10.0	10.8		ug/L		108	65 - 125
1,1,1-Trichloroethane	10.0	10.4		ug/L		104	63 - 133
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	77 - 127
Trichloroethene	10.0	11.1		ug/L		111	73 - 120
Vinyl chloride	10.0	9.83		ug/L		98	53 - 138
Xylenes, Total	20.0	21.8		ug/L		109	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		70 - 118
Dibromofluoromethane (Surr)	95		70 - 128
1,2-Dichloroethane-d4 (Surr)	95		64 - 135
Toluene-d8 (Surr)	99		71 - 118

**Lab Sample ID: MB 180-100943/5**

**Matrix: Water**

**Analysis Batch: 100943**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			03/28/14 10:44	1
Benzene	ND		1.0	0.11	ug/L			03/28/14 10:44	1
Bromoform	ND		1.0	0.19	ug/L			03/28/14 10:44	1
Bromomethane	ND		1.0	0.31	ug/L			03/28/14 10:44	1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

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

**Lab Sample ID: MB 180-100943/5**

**Matrix: Water**

**Analysis Batch: 100943**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
2-Butanone	ND				5.0	0.55	ug/L			03/28/14 10:44	1
Carbon disulfide	ND				1.0	0.21	ug/L			03/28/14 10:44	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			03/28/14 10:44	1
Chlorobenzene	ND				1.0	0.14	ug/L			03/28/14 10:44	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			03/28/14 10:44	1
Chloroethane	ND				1.0	0.21	ug/L			03/28/14 10:44	1
Chloroform	ND				1.0	0.17	ug/L			03/28/14 10:44	1
Chloromethane	ND				1.0	0.28	ug/L			03/28/14 10:44	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			03/28/14 10:44	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			03/28/14 10:44	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			03/28/14 10:44	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			03/28/14 10:44	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			03/28/14 10:44	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			03/28/14 10:44	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			03/28/14 10:44	1
Ethylbenzene	ND				1.0	0.23	ug/L			03/28/14 10:44	1
2-Hexanone	ND				5.0	0.16	ug/L			03/28/14 10:44	1
Methylene Chloride	ND				1.0	0.13	ug/L			03/28/14 10:44	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			03/28/14 10:44	1
Styrene	ND				1.0	0.097	ug/L			03/28/14 10:44	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			03/28/14 10:44	1
Tetrachloroethene	ND				1.0	0.15	ug/L			03/28/14 10:44	1
Toluene	ND				1.0	0.15	ug/L			03/28/14 10:44	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			03/28/14 10:44	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			03/28/14 10:44	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			03/28/14 10:44	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			03/28/14 10:44	1
Trichloroethene	ND				1.0	0.14	ug/L			03/28/14 10:44	1
Vinyl chloride	ND				1.0	0.23	ug/L			03/28/14 10:44	1
Xylenes, Total	ND				3.0	0.49	ug/L			03/28/14 10:44	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	99		99		70 - 118		03/28/14 10:44	1
Dibromofluoromethane (Surr)	93		93		70 - 128		03/28/14 10:44	1
1,2-Dichloroethane-d4 (Surr)	93		93		64 - 135		03/28/14 10:44	1
Toluene-d8 (Surr)	101		101		71 - 118		03/28/14 10:44	1

**Lab Sample ID: LCS 180-100943/8**

**Matrix: Water**

**Analysis Batch: 100943**

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

Analyte	Spike	LCS	LCS	%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec
Acetone	10.0	9.24		ug/L	92	22 - 150
Benzene	10.0	10.9		ug/L	109	80 - 120
Bromoform	10.0	7.50		ug/L	75	46 - 150
Bromomethane	10.0	8.07		ug/L	81	33 - 150
2-Butanone	10.0	11.5		ug/L	115	39 - 138
Carbon disulfide	10.0	9.57		ug/L	96	54 - 132

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

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

Lab Sample ID: LCS 180-100943/8

Matrix: Water

Analysis Batch: 100943

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

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Carbon tetrachloride	10.0	8.68		ug/L		87	55 - 150
Chlorobenzene	10.0	11.0		ug/L		110	80 - 120
Chlorodibromomethane	10.0	8.96		ug/L		90	60 - 140
Chloroethane	10.0	9.35		ug/L		94	36 - 142
Chloroform	10.0	10.7		ug/L		107	72 - 127
Chloromethane	10.0	9.69		ug/L		97	50 - 139
cis-1,2-Dichloroethene	10.0	10.8		ug/L		108	70 - 120
cis-1,3-Dichloropropene	10.0	9.71		ug/L		97	66 - 120
Dichlorobromomethane	10.0	9.11		ug/L		91	66 - 130
1,1-Dichloroethane	10.0	10.9		ug/L		109	73 - 126
1,2-Dichloroethane	10.0	10.7		ug/L		107	68 - 132
1,1-Dichloroethene	10.0	10.4		ug/L		104	65 - 136
1,2-Dichloropropane	10.0	10.5		ug/L		105	76 - 124
Ethylbenzene	10.0	11.1		ug/L		111	72 - 126
2-Hexanone	10.0	10.8		ug/L		108	25 - 132
Methylene Chloride	10.0	10.2		ug/L		102	63 - 129
4-Methyl-2-pentanone	10.0	10.5		ug/L		105	45 - 145
Styrene	10.0	10.8		ug/L		108	71 - 127
1,1,2,2-Tetrachloroethane	10.0	10.9		ug/L		109	62 - 125
Tetrachloroethene	10.0	11.5		ug/L		115	70 - 135
Toluene	10.0	11.2		ug/L		112	80 - 123
trans-1,2-Dichloroethene	10.0	11.1		ug/L		111	73 - 126
trans-1,3-Dichloropropene	10.0	9.71		ug/L		97	65 - 125
1,1,1-Trichloroethane	10.0	9.61		ug/L		96	63 - 133
1,1,2-Trichloroethane	10.0	10.8		ug/L		108	77 - 127
Trichloroethene	10.0	10.6		ug/L		106	73 - 120
Vinyl chloride	10.0	9.46		ug/L		95	53 - 138
Xylenes, Total	20.0	21.7		ug/L		109	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		70 - 118
Dibromofluoromethane (Surr)	99		70 - 128
1,2-Dichloroethane-d4 (Surr)	99		64 - 135
Toluene-d8 (Surr)	100		71 - 118

## Method: 200.7 - Metals (Custom List)

Lab Sample ID: MB 180-100557/1-A

Matrix: Water

Analysis Batch: 100751

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 100557

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		200	16	ug/L		03/25/14 12:27	03/26/14 11:02	1
Iron	ND		100	9.5	ug/L		03/25/14 12:27	03/26/14 11:02	1
Zinc	1.89	J	20	1.0	ug/L		03/25/14 12:27	03/26/14 11:02	1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

## Method: 200.7 - Metals (Custom List) (Continued)

**Lab Sample ID: LCS 180-100557/2-A**

**Matrix: Water**

**Analysis Batch: 100751**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 100557**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aluminum	2000	2020		ug/L		101	85 - 115
Iron	1000	1030		ug/L		103	85 - 115
Zinc	500	525		ug/L		105	85 - 115

## Method: 1664B - HEM and SGT-HEM

**Lab Sample ID: MB 180-100664/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Analysis Batch: 100832**

**Prep Type: Total/NA**

**Prep Batch: 100664**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	2.40	J	5.0	1.5	mg/L		03/26/14 09:18	03/26/14 09:18	1

**Lab Sample ID: LCS 180-100664/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Analysis Batch: 100832**

**Prep Type: Total/NA**

**Prep Batch: 100664**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
HEM (Oil & Grease)	40.0	33.9		mg/L		85	78 - 114

**Lab Sample ID: LCSD 180-100664/3-A**

**Client Sample ID: Lab Control Sample Dup**

**Matrix: Water**

**Analysis Batch: 100832**

**Prep Type: Total/NA**

**Prep Batch: 100664**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD
HEM (Oil & Grease)	40.0	32.8		mg/L		82	78 - 114

## Method: SM 4500 H+ B - pH

**Lab Sample ID: LCS 180-100834/1**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Analysis Batch: 100834**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
pH	7.00	7.020		SU		100	99 - 101

**Lab Sample ID: 180-30855-3 DU**

**Client Sample ID: EFFLUENT**

**Matrix: Water**

**Analysis Batch: 100834**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	7.56	HF	7.530		SU		0.4	2

TestAmerica Pittsburgh

# QC Association Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-30855-1

## GC/MS VOA

### Analysis Batch: 100654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-30855-1 - DL	MW2	Total/NA	Water	8260C	
180-30855-2	MW14	Total/NA	Water	8260C	
180-30855-3	EFFFLUENT	Total/NA	Water	8260C	
180-30855-4	TRIP BLANK	Total/NA	Water	8260C	
LCS 180-100654/8	Lab Control Sample	Total/NA	Water	8260C	
MB 180-100654/4	Method Blank	Total/NA	Water	8260C	

### Analysis Batch: 100943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-30855-1	MW2	Total/NA	Water	8260C	
LCS 180-100943/8	Lab Control Sample	Total/NA	Water	8260C	
MB 180-100943/5	Method Blank	Total/NA	Water	8260C	

## Metals

### Prep Batch: 100557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-30855-3	EFFFLUENT	Total Recoverable	Water	200.7	
LCS 180-100557/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-100557/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 100751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-30855-3	EFFFLUENT	Total Recoverable	Water	200.7	
LCS 180-100557/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-100557/1-A	Method Blank	Total Recoverable	Water	200.7	

## General Chemistry

### Prep Batch: 100664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-30855-3	EFFFLUENT	Total/NA	Water	1664B	
LCS 180-100664/2-A	Lab Control Sample	Total/NA	Water	1664B	
LCSD 180-100664/3-A	Lab Control Sample Dup	Total/NA	Water	1664B	
MB 180-100664/1-A	Method Blank	Total/NA	Water	1664B	

### Analysis Batch: 100832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-30855-3	EFFFLUENT	Total/NA	Water	1664B	
LCS 180-100664/2-A	Lab Control Sample	Total/NA	Water	1664B	
LCSD 180-100664/3-A	Lab Control Sample Dup	Total/NA	Water	1664B	
MB 180-100664/1-A	Method Blank	Total/NA	Water	1664B	

### Analysis Batch: 100834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-30855-3	EFFFLUENT	Total/NA	Water	SM 4500 H+ B	
180-30855-3 DU	EFFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-100834/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

TestAmerica Pittsburgh

**TestAmerica Pittsburgh**

301 Alpha Drive RIDC Park  
Pittsburgh, PA 15238  
Phone (412) 963-7058 Fax (412) 963-2468

**Chain of Custody Record**

**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Sampler: <u>Chuck Becker</u>	Lab P/M: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-1-1355-31-1
		Phone: <u>716-922-9102</u>	E-Mail: dave.dunlap@testamericanainc.com	Page: 1 of 1	Job #:
Company: <u>SEK VENTURES L.L.C.</u>		<b>Analysis Requested</b> Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: Project #: 18006934 SSON #: Sample Identification Sample Date      Sample Time      Sample Type (C=come, G=grab)      Matrix (W=water, S=solid, O=oil, B=tissue, A=air)			
Address: 300 Falconer Road City: Fredonia State, Zip: NY, 14738 Phone: <u>716-922-9102</u> Email: pllundin@keywell.com Project Name: Keywell, Fredonia Site:		1664B - HEM (Oil and Grease) 2007 - ICP Metals (Al,Fe,Zn) 8260C - TLC 32 - Low Level 8260D - ICPMS MSN 10600 NOX 8260E - ICPMS MSN 10600 NOX 8260F - ICPMS MSN 10600 NOX 8260G - ICPMS MSN 10600 NOX 8260H - ICPMS MSN 10600 NOX 8260I - ICPMS MSN 10600 NOX 8260J - ICPMS MSN 10600 NOX 8260K - ICPMS MSN 10600 NOX 8260L - ICPMS MSN 10600 NOX 8260M - ICPMS MSN 10600 NOX 8260N - ICPMS MSN 10600 NOX 8260O - ICPMS MSN 10600 NOX 8260P - ICPMS MSN 10600 NOX 8260Q - ICPMS MSN 10600 NOX 8260R - ICPMS MSN 10600 NOX 8260S - ICPMS MSN 10600 NOX 8260T - ICPMS MSN 10600 NOX 8260U - ICPMS MSN 10600 NOX 8260V - ICPMS MSN 10600 NOX 8260W - ICPMS MSN 10600 NOX 8260X - ICPMS MSN 10600 NOX 8260Y - ICPMS MSN 10600 NOX 8260Z - ICPMS MSN 10600 NOX Other Number(s) or Contaminants:      Special Instructions/Note:			

# SHOR'T HOLD

Possible Hazard Identification	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Radiological
Non-Hazard	Deliverable Requested: I, II, III, IV, Other (specify)				
Empty Kit Relinquished by:	Date/Time:	Company	Method of Shipment:	Date/Time:	Comments:
<u>Chuck Becker</u>	<u>3/20/14</u>	<u>S&amp;K VENTURES</u>	<u>UPS</u>	<u>3/21/14</u>	<u>Wright</u>
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Comments:
<u>Chuck Becker</u>	<u>3/20/14</u>	<u>S&amp;K VENTURES</u>	<u>John J. Dunlap</u>	<u>3/21/14</u>	<u>Wright</u>
Custody Seals Intact:	<input checked="" type="checkbox"/> Yes	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:		

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

## Login Sample Receipt Checklist

Client: SGK Ventures, LLC

Job Number: 180-30855-1

**Login Number: 30855**

**List Source: TestAmerica Pittsburgh**

**List Number: 1**

**Creator: Kovitch, Christina M**

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	
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.	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").	True	
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 Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-31622-1

Client Project/Site: Frewsburg

For:

SGK Ventures, LLC-fka Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

4/28/2014 11:55:10 AM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

**Job ID: 180-31622-1**

**Laboratory: TestAmerica Pittsburgh**

### Narrative

#### Job Narrative

180-31622-1

### Receipt

The samples were received on 4/11/2014 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

### GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for batch 103170 recovered above the control limits for trans-1,3-dichloropropene. As this compound was not detected in the associated samples and the recovery was biased high, the results were reported.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-31622-1), MW14 (180-31622-2), and EFFLUENT (180-31622-3). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

### Metals

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

### General Chemistry

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

## Definitions/Glossary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

### 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.
E	Result exceeded calibration range.
*	LCS or LCSD exceeds the control limits

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

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## Certification Summary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14 *
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-15
Louisiana	NELAP	6	04041	06-30-14
New Hampshire	NELAP	1	203011	04-05-14 *
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	03-31-15
North Carolina DENR	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-15
South Carolina	State Program	4	89014	04-30-14 *
Texas	NELAP	6	T104704528	03-31-15
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14 *
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-14 *
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-31622-1	MW2	Water	04/10/14 07:00	04/11/14 09:15
180-31622-2	MW14	Water	04/10/14 08:00	04/11/14 09:15
180-31622-3	EFFLUENT	Water	04/10/14 09:30	04/11/14 09:15
180-31622-4	TRIP BLANK	Water	04/10/14 00:00	04/11/14 09:15

## Method Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
200.7	Metals (Custom List)	EPA	TAL PIT
1664B	HEM and SGT-HEM	1664B	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

1664B = 1664B

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

## Client Sample ID: MW2

Date Collected: 04/10/14 07:00  
 Date Received: 04/11/14 09:15

Lab Sample ID: 180-31622-1  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	10000	5 mL	5 mL	103365	04/21/14 17:48	DLF	TAL PIT
		Instrument ID: CHHP5								
Total/NA	Analysis	8260C		1000	5 mL	5 mL	103365	04/21/14 22:14	DLF	TAL PIT
		Instrument ID: CHHP5								

## Client Sample ID: MW14

Date Collected: 04/10/14 08:00  
 Date Received: 04/11/14 09:15

Lab Sample ID: 180-31622-2  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	5 mL	5 mL	103365	04/21/14 18:12	DLF	TAL PIT
		Instrument ID: CHHP5								

## Client Sample ID: EFFLUENT

Date Collected: 04/10/14 09:30  
 Date Received: 04/11/14 09:15

Lab Sample ID: 180-31622-3  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	103170	04/18/14 17:02	DLF	TAL PIT
		Instrument ID: CHHP5								
Total/NA	Analysis	8260C	DL	5	5 mL	5 mL	103365	04/21/14 18:37	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	102600	04/14/14 09:49	CEH	TAL PIT
Total Recoverable	Analysis	200.7		1	50 mL	50 mL	102832	04/15/14 14:41	RJR	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	1664B		1	920 mL	1000 mL	104020	04/25/14 10:23	JWM	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	1664B			920 mL	1000 mL	103946	04/25/14 10:23	JWM	TAL PIT
Total/NA	Analysis	SM 4500 H+ B		1		50 mL	102915	04/16/14 14:45	ADW	TAL PIT
		Instrument ID: NOEQUIP								

## Client Sample ID: TRIP BLANK

Date Collected: 04/10/14 00:00  
 Date Received: 04/11/14 09:15

Lab Sample ID: 180-31622-4  
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	103170	04/18/14 16:37	DLF	TAL PIT
		Instrument ID: CHHP5								

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

CEH = Caitlyn Haluck

JWM = Jeremiah McLaughlin

Batch Type: Analysis

ADW = Adam Wolfe

DLF = Donald Ferguson

JWM = Jeremiah McLaughlin

RJR = Ron Rosenbaum

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# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

**Client Sample ID: MW2**

Date Collected: 04/10/14 07:00

Date Received: 04/11/14 09:15

**Lab Sample ID: 180-31622-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			04/21/14 22:14	1000
Benzene	ND		1000	110	ug/L			04/21/14 22:14	1000
Bromoform	ND		1000	190	ug/L			04/21/14 22:14	1000
Bromomethane	ND		1000	310	ug/L			04/21/14 22:14	1000
2-Butanone	ND		5000	550	ug/L			04/21/14 22:14	1000
Carbon disulfide	ND		1000	210	ug/L			04/21/14 22:14	1000
Carbon tetrachloride	ND		1000	140	ug/L			04/21/14 22:14	1000
Chlorobenzene	ND		1000	140	ug/L			04/21/14 22:14	1000
Chlorodibromomethane	ND		1000	140	ug/L			04/21/14 22:14	1000
Chloroethane	ND		1000	210	ug/L			04/21/14 22:14	1000
Chloroform	ND		1000	170	ug/L			04/21/14 22:14	1000
Chloromethane	ND		1000	280	ug/L			04/21/14 22:14	1000
<b>cis-1,2-Dichloroethene</b>	<b>160000</b>	<b>E</b>	1000	240	ug/L			04/21/14 22:14	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			04/21/14 22:14	1000
Dichlorobromomethane	ND		1000	130	ug/L			04/21/14 22:14	1000
1,1-Dichloroethane	ND		1000	120	ug/L			04/21/14 22:14	1000
1,2-Dichloroethane	ND		1000	210	ug/L			04/21/14 22:14	1000
<b>1,1-Dichloroethene</b>	<b>310</b>	<b>J</b>	1000	300	ug/L			04/21/14 22:14	1000
1,2-Dichloropropane	ND		1000	95	ug/L			04/21/14 22:14	1000
Ethylbenzene	ND		1000	230	ug/L			04/21/14 22:14	1000
2-Hexanone	ND		5000	160	ug/L			04/21/14 22:14	1000
<b>Methylene Chloride</b>	<b>290</b>	<b>J</b>	1000	130	ug/L			04/21/14 22:14	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			04/21/14 22:14	1000
Styrene	ND		1000	97	ug/L			04/21/14 22:14	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			04/21/14 22:14	1000
Tetrachloroethene	ND		1000	150	ug/L			04/21/14 22:14	1000
Toluene	ND		1000	150	ug/L			04/21/14 22:14	1000
<b>trans-1,2-Dichloroethene</b>	<b>250</b>	<b>J</b>	1000	170	ug/L			04/21/14 22:14	1000
trans-1,3-Dichloropropene	ND		1000	150	ug/L			04/21/14 22:14	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			04/21/14 22:14	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			04/21/14 22:14	1000
<b>Trichloroethene</b>	<b>530</b>	<b>J</b>	1000	140	ug/L			04/21/14 22:14	1000
<b>Vinyl chloride</b>	<b>28000</b>		1000	230	ug/L			04/21/14 22:14	1000
Xylenes, Total	ND		3000	490	ug/L			04/21/14 22:14	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	82		70 - 118					04/21/14 22:14	1000
Dibromofluoromethane (Surr)	116		70 - 128					04/21/14 22:14	1000
1,2-Dichloroethane-d4 (Surr)	116		64 - 135					04/21/14 22:14	1000
Toluene-d8 (Surr)	95		71 - 118					04/21/14 22:14	1000

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50000	25000	ug/L			04/21/14 17:48	10000
Benzene	ND		10000	1100	ug/L			04/21/14 17:48	10000
Bromoform	ND		10000	1900	ug/L			04/21/14 17:48	10000
Bromomethane	ND		10000	3100	ug/L			04/21/14 17:48	10000
2-Butanone	ND		50000	5500	ug/L			04/21/14 17:48	10000
Carbon disulfide	ND		10000	2100	ug/L			04/21/14 17:48	10000
Carbon tetrachloride	ND		10000	1400	ug/L			04/21/14 17:48	10000

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

**Client Sample ID: MW2**

**Lab Sample ID: 180-31622-1**

Date Collected: 04/10/14 07:00

Matrix: Water

Date Received: 04/11/14 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		10000	1400	ug/L		04/21/14 17:48		10000
Chlorodibromomethane	ND		10000	1400	ug/L		04/21/14 17:48		10000
Chloroethane	ND		10000	2100	ug/L		04/21/14 17:48		10000
Chloroform	ND		10000	1700	ug/L		04/21/14 17:48		10000
Chloromethane	ND		10000	2800	ug/L		04/21/14 17:48		10000
<b>cis-1,2-Dichloroethene</b>	<b>150000</b>		10000	2400	ug/L		04/21/14 17:48		10000
cis-1,3-Dichloropropene	ND		10000	1900	ug/L		04/21/14 17:48		10000
Dichlorobromomethane	ND		10000	1300	ug/L		04/21/14 17:48		10000
1,1-Dichloroethane	ND		10000	1200	ug/L		04/21/14 17:48		10000
1,2-Dichloroethane	ND		10000	2100	ug/L		04/21/14 17:48		10000
1,1-Dichloroethene	ND		10000	3000	ug/L		04/21/14 17:48		10000
1,2-Dichloropropane	ND		10000	950	ug/L		04/21/14 17:48		10000
Ethylbenzene	ND		10000	2300	ug/L		04/21/14 17:48		10000
2-Hexanone	ND		50000	1600	ug/L		04/21/14 17:48		10000
<b>Methylene Chloride</b>	<b>6300 J</b>		10000	1300	ug/L		04/21/14 17:48		10000
4-Methyl-2-pentanone	ND		50000	5300	ug/L		04/21/14 17:48		10000
Styrene	ND		10000	970	ug/L		04/21/14 17:48		10000
1,1,2,2-Tetrachloroethane	ND		10000	2000	ug/L		04/21/14 17:48		10000
Tetrachloroethene	ND		10000	1500	ug/L		04/21/14 17:48		10000
Toluene	ND		10000	1500	ug/L		04/21/14 17:48		10000
trans-1,2-Dichloroethene	ND		10000	1700	ug/L		04/21/14 17:48		10000
trans-1,3-Dichloropropene	ND		10000	1500	ug/L		04/21/14 17:48		10000
1,1,1-Trichloroethane	ND		10000	2900	ug/L		04/21/14 17:48		10000
1,1,2-Trichloroethane	ND		10000	2000	ug/L		04/21/14 17:48		10000
Trichloroethene	ND		10000	1400	ug/L		04/21/14 17:48		10000
<b>Vinyl chloride</b>	<b>33000</b>		10000	2300	ug/L		04/21/14 17:48		10000
Xylenes, Total	ND		30000	4900	ug/L		04/21/14 17:48		10000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	86			70 - 118			04/21/14 17:48		10000
Dibromofluoromethane (Surr)	116			70 - 128			04/21/14 17:48		10000
1,2-Dichloroethane-d4 (Surr)	120			64 - 135			04/21/14 17:48		10000
Toluene-d8 (Surr)	100			71 - 118			04/21/14 17:48		10000

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# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

**Client Sample ID: MW14**

**Lab Sample ID: 180-31622-2**

**Matrix: Water**

Date Collected: 04/10/14 08:00  
 Date Received: 04/11/14 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			04/21/14 18:12	500
Benzene	ND		500	53	ug/L			04/21/14 18:12	500
Bromoform	ND		500	96	ug/L			04/21/14 18:12	500
Bromomethane	ND		500	160	ug/L			04/21/14 18:12	500
2-Butanone	ND		2500	270	ug/L			04/21/14 18:12	500
Carbon disulfide	ND		500	110	ug/L			04/21/14 18:12	500
Carbon tetrachloride	ND		500	68	ug/L			04/21/14 18:12	500
Chlorobenzene	ND		500	68	ug/L			04/21/14 18:12	500
Chlorodibromomethane	ND		500	68	ug/L			04/21/14 18:12	500
Chloroethane	ND		500	110	ug/L			04/21/14 18:12	500
Chloroform	ND		500	85	ug/L			04/21/14 18:12	500
Chloromethane	ND		500	140	ug/L			04/21/14 18:12	500
<b>cis-1,2-Dichloroethene</b>	<b>3700</b>		500	120	ug/L			04/21/14 18:12	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			04/21/14 18:12	500
Dichlorobromomethane	ND		500	65	ug/L			04/21/14 18:12	500
1,1-Dichloroethane	ND		500	58	ug/L			04/21/14 18:12	500
1,2-Dichloroethane	ND		500	110	ug/L			04/21/14 18:12	500
1,1-Dichloroethene	ND		500	150	ug/L			04/21/14 18:12	500
1,2-Dichloropropane	ND		500	47	ug/L			04/21/14 18:12	500
Ethylbenzene	ND		500	110	ug/L			04/21/14 18:12	500
2-Hexanone	ND		2500	80	ug/L			04/21/14 18:12	500
<b>Methylene Chloride</b>	<b>310 J</b>		500	63	ug/L			04/21/14 18:12	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			04/21/14 18:12	500
Styrene	ND		500	48	ug/L			04/21/14 18:12	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			04/21/14 18:12	500
Tetrachloroethene	ND		500	74	ug/L			04/21/14 18:12	500
Toluene	ND		500	75	ug/L			04/21/14 18:12	500
trans-1,2-Dichloroethene	ND		500	85	ug/L			04/21/14 18:12	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			04/21/14 18:12	500
1,1,1-Trichloroethane	ND		500	140	ug/L			04/21/14 18:12	500
1,1,2-Trichloroethane	ND		500	100	ug/L			04/21/14 18:12	500
<b>Trichloroethene</b>	<b>16000</b>		500	72	ug/L			04/21/14 18:12	500
Vinyl chloride	ND		500	110	ug/L			04/21/14 18:12	500
Xylenes, Total	ND		1500	240	ug/L			04/21/14 18:12	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	91			70 - 118				04/21/14 18:12	500
Dibromofluoromethane (Surr)	117			70 - 128				04/21/14 18:12	500
1,2-Dichloroethane-d4 (Surr)	118			64 - 135				04/21/14 18:12	500
Toluene-d8 (Surr)	101			71 - 118				04/21/14 18:12	500

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

## Client Sample ID: EFFLUENT

Date Collected: 04/10/14 09:30

Date Received: 04/11/14 09:15

## Lab Sample ID: 180-31622-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			04/18/14 17:02	1
Benzene	ND		1.0	0.11	ug/L			04/18/14 17:02	1
<b>Bromoform</b>	<b>8.7</b>		1.0	0.19	ug/L			04/18/14 17:02	1
Bromomethane	ND		1.0	0.31	ug/L			04/18/14 17:02	1
2-Butanone	ND		5.0	0.55	ug/L			04/18/14 17:02	1
Carbon disulfide	ND		1.0	0.21	ug/L			04/18/14 17:02	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			04/18/14 17:02	1
Chlorobenzene	ND		1.0	0.14	ug/L			04/18/14 17:02	1
<b>Chlorodibromomethane</b>	<b>2.4</b>		1.0	0.14	ug/L			04/18/14 17:02	1
Chloroethane	ND		1.0	0.21	ug/L			04/18/14 17:02	1
Chloroform	ND		1.0	0.17	ug/L			04/18/14 17:02	1
Chloromethane	ND		1.0	0.28	ug/L			04/18/14 17:02	1
<b>cis-1,2-Dichloroethene</b>	<b>110 E</b>		1.0	0.24	ug/L			04/18/14 17:02	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/18/14 17:02	1
<b>Dichlorobromomethane</b>	<b>0.52 J</b>		1.0	0.13	ug/L			04/18/14 17:02	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			04/18/14 17:02	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/18/14 17:02	1
<b>1,1-Dichloroethene</b>	<b>0.71 J</b>		1.0	0.30	ug/L			04/18/14 17:02	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			04/18/14 17:02	1
Ethylbenzene	ND		1.0	0.23	ug/L			04/18/14 17:02	1
2-Hexanone	ND		5.0	0.16	ug/L			04/18/14 17:02	1
Methylene Chloride	ND		1.0	0.13	ug/L			04/18/14 17:02	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			04/18/14 17:02	1
Styrene	ND		1.0	0.097	ug/L			04/18/14 17:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			04/18/14 17:02	1
Tetrachloroethene	ND		1.0	0.15	ug/L			04/18/14 17:02	1
Toluene	ND		1.0	0.15	ug/L			04/18/14 17:02	1
<b>trans-1,2-Dichloroethene</b>	<b>1.4</b>		1.0	0.17	ug/L			04/18/14 17:02	1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L			04/18/14 17:02	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			04/18/14 17:02	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			04/18/14 17:02	1
<b>Trichloroethene</b>	<b>28</b>		1.0	0.14	ug/L			04/18/14 17:02	1
<b>Vinyl chloride</b>	<b>40 E</b>		1.0	0.23	ug/L			04/18/14 17:02	1
Xylenes, Total	ND		3.0	0.49	ug/L			04/18/14 17:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	90		70 - 118					04/18/14 17:02	1
Dibromofluoromethane (Surr)	118		70 - 128					04/18/14 17:02	1
1,2-Dichloroethane-d4 (Surr)	117		64 - 135					04/18/14 17:02	1
Toluene-d8 (Surr)	99		71 - 118					04/18/14 17:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	13	ug/L			04/21/14 18:37	5
Benzene	ND		5.0	0.53	ug/L			04/21/14 18:37	5
<b>Bromoform</b>	<b>7.9</b>		5.0	0.96	ug/L			04/21/14 18:37	5
Bromomethane	ND		5.0	1.6	ug/L			04/21/14 18:37	5
2-Butanone	ND		25	2.7	ug/L			04/21/14 18:37	5
Carbon disulfide	ND		5.0	1.1	ug/L			04/21/14 18:37	5
Carbon tetrachloride	ND		5.0	0.68	ug/L			04/21/14 18:37	5

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

## Client Sample ID: EFFLUENT

Date Collected: 04/10/14 09:30  
 Date Received: 04/11/14 09:15

Lab Sample ID: 180-31622-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5.0	0.68	ug/L		04/21/14 18:37		5
<b>Chlorodibromomethane</b>	<b>2.1</b>	<b>J</b>	5.0	0.68	ug/L		04/21/14 18:37		5
Chloroethane	ND		5.0	1.1	ug/L		04/21/14 18:37		5
Chloroform	ND		5.0	0.85	ug/L		04/21/14 18:37		5
Chloromethane	ND		5.0	1.4	ug/L		04/21/14 18:37		5
<b>cis-1,2-Dichloroethene</b>	<b>94</b>		5.0	1.2	ug/L		04/21/14 18:37		5
cis-1,3-Dichloropropene	ND		5.0	0.93	ug/L		04/21/14 18:37		5
Dichlorobromomethane	ND		5.0	0.65	ug/L		04/21/14 18:37		5
1,1-Dichloroethane	ND		5.0	0.58	ug/L		04/21/14 18:37		5
1,2-Dichloroethane	ND		5.0	1.1	ug/L		04/21/14 18:37		5
1,1-Dichloroethene	ND		5.0	1.5	ug/L		04/21/14 18:37		5
1,2-Dichloropropane	ND		5.0	0.47	ug/L		04/21/14 18:37		5
Ethylbenzene	ND		5.0	1.1	ug/L		04/21/14 18:37		5
2-Hexanone	ND		25	0.80	ug/L		04/21/14 18:37		5
<b>Methylene Chloride</b>	<b>3.6</b>	<b>J</b>	5.0	0.63	ug/L		04/21/14 18:37		5
4-Methyl-2-pentanone	ND		25	2.6	ug/L		04/21/14 18:37		5
Styrene	ND		5.0	0.48	ug/L		04/21/14 18:37		5
1,1,2,2-Tetrachloroethane	ND		5.0	1.0	ug/L		04/21/14 18:37		5
Tetrachloroethene	ND		5.0	0.74	ug/L		04/21/14 18:37		5
Toluene	ND		5.0	0.75	ug/L		04/21/14 18:37		5
<b>trans-1,2-Dichloroethene</b>	<b>1.4</b>	<b>J</b>	5.0	0.85	ug/L		04/21/14 18:37		5
trans-1,3-Dichloropropene	ND		5.0	0.74	ug/L		04/21/14 18:37		5
1,1,1-Trichloroethane	ND		5.0	1.4	ug/L		04/21/14 18:37		5
1,1,2-Trichloroethane	ND		5.0	1.0	ug/L		04/21/14 18:37		5
<b>Trichloroethene</b>	<b>22</b>		5.0	0.72	ug/L		04/21/14 18:37		5
<b>Vinyl chloride</b>	<b>29</b>		5.0	1.1	ug/L		04/21/14 18:37		5
Xylenes, Total	ND		15	2.4	ug/L		04/21/14 18:37		5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	89		70 - 118				04/21/14 18:37		5
Dibromofluoromethane (Surr)	115		70 - 128				04/21/14 18:37		5
1,2-Dichloroethane-d4 (Surr)	116		64 - 135				04/21/14 18:37		5
Toluene-d8 (Surr)	97		71 - 118				04/21/14 18:37		5

### Method: 200.7 - Metals (Custom List) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200	16	ug/L		04/14/14 09:49	04/15/14 14:41	1
Iron	ND		100	9.5	ug/L		04/14/14 09:49	04/15/14 14:41	1
<b>Zinc</b>	<b>71</b>		20	1.0	ug/L		04/14/14 09:49	04/15/14 14:41	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	2.2	J	5.4	1.6	mg/L		04/25/14 10:23	04/25/14 10:23	1
pH	7.52	HF	0.100	0.100	SU			04/16/14 14:45	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 180-31622-4**

**Matrix: Water**

Date Collected: 04/10/14 00:00

Date Received: 04/11/14 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		04/18/14 16:37		1
Benzene	ND		1.0	0.11	ug/L		04/18/14 16:37		1
Bromoform	ND		1.0	0.19	ug/L		04/18/14 16:37		1
Bromomethane	ND		1.0	0.31	ug/L		04/18/14 16:37		1
2-Butanone	ND		5.0	0.55	ug/L		04/18/14 16:37		1
Carbon disulfide	ND		1.0	0.21	ug/L		04/18/14 16:37		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		04/18/14 16:37		1
Chlorobenzene	ND		1.0	0.14	ug/L		04/18/14 16:37		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		04/18/14 16:37		1
Chloroethane	ND		1.0	0.21	ug/L		04/18/14 16:37		1
Chloroform	ND		1.0	0.17	ug/L		04/18/14 16:37		1
Chloromethane	ND		1.0	0.28	ug/L		04/18/14 16:37		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		04/18/14 16:37		1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L		04/18/14 16:37		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		04/18/14 16:37		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		04/18/14 16:37		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		04/18/14 16:37		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		04/18/14 16:37		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		04/18/14 16:37		1
Ethylbenzene	ND		1.0	0.23	ug/L		04/18/14 16:37		1
2-Hexanone	ND		5.0	0.16	ug/L		04/18/14 16:37		1
Methylene Chloride	ND		1.0	0.13	ug/L		04/18/14 16:37		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		04/18/14 16:37		1
Styrene	ND		1.0	0.097	ug/L		04/18/14 16:37		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		04/18/14 16:37		1
Tetrachloroethene	ND		1.0	0.15	ug/L		04/18/14 16:37		1
Toluene	ND		1.0	0.15	ug/L		04/18/14 16:37		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		04/18/14 16:37		1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L		04/18/14 16:37		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		04/18/14 16:37		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		04/18/14 16:37		1
Trichloroethene	ND		1.0	0.14	ug/L		04/18/14 16:37		1
Vinyl chloride	ND		1.0	0.23	ug/L		04/18/14 16:37		1
Xylenes, Total	ND		3.0	0.49	ug/L		04/18/14 16:37		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 118		04/18/14 16:37	1
Dibromofluoromethane (Surr)	117		70 - 128		04/18/14 16:37	1
1,2-Dichloroethane-d4 (Surr)	116		64 - 135		04/18/14 16:37	1
Toluene-d8 (Surr)	101		71 - 118		04/18/14 16:37	1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

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

**Lab Sample ID:** MB 180-103170/3

**Matrix:** Water

**Analysis Batch:** 103170

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Acetone	ND		1	5.0	2.5	ug/L		04/18/14 09:59	
Benzene	ND		1	1.0	0.11	ug/L		04/18/14 09:59	
Bromoform	ND		1	1.0	0.19	ug/L		04/18/14 09:59	
Bromomethane	ND		1	1.0	0.31	ug/L		04/18/14 09:59	
2-Butanone	ND		1	5.0	0.55	ug/L		04/18/14 09:59	
Carbon disulfide	ND		1	1.0	0.21	ug/L		04/18/14 09:59	
Carbon tetrachloride	ND		1	1.0	0.14	ug/L		04/18/14 09:59	
Chlorobenzene	ND		1	1.0	0.14	ug/L		04/18/14 09:59	
Chlorodibromomethane	ND		1	1.0	0.14	ug/L		04/18/14 09:59	
Chloroethane	ND		1	1.0	0.21	ug/L		04/18/14 09:59	
Chloroform	ND		1	1.0	0.17	ug/L		04/18/14 09:59	
Chloromethane	ND		1	1.0	0.28	ug/L		04/18/14 09:59	
cis-1,2-Dichloroethene	ND		1	1.0	0.24	ug/L		04/18/14 09:59	
cis-1,3-Dichloropropene	ND		1	1.0	0.19	ug/L		04/18/14 09:59	
Dichlorobromomethane	ND		1	1.0	0.13	ug/L		04/18/14 09:59	
1,1-Dichloroethane	ND		1	1.0	0.12	ug/L		04/18/14 09:59	
1,2-Dichloroethane	ND		1	1.0	0.21	ug/L		04/18/14 09:59	
1,1-Dichloroethene	ND		1	1.0	0.30	ug/L		04/18/14 09:59	
1,2-Dichloropropane	ND		1	1.0	0.095	ug/L		04/18/14 09:59	
Ethylbenzene	ND		1	1.0	0.23	ug/L		04/18/14 09:59	
2-Hexanone	ND		1	5.0	0.16	ug/L		04/18/14 09:59	
Methylene Chloride	ND		1	1.0	0.13	ug/L		04/18/14 09:59	
4-Methyl-2-pentanone	ND		1	5.0	0.53	ug/L		04/18/14 09:59	
Styrene	ND		1	1.0	0.097	ug/L		04/18/14 09:59	
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.20	ug/L		04/18/14 09:59	
Tetrachloroethene	ND		1	1.0	0.15	ug/L		04/18/14 09:59	
Toluene	ND		1	1.0	0.15	ug/L		04/18/14 09:59	
trans-1,2-Dichloroethene	ND		1	1.0	0.17	ug/L		04/18/14 09:59	
trans-1,3-Dichloropropene	ND		1	1.0	0.15	ug/L		04/18/14 09:59	
1,1,1-Trichloroethane	ND		1	1.0	0.29	ug/L		04/18/14 09:59	
1,1,2-Trichloroethane	ND		1	1.0	0.20	ug/L		04/18/14 09:59	
Trichloroethene	ND		1	1.0	0.14	ug/L		04/18/14 09:59	
Vinyl chloride	ND		1	1.0	0.23	ug/L		04/18/14 09:59	
Xylenes, Total	ND		1	3.0	0.49	ug/L		04/18/14 09:59	

Surrogate	MB	MB	Dil Fac				
	%Recovery	Qualifier		Prepared	Analyzed		
4-Bromofluorobenzene (Surr)	89		1	70 - 118		04/18/14 09:59	
Dibromofluoromethane (Surr)	107		1	70 - 128		04/18/14 09:59	
1,2-Dichloroethane-d4 (Surr)	104		1	64 - 135		04/18/14 09:59	
Toluene-d8 (Surr)	97		1	71 - 118		04/18/14 09:59	

**Lab Sample ID:** LCS 180-103170/6

**Matrix:** Water

**Analysis Batch:** 103170

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

Analyte	Spike	LCS	LCS	Dil Fac	%Rec.	Limits
	Added	Result	Qualifier		Unit	
Acetone	10.0	8.33		83	ug/L	22 - 150
Benzene	10.0	10.6		106	ug/L	80 - 120

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

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

**Lab Sample ID: LCS 180-103170/6**

**Matrix: Water**

**Analysis Batch: 103170**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Bromoform	10.0	12.5		ug/L		125	46 - 150
Bromomethane	10.0	12.1		ug/L		121	33 - 150
2-Butanone	10.0	9.74		ug/L		97	39 - 138
Carbon disulfide	10.0	11.0		ug/L		110	54 - 132
Carbon tetrachloride	10.0	12.4		ug/L		124	55 - 150
Chlorobenzene	10.0	10.8		ug/L		108	80 - 120
Chlorodibromomethane	10.0	11.8		ug/L		118	60 - 140
Chloroethane	10.0	11.1		ug/L		111	36 - 142
Chloroform	10.0	10.3		ug/L		103	72 - 127
Chloromethane	10.0	9.93		ug/L		99	50 - 139
cis-1,2-Dichloroethene	10.0	10.6		ug/L		106	70 - 120
cis-1,3-Dichloropropene	10.0	11.9		ug/L		119	66 - 120
Dichlorobromomethane	10.0	11.1		ug/L		111	66 - 130
1,1-Dichloroethane	10.0	10.1		ug/L		101	73 - 126
1,2-Dichloroethane	10.0	10.4		ug/L		104	68 - 132
1,1-Dichloroethene	10.0	9.91		ug/L		99	65 - 136
1,2-Dichloropropane	10.0	10.8		ug/L		108	76 - 124
Ethylbenzene	10.0	10.8		ug/L		108	72 - 126
2-Hexanone	10.0	9.46		ug/L		95	25 - 132
Methylene Chloride	10.0	10.6		ug/L		106	63 - 129
4-Methyl-2-pentanone	10.0	9.77		ug/L		98	45 - 145
Styrene	10.0	11.4		ug/L		114	71 - 127
1,1,2,2-Tetrachloroethane	10.0	11.1		ug/L		111	62 - 125
Tetrachloroethene	10.0	11.5		ug/L		115	70 - 135
Toluene	10.0	11.1		ug/L		111	80 - 123
trans-1,2-Dichloroethene	10.0	10.9		ug/L		109	73 - 126
trans-1,3-Dichloropropene	10.0	12.9 *		ug/L		129	65 - 125
1,1,1-Trichloroethane	10.0	12.1		ug/L		121	63 - 133
1,1,2-Trichloroethane	10.0	11.1		ug/L		111	77 - 127
Trichloroethene	10.0	10.8		ug/L		108	73 - 120
Vinyl chloride	10.0	9.98		ug/L		100	53 - 138
Xylenes, Total	20.0	21.6		ug/L		108	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	90		70 - 118
Dibromofluoromethane (Surr)	92		70 - 128
1,2-Dichloroethane-d4 (Surr)	89		64 - 135
Toluene-d8 (Surr)	91		71 - 118

**Lab Sample ID: MB 180-103365/3**

**Matrix: Water**

**Analysis Batch: 103365**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			04/21/14 12:27	1
Benzene	ND		1.0	0.11	ug/L			04/21/14 12:27	1
Bromoform	ND		1.0	0.19	ug/L			04/21/14 12:27	1
Bromomethane	ND		1.0	0.31	ug/L			04/21/14 12:27	1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

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

**Lab Sample ID: MB 180-103365/3**

**Matrix: Water**

**Analysis Batch: 103365**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
2-Butanone	ND				5.0	0.55	ug/L			04/21/14 12:27	1
Carbon disulfide	ND				1.0	0.21	ug/L			04/21/14 12:27	1
Carbon tetrachloride	ND				1.0	0.14	ug/L			04/21/14 12:27	1
Chlorobenzene	ND				1.0	0.14	ug/L			04/21/14 12:27	1
Chlorodibromomethane	ND				1.0	0.14	ug/L			04/21/14 12:27	1
Chloroethane	ND				1.0	0.21	ug/L			04/21/14 12:27	1
Chloroform	ND				1.0	0.17	ug/L			04/21/14 12:27	1
Chloromethane	ND				1.0	0.28	ug/L			04/21/14 12:27	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			04/21/14 12:27	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			04/21/14 12:27	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			04/21/14 12:27	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			04/21/14 12:27	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			04/21/14 12:27	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			04/21/14 12:27	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			04/21/14 12:27	1
Ethylbenzene	ND				1.0	0.23	ug/L			04/21/14 12:27	1
2-Hexanone	ND				5.0	0.16	ug/L			04/21/14 12:27	1
Methylene Chloride	ND				1.0	0.13	ug/L			04/21/14 12:27	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			04/21/14 12:27	1
Styrene	ND				1.0	0.097	ug/L			04/21/14 12:27	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			04/21/14 12:27	1
Tetrachloroethene	ND				1.0	0.15	ug/L			04/21/14 12:27	1
Toluene	ND				1.0	0.15	ug/L			04/21/14 12:27	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			04/21/14 12:27	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			04/21/14 12:27	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			04/21/14 12:27	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			04/21/14 12:27	1
Trichloroethene	ND				1.0	0.14	ug/L			04/21/14 12:27	1
Vinyl chloride	ND				1.0	0.23	ug/L			04/21/14 12:27	1
Xylenes, Total	ND				3.0	0.49	ug/L			04/21/14 12:27	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	88		88		70 - 118		04/21/14 12:27	1
Dibromofluoromethane (Surr)	116		116		70 - 128		04/21/14 12:27	1
1,2-Dichloroethane-d4 (Surr)	119		119		64 - 135		04/21/14 12:27	1
Toluene-d8 (Surr)	98		98		71 - 118		04/21/14 12:27	1

**Lab Sample ID: LCS 180-103365/7**

**Matrix: Water**

**Analysis Batch: 103365**

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

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Acetone	10.0	9.67		ug/L		97	22 - 150
Benzene	10.0	10.7		ug/L		107	80 - 120
Bromoform	10.0	11.6		ug/L		116	46 - 150
Bromomethane	10.0	10.9		ug/L		109	33 - 150
2-Butanone	10.0	9.69		ug/L		97	39 - 138
Carbon disulfide	10.0	10.1		ug/L		101	54 - 132

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

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

Lab Sample ID: LCS 180-103365/7

Matrix: Water

Analysis Batch: 103365

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

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Carbon tetrachloride	10.0	12.9		ug/L		129	55 - 150
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120
Chlorodibromomethane	10.0	11.6		ug/L		116	60 - 140
Chloroethane	10.0	10.1		ug/L		101	36 - 142
Chloroform	10.0	10.3		ug/L		103	72 - 127
Chloromethane	10.0	9.57		ug/L		96	50 - 139
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	70 - 120
cis-1,3-Dichloropropene	10.0	10.2		ug/L		102	66 - 120
Dichlorobromomethane	10.0	10.8		ug/L		108	66 - 130
1,1-Dichloroethane	10.0	10.3		ug/L		103	73 - 126
1,2-Dichloroethane	10.0	10.5		ug/L		105	68 - 132
1,1-Dichloroethene	10.0	9.68		ug/L		97	65 - 136
1,2-Dichloropropane	10.0	10.4		ug/L		104	76 - 124
Ethylbenzene	10.0	10.3		ug/L		103	72 - 126
2-Hexanone	10.0	8.13		ug/L		81	25 - 132
Methylene Chloride	10.0	10.8		ug/L		108	63 - 129
4-Methyl-2-pentanone	10.0	8.50		ug/L		85	45 - 145
Styrene	10.0	10.3		ug/L		103	71 - 127
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	62 - 125
Tetrachloroethene	10.0	10.7		ug/L		107	70 - 135
Toluene	10.0	10.6		ug/L		106	80 - 123
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	73 - 126
trans-1,3-Dichloropropene	10.0	11.6		ug/L		116	65 - 125
1,1,1-Trichloroethane	10.0	11.5		ug/L		115	63 - 133
1,1,2-Trichloroethane	10.0	10.9		ug/L		109	77 - 127
Trichloroethene	10.0	10.5		ug/L		105	73 - 120
Vinyl chloride	10.0	9.16		ug/L		92	53 - 138
Xylenes, Total	20.0	20.4		ug/L		102	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		70 - 118
Dibromofluoromethane (Surr)	102		70 - 128
1,2-Dichloroethane-d4 (Surr)	103		64 - 135
Toluene-d8 (Surr)	97		71 - 118

## Method: 200.7 - Metals (Custom List)

Lab Sample ID: MB 180-102600/1-A

Matrix: Water

Analysis Batch: 102832

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 102600

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		200	16	ug/L		04/14/14 09:49	04/15/14 13:30	1
Iron	ND		100	9.5	ug/L		04/14/14 09:49	04/15/14 13:30	1
Zinc	ND		20	1.0	ug/L		04/14/14 09:49	04/15/14 13:30	1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

## Method: 200.7 - Metals (Custom List) (Continued)

**Lab Sample ID: LCS 180-102600/2-A**

**Matrix: Water**

**Analysis Batch: 102832**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 102600**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aluminum	2000	2000		ug/L	100	85 - 115	
Iron	1000	1040		ug/L	104	85 - 115	
Zinc	500	517		ug/L	103	85 - 115	

## Method: 1664B - HEM and SGT-HEM

**Lab Sample ID: MB 180-103946/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Analysis Batch: 104020**

**Prep Type: Total/NA**

**Prep Batch: 103946**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0	1.5	mg/L		04/25/14 10:23	04/25/14 10:23	1

**Lab Sample ID: LCS 180-103946/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Analysis Batch: 104020**

**Prep Type: Total/NA**

**Prep Batch: 103946**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
HEM (Oil & Grease)	40.0	33.7		mg/L	84	78 - 114	

**Lab Sample ID: LCSD 180-103946/3-A**

**Client Sample ID: Lab Control Sample Dup**

**Matrix: Water**

**Analysis Batch: 104020**

**Prep Type: Total/NA**

**Prep Batch: 103946**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	Limit
HEM (Oil & Grease)	40.0	32.5		mg/L	81	78 - 114	4	18

## Method: SM 4500 H+ B - pH

**Lab Sample ID: LCS 180-102915/1**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Analysis Batch: 102915**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
pH	7.00	7.020		SU	100	99 - 101	

TestAmerica Pittsburgh

# QC Association Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-31622-1

## GC/MS VOA

### Analysis Batch: 103170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-31622-3	EFFLUENT	Total/NA	Water	8260C	
180-31622-4	TRIP BLANK	Total/NA	Water	8260C	
LCS 180-103170/6	Lab Control Sample	Total/NA	Water	8260C	
MB 180-103170/3	Method Blank	Total/NA	Water	8260C	

### Analysis Batch: 103365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-31622-1 - DL	MW2	Total/NA	Water	8260C	
180-31622-1	MW2	Total/NA	Water	8260C	
180-31622-2	MW14	Total/NA	Water	8260C	
180-31622-3 - DL	EFFLUENT	Total/NA	Water	8260C	
LCS 180-103365/7	Lab Control Sample	Total/NA	Water	8260C	
MB 180-103365/3	Method Blank	Total/NA	Water	8260C	

## Metals

### Prep Batch: 102600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-31622-3	EFFLUENT	Total Recoverable	Water	200.7	
LCS 180-102600/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-102600/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 102832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-31622-3	EFFLUENT	Total Recoverable	Water	200.7	102600
LCS 180-102600/2-A	Lab Control Sample	Total Recoverable	Water	200.7	102600
MB 180-102600/1-A	Method Blank	Total Recoverable	Water	200.7	102600

## General Chemistry

### Analysis Batch: 102915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-31622-3	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-102915/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 103946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-31622-3	EFFLUENT	Total/NA	Water	1664B	
LCS 180-103946/2-A	Lab Control Sample	Total/NA	Water	1664B	
LCSD 180-103946/3-A	Lab Control Sample Dup	Total/NA	Water	1664B	
MB 180-103946/1-A	Method Blank	Total/NA	Water	1664B	

### Analysis Batch: 104020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-31622-3	EFFLUENT	Total/NA	Water	1664B	103946
LCS 180-103946/2-A	Lab Control Sample	Total/NA	Water	1664B	103946
LCSD 180-103946/3-A	Lab Control Sample Dup	Total/NA	Water	1664B	103946
MB 180-103946/1-A	Method Blank	Total/NA	Water	1664B	103946

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**TestAmerica Pittsburgh**

301 Alpha Drive RIDC Park  
Pittsburgh, PA 15238  
Phone (412) 963-7058 Fax (412) 963-2468

**Chain of Custody Record**

**TestAmerica**

THE LEADERS IN ENVIRONMENTAL TESTING

**Client Information**

Client Contact:

Patty Lundin

Company:

Keywell LLC

Address:

300 Falconer Road

City:

Freysburg

State/Zip:

NY, 14738

Phone:

(716) 922 - 9102

Email:

pllundin@keywell.com

Project Name:

Keywell - Freysburg

Site:

Sampler: **Chuck Becker**  
Phone: \_\_\_\_\_

Lab PM:  
Dunlap, David A

E-Mail:  
dave.dunlap@testamericainc.com

Carrier Tracking No(s):

COC No:  
180-111355-31.1

Page:

1 of 1

Job #:

Preservation Codes:

A - HCl  
B - NaOH  
C - Zn/Acetate  
D - Nitric Acid  
E - NaHSO4  
F - MeOH  
G - Amchlor  
H - Ascorbic Acid  
I - TSP Dodecylate  
J - Acetone  
V - MCAA  
W - ph 4-6  
Z - other (specify)

**Analysis Requested**

Due Date Requested:

TAT Requested (days):

\_\_\_\_\_

PO#:

Purchase Order not required

WO#:

Project #:

18006934

SSOW#:

Sample ID:

Sample Date:

Sample Time:

Sample Type:

Matrix:

(Water,  
Soil,  
Dust,  
Trace, Air)

Preservation Code:

Sample ID:

Sample Date:

Sample Time:

Sample Type:

Matrix:

(Water,  
Soil,  
Dust,  
Trace, Air)

Preservation Code:

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Dust,  
Trace, Air)

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Trace, Air)

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Trace, Air)

Preservation Code:

Sample ID:

Sample Date:

Sample Time:

Sample Type:

Matrix:

(Water,  
Soil,  
Dust,  
Trace, Air)

Preservation Code:</

## Login Sample Receipt Checklist

Client: SGK Ventures, LLC

Job Number: 180-31622-1

**Login Number: 31622**

**List Source: TestAmerica Pittsburgh**

**List Number: 1**

**Creator: Kovitch, Christina M**

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	
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.	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").	True	
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 Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-32311-1

Client Project/Site: Frewsburg

For:

SGK Ventures, LLC-fka Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

5/14/2014 9:23:39 AM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-32311-1

**Job ID: 180-32311-1**

**Laboratory: TestAmerica Pittsburgh**

Narrative

Job Narrative  
180-32311-1

### Receipt

The sample was received on 5/1/2014 10:20 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.3° C.

### GC/MS VOA

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

## Definitions/Glossary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32311-1

### 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

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## Certification Summary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32311-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14 *
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-15
Louisiana	NELAP	6	04041	06-30-14
New Hampshire	NELAP	1	203011	04-05-14 *
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	03-31-15
North Carolina DENR	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-15
South Carolina	State Program	4	89014	04-30-14 *
Texas	NELAP	6	T104704528	03-31-15
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14 *
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-14 *
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-32311-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-32311-1	EFFLUENT RESAMPLE	Water	04/30/14 09:45	05/01/14 10:20

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TestAmerica Pittsburgh

## Method Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-32311-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT

**Protocol References:**

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

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

## Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-32311-1

**Client Sample ID: EFFLUENT RESAMPLE**

**Lab Sample ID: 180-32311-1**

Date Collected: 04/30/14 09:45

Matrix: Water

Date Received: 05/01/14 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	105572	05/13/14 15:43	DLF	TAL PIT

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

**Analyst References:**

Lab: TAL PIT

Batch Type: Analysis

DLF = Donald Ferguson

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# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32311-1

**Client Sample ID: EFFLUENT RESAMPLE**

**Lab Sample ID: 180-32311-1**

**Matrix: Water**

Date Collected: 04/30/14 09:45

Date Received: 05/01/14 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			05/13/14 15:43	1
Benzene	ND		1.0	0.11	ug/L			05/13/14 15:43	1
Bromoform	ND		1.0	0.19	ug/L			05/13/14 15:43	1
Bromomethane	ND		1.0	0.31	ug/L			05/13/14 15:43	1
2-Butanone	ND		5.0	0.55	ug/L			05/13/14 15:43	1
Carbon disulfide	ND		1.0	0.21	ug/L			05/13/14 15:43	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			05/13/14 15:43	1
Chlorobenzene	ND		1.0	0.14	ug/L			05/13/14 15:43	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			05/13/14 15:43	1
Chloroethane	ND		1.0	0.21	ug/L			05/13/14 15:43	1
Chloroform	ND		1.0	0.17	ug/L			05/13/14 15:43	1
Chloromethane	ND		1.0	0.28	ug/L			05/13/14 15:43	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			05/13/14 15:43	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			05/13/14 15:43	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			05/13/14 15:43	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			05/13/14 15:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/13/14 15:43	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			05/13/14 15:43	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			05/13/14 15:43	1
Ethylbenzene	ND		1.0	0.23	ug/L			05/13/14 15:43	1
2-Hexanone	ND		5.0	0.16	ug/L			05/13/14 15:43	1
Methylene Chloride	ND		1.0	0.13	ug/L			05/13/14 15:43	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			05/13/14 15:43	1
Styrene	ND		1.0	0.097	ug/L			05/13/14 15:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			05/13/14 15:43	1
Tetrachloroethene	ND		1.0	0.15	ug/L			05/13/14 15:43	1
Toluene	ND		1.0	0.15	ug/L			05/13/14 15:43	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			05/13/14 15:43	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			05/13/14 15:43	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			05/13/14 15:43	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			05/13/14 15:43	1
<b>Trichloroethene</b>	<b>0.66 J</b>		1.0	0.14	ug/L			05/13/14 15:43	1
Vinyl chloride	ND		1.0	0.23	ug/L			05/13/14 15:43	1
Xylenes, Total	ND		3.0	0.49	ug/L			05/13/14 15:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 118		05/13/14 15:43	1
Dibromofluoromethane (Surr)	102		70 - 128		05/13/14 15:43	1
1,2-Dichloroethane-d4 (Surr)	110		64 - 135		05/13/14 15:43	1
Toluene-d8 (Surr)	111		71 - 118		05/13/14 15:43	1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32311-1

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

**Lab Sample ID:** MB 180-105572/5

**Matrix:** Water

**Analysis Batch:** 105572

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Acetone	ND		1	5.0	2.5	ug/L		05/13/14 11:55	
Benzene	ND		1	1.0	0.11	ug/L		05/13/14 11:55	
Bromoform	ND		1	1.0	0.19	ug/L		05/13/14 11:55	
Bromomethane	ND		1	1.0	0.31	ug/L		05/13/14 11:55	
2-Butanone	ND		1	5.0	0.55	ug/L		05/13/14 11:55	
Carbon disulfide	ND		1	1.0	0.21	ug/L		05/13/14 11:55	
Carbon tetrachloride	ND		1	1.0	0.14	ug/L		05/13/14 11:55	
Chlorobenzene	ND		1	1.0	0.14	ug/L		05/13/14 11:55	
Chlorodibromomethane	ND		1	1.0	0.14	ug/L		05/13/14 11:55	
Chloroethane	ND		1	1.0	0.21	ug/L		05/13/14 11:55	
Chloroform	ND		1	1.0	0.17	ug/L		05/13/14 11:55	
Chloromethane	ND		1	1.0	0.28	ug/L		05/13/14 11:55	
cis-1,2-Dichloroethene	ND		1	1.0	0.24	ug/L		05/13/14 11:55	
cis-1,3-Dichloropropene	ND		1	1.0	0.19	ug/L		05/13/14 11:55	
Dichlorobromomethane	ND		1	1.0	0.13	ug/L		05/13/14 11:55	
1,1-Dichloroethane	ND		1	1.0	0.12	ug/L		05/13/14 11:55	
1,2-Dichloroethane	ND		1	1.0	0.21	ug/L		05/13/14 11:55	
1,1-Dichloroethene	ND		1	1.0	0.30	ug/L		05/13/14 11:55	
1,2-Dichloropropane	ND		1	1.0	0.095	ug/L		05/13/14 11:55	
Ethylbenzene	ND		1	1.0	0.23	ug/L		05/13/14 11:55	
2-Hexanone	ND		1	5.0	0.16	ug/L		05/13/14 11:55	
Methylene Chloride	ND		1	1.0	0.13	ug/L		05/13/14 11:55	
4-Methyl-2-pentanone	ND		1	5.0	0.53	ug/L		05/13/14 11:55	
Styrene	ND		1	1.0	0.097	ug/L		05/13/14 11:55	
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.20	ug/L		05/13/14 11:55	
Tetrachloroethene	ND		1	1.0	0.15	ug/L		05/13/14 11:55	
Toluene	ND		1	1.0	0.15	ug/L		05/13/14 11:55	
trans-1,2-Dichloroethene	ND		1	1.0	0.17	ug/L		05/13/14 11:55	
trans-1,3-Dichloropropene	ND		1	1.0	0.15	ug/L		05/13/14 11:55	
1,1,1-Trichloroethane	ND		1	1.0	0.29	ug/L		05/13/14 11:55	
1,1,2-Trichloroethane	ND		1	1.0	0.20	ug/L		05/13/14 11:55	
Trichloroethene	ND		1	1.0	0.14	ug/L		05/13/14 11:55	
Vinyl chloride	ND		1	1.0	0.23	ug/L		05/13/14 11:55	
Xylenes, Total	ND		1	3.0	0.49	ug/L		05/13/14 11:55	

Surrogate	MB	MB	Dil Fac				
	%Recovery	Qualifier		Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		1	70 - 118		05/13/14 11:55	
Dibromofluoromethane (Surr)	107		1	70 - 128		05/13/14 11:55	
1,2-Dichloroethane-d4 (Surr)	111		1	64 - 135		05/13/14 11:55	
Toluene-d8 (Surr)	107		1	71 - 118		05/13/14 11:55	

**Lab Sample ID:** LCS 180-105572/8

**Matrix:** Water

**Analysis Batch:** 105572

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

Analyte	Spike	LCS	LCS	Dil Fac	%Rec.	Limits
	Added	Result	Qualifier		Unit	
Acetone	10.0	9.12		91	ug/L	22 - 150
Benzene	10.0	11.2		112	ug/L	80 - 120

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32311-1

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

**Lab Sample ID: LCS 180-105572/8**

**Matrix: Water**

**Analysis Batch: 105572**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Bromoform	10.0	13.4		ug/L		134	46 - 150
Bromomethane	10.0	9.96		ug/L		100	33 - 150
2-Butanone	10.0	10.1		ug/L		101	39 - 138
Carbon disulfide	10.0	9.65		ug/L		97	54 - 132
Carbon tetrachloride	10.0	13.3		ug/L		133	55 - 150
Chlorobenzene	10.0	11.0		ug/L		110	80 - 120
Chlorodibromomethane	10.0	12.4		ug/L		124	60 - 140
Chloroethane	10.0	10.9		ug/L		109	36 - 142
Chloroform	10.0	11.5		ug/L		115	72 - 127
Chloromethane	10.0	10.4		ug/L		104	50 - 139
cis-1,2-Dichloroethene	10.0	9.97		ug/L		100	70 - 120
cis-1,3-Dichloropropene	10.0	9.19		ug/L		92	66 - 120
Dichlorobromomethane	10.0	11.6		ug/L		116	66 - 130
1,1-Dichloroethane	10.0	11.0		ug/L		110	73 - 126
1,2-Dichloroethane	10.0	12.3		ug/L		123	68 - 132
1,1-Dichloroethene	10.0	9.62		ug/L		96	65 - 136
1,2-Dichloropropane	10.0	10.3		ug/L		103	76 - 124
Ethylbenzene	10.0	11.1		ug/L		111	72 - 126
2-Hexanone	10.0	9.62		ug/L		96	25 - 132
Methylene Chloride	10.0	10.6		ug/L		106	63 - 129
4-Methyl-2-pentanone	10.0	9.77		ug/L		98	45 - 145
Styrene	10.0	11.4		ug/L		114	71 - 127
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	62 - 125
Tetrachloroethene	10.0	10.5		ug/L		105	70 - 135
Toluene	10.0	11.2		ug/L		112	80 - 123
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	73 - 126
trans-1,3-Dichloropropene	10.0	9.68		ug/L		97	65 - 125
1,1,1-Trichloroethane	10.0	10.5		ug/L		105	63 - 133
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	77 - 127
Trichloroethene	10.0	10.5		ug/L		105	73 - 120
Vinyl chloride	10.0	10.8		ug/L		108	53 - 138
Xylenes, Total	20.0	22.3		ug/L		112	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	110		70 - 118
Dibromofluoromethane (Surr)	112		70 - 128
1,2-Dichloroethane-d4 (Surr)	114		64 - 135
Toluene-d8 (Surr)	107		71 - 118

TestAmerica Pittsburgh

# QC Association Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-32311-1

## GC/MS VOA

Analysis Batch: 105572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-32311-1	EFFLUENT RESAMPLE	Total/NA	Water	8260C	
LCS 180-105572/8	Lab Control Sample	Total/NA	Water	8260C	
MB 180-105572/5	Method Blank	Total/NA	Water	8260C	

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### ***Chain of Custody Record***

TAL-4124 (1007)

*Temperature on Receipt* \_\_\_\_\_

180-32311 Chain of Custody

## Login Sample Receipt Checklist

Client: SGK Ventures, LLC

Job Number: 180-32311-1

**Login Number:** 32311

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Watson, Debbie

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	
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.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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## **APPENDIX B2**

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### **ANALYTICAL DATA REPORTS**

**SEMI-ANNUAL MONITORING (NOVEMBER 2013)**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-27411-1

Client Project/Site: Frewsburg

For:

Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

11/29/2013 9:27:07 AM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

### Job ID: 180-27411-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-27411-1

#### Receipt

The samples were received on 11/21/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): TRIP BLANK (180-27411-11). Notation was made to the COC.

Two VOA vials were received broken for samples MW12DUP (180-27411-7) and the matrix spike duplicate of sample MW14 (180-27411-9). The analyses were completed from the remaining vial for each sample.

#### GC/MS VOA

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2 (180-27411-1), MW3 (180-27411-2), MW4 (180-27411-3), MW9R (180-27411-4), MW11R (180-27411-5), MW13 (180-27411-8), and MW14 (180-27411-9). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The matrix spike duplicate (MSD) of sample MW14 (180-27411-9) recovered above the control limits for trichloroethene.

No other analytical or quality issues were noted.

## Definitions/Glossary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS/MSD Recovery and/or RPD exceeds the control limits

### 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

## Certification Summary

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-14
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13 *
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-14
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

## Sample Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-27411-1	MW2	Water	11/19/13 07:30	11/21/13 09:30
180-27411-2	MW3	Water	11/19/13 08:45	11/21/13 09:30
180-27411-3	MW4	Water	11/19/13 09:20	11/21/13 09:30
180-27411-4	MW9R	Water	11/19/13 11:10	11/21/13 09:30
180-27411-5	MW11R	Water	11/19/13 13:15	11/21/13 09:30
180-27411-6	MW12	Water	11/20/13 07:15	11/21/13 09:30
180-27411-7	MW12DUP	Water	11/20/13 07:15	11/21/13 09:30
180-27411-8	MW13	Water	11/20/13 10:45	11/21/13 09:30
180-27411-9	MW14	Water	11/19/13 06:45	11/21/13 09:30
180-27411-10	RINSE BLANK	Water	11/19/13 09:40	11/21/13 09:30
180-27411-11	TRIP BLANK	Water	11/19/13 00:00	11/21/13 09:30

TestAmerica Pittsburgh

## Method Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds by GC/MS (Low Level)	SW846	TAL PIT

**Protocol References:**

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

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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## Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

### Client Sample ID: MW2

Date Collected: 11/19/13 07:30  
Date Received: 11/21/13 09:30

Lab Sample ID: 180-27411-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5000	5 mL	5 mL	90831	11/25/13 18:53	DLF	TAL PIT

Instrument ID: HP5

### Client Sample ID: MW3

Date Collected: 11/19/13 08:45  
Date Received: 11/21/13 09:30

Lab Sample ID: 180-27411-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	5 mL	5 mL	90831	11/25/13 19:17	DLF	TAL PIT

Instrument ID: HP5

### Client Sample ID: MW4

Date Collected: 11/19/13 09:20  
Date Received: 11/21/13 09:30

Lab Sample ID: 180-27411-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	90831	11/25/13 19:41	DLF	TAL PIT

Instrument ID: HP5

### Client Sample ID: MW9R

Date Collected: 11/19/13 11:10  
Date Received: 11/21/13 09:30

Lab Sample ID: 180-27411-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	5 mL	5 mL	90831	11/25/13 20:30	DLF	TAL PIT

Instrument ID: HP5

### Client Sample ID: MW11R

Date Collected: 11/19/13 13:15  
Date Received: 11/21/13 09:30

Lab Sample ID: 180-27411-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2000	5 mL	5 mL	90831	11/25/13 20:54	DLF	TAL PIT

Instrument ID: HP5

### Client Sample ID: MW12

Date Collected: 11/20/13 07:15  
Date Received: 11/21/13 09:30

Lab Sample ID: 180-27411-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	90864	11/26/13 03:45	MAZ	TAL PIT

Instrument ID: HP5

TestAmerica Pittsburgh

# Lab Chronicle

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

## Client Sample ID: MW12DUP

Date Collected: 11/20/13 07:15  
Date Received: 11/21/13 09:30

## Lab Sample ID: 180-27411-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	90831	11/25/13 21:43	DLF	TAL PIT

## Client Sample ID: MW13

Date Collected: 11/20/13 10:45  
Date Received: 11/21/13 09:30

## Lab Sample ID: 180-27411-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	5 mL	5 mL	90864	11/26/13 07:22	MAZ	TAL PIT

## Client Sample ID: MW14

Date Collected: 11/19/13 06:45  
Date Received: 11/21/13 09:30

## Lab Sample ID: 180-27411-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	90757	11/24/13 23:00	MAZ	TAL PIT

## Client Sample ID: RINSE BLANK

Date Collected: 11/19/13 09:40  
Date Received: 11/21/13 09:30

## Lab Sample ID: 180-27411-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	90831	11/25/13 21:18	DLF	TAL PIT

## Client Sample ID: TRIP BLANK

Date Collected: 11/19/13 00:00  
Date Received: 11/21/13 09:30

## Lab Sample ID: 180-27411-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	90757	11/24/13 23:24	MAZ	TAL PIT

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

### Analyst References:

Lab: TAL PIT

Batch Type: Analysis

DLF = Donald Ferguson

MAZ = Mike Zukowski

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: MW2**

Date Collected: 11/19/13 07:30  
Date Received: 11/21/13 09:30

**Lab Sample ID: 180-27411-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			11/25/13 18:53	5000
Benzene	ND		5000	530	ug/L			11/25/13 18:53	5000
Bromoform	ND		5000	960	ug/L			11/25/13 18:53	5000
Bromomethane	ND		5000	1600	ug/L			11/25/13 18:53	5000
2-Butanone	ND		25000	2700	ug/L			11/25/13 18:53	5000
Carbon disulfide	ND		5000	1100	ug/L			11/25/13 18:53	5000
Carbon tetrachloride	ND		5000	680	ug/L			11/25/13 18:53	5000
Chlorobenzene	ND		5000	680	ug/L			11/25/13 18:53	5000
Chlorodibromomethane	ND		5000	680	ug/L			11/25/13 18:53	5000
Chloroethane	ND		5000	1100	ug/L			11/25/13 18:53	5000
<b>Chloroform</b>	<b>1200</b>	<b>J B</b>		5000	850	ug/L		11/25/13 18:53	5000
Chloromethane	ND		5000	1400	ug/L			11/25/13 18:53	5000
<b>cis-1,2-Dichloroethene</b>	<b>87000</b>			5000	1200	ug/L		11/25/13 18:53	5000
cis-1,3-Dichloropropene	ND		5000	930	ug/L			11/25/13 18:53	5000
Dichlorobromomethane	ND		5000	650	ug/L			11/25/13 18:53	5000
1,1-Dichloroethane	ND		5000	580	ug/L			11/25/13 18:53	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			11/25/13 18:53	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			11/25/13 18:53	5000
1,2-Dichloropropane	ND		5000	470	ug/L			11/25/13 18:53	5000
Ethylbenzene	ND		5000	1100	ug/L			11/25/13 18:53	5000
2-Hexanone	ND		25000	800	ug/L			11/25/13 18:53	5000
Methylene Chloride	ND		5000	630	ug/L			11/25/13 18:53	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			11/25/13 18:53	5000
Styrene	ND		5000	480	ug/L			11/25/13 18:53	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			11/25/13 18:53	5000
Tetrachloroethene	ND		5000	740	ug/L			11/25/13 18:53	5000
Toluene	ND		5000	750	ug/L			11/25/13 18:53	5000
trans-1,2-Dichloroethene	ND		5000	850	ug/L			11/25/13 18:53	5000
trans-1,3-Dichloropropene	ND		5000	740	ug/L			11/25/13 18:53	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			11/25/13 18:53	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			11/25/13 18:53	5000
Trichloroethene	ND		5000	720	ug/L			11/25/13 18:53	5000
<b>Vinyl chloride</b>	<b>22000</b>			5000	1100	ug/L		11/25/13 18:53	5000
Xylenes, Total	ND		15000	2400	ug/L			11/25/13 18:53	5000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	86			70 - 118				11/25/13 18:53	5000
Dibromofluoromethane (Surr)	110			70 - 128				11/25/13 18:53	5000
1,2-Dichloroethane-d4 (Surr)	107			64 - 135				11/25/13 18:53	5000
Toluene-d8 (Surr)	97			71 - 118				11/25/13 18:53	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: MW3**

Date Collected: 11/19/13 08:45

Date Received: 11/21/13 09:30

**Lab Sample ID: 180-27411-2**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1300	630	ug/L			11/25/13 19:17	250
Benzene	ND		250	26	ug/L			11/25/13 19:17	250
Bromoform	ND		250	48	ug/L			11/25/13 19:17	250
Bromomethane	ND		250	78	ug/L			11/25/13 19:17	250
2-Butanone	ND		1300	140	ug/L			11/25/13 19:17	250
Carbon disulfide	ND		250	53	ug/L			11/25/13 19:17	250
Carbon tetrachloride	ND		250	34	ug/L			11/25/13 19:17	250
Chlorobenzene	ND		250	34	ug/L			11/25/13 19:17	250
Chlorodibromomethane	ND		250	34	ug/L			11/25/13 19:17	250
Chloroethane	ND		250	54	ug/L			11/25/13 19:17	250
<b>Chloroform</b>	<b>73 J B</b>		250	43	ug/L			11/25/13 19:17	250
Chloromethane	ND		250	71	ug/L			11/25/13 19:17	250
<b>cis-1,2-Dichloroethene</b>	<b>1200</b>		250	59	ug/L			11/25/13 19:17	250
cis-1,3-Dichloropropene	ND		250	47	ug/L			11/25/13 19:17	250
Dichlorobromomethane	ND		250	33	ug/L			11/25/13 19:17	250
1,1-Dichloroethane	ND		250	29	ug/L			11/25/13 19:17	250
1,2-Dichloroethane	ND		250	53	ug/L			11/25/13 19:17	250
1,1-Dichloroethene	ND		250	74	ug/L			11/25/13 19:17	250
1,2-Dichloropropane	ND		250	24	ug/L			11/25/13 19:17	250
Ethylbenzene	ND		250	57	ug/L			11/25/13 19:17	250
2-Hexanone	ND		1300	40	ug/L			11/25/13 19:17	250
Methylene Chloride	ND		250	31	ug/L			11/25/13 19:17	250
4-Methyl-2-pentanone	ND		1300	130	ug/L			11/25/13 19:17	250
Styrene	ND		250	24	ug/L			11/25/13 19:17	250
1,1,2,2-Tetrachloroethane	ND		250	50	ug/L			11/25/13 19:17	250
Tetrachloroethene	ND		250	37	ug/L			11/25/13 19:17	250
Toluene	ND		250	38	ug/L			11/25/13 19:17	250
trans-1,2-Dichloroethene	ND		250	42	ug/L			11/25/13 19:17	250
trans-1,3-Dichloropropene	ND		250	37	ug/L			11/25/13 19:17	250
1,1,1-Trichloroethane	ND		250	72	ug/L			11/25/13 19:17	250
1,1,2-Trichloroethane	ND		250	50	ug/L			11/25/13 19:17	250
<b>Trichloroethene</b>	<b>4200</b>		250	36	ug/L			11/25/13 19:17	250
Vinyl chloride	ND		250	57	ug/L			11/25/13 19:17	250
Xylenes, Total	ND		750	120	ug/L			11/25/13 19:17	250

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 118			250
Dibromofluoromethane (Surr)	114		70 - 128			250
1,2-Dichloroethane-d4 (Surr)	107		64 - 135			250
Toluene-d8 (Surr)	95		71 - 118			250

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: MW4**

Date Collected: 11/19/13 09:20

Date Received: 11/21/13 09:30

**Lab Sample ID: 180-27411-3**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			11/25/13 19:41	1000
Benzene	ND		1000	110	ug/L			11/25/13 19:41	1000
Bromoform	ND		1000	190	ug/L			11/25/13 19:41	1000
Bromomethane	ND		1000	310	ug/L			11/25/13 19:41	1000
2-Butanone	ND		5000	550	ug/L			11/25/13 19:41	1000
Carbon disulfide	ND		1000	210	ug/L			11/25/13 19:41	1000
Carbon tetrachloride	ND		1000	140	ug/L			11/25/13 19:41	1000
Chlorobenzene	ND		1000	140	ug/L			11/25/13 19:41	1000
Chlorodibromomethane	ND		1000	140	ug/L			11/25/13 19:41	1000
Chloroethane	ND		1000	210	ug/L			11/25/13 19:41	1000
<b>Chloroform</b>	<b>260</b>	<b>J B</b>	1000	170	ug/L			11/25/13 19:41	1000
Chloromethane	ND		1000	280	ug/L			11/25/13 19:41	1000
<b>cis-1,2-Dichloroethene</b>	<b>2800</b>		1000	240	ug/L			11/25/13 19:41	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			11/25/13 19:41	1000
Dichlorobromomethane	ND		1000	130	ug/L			11/25/13 19:41	1000
1,1-Dichloroethane	ND		1000	120	ug/L			11/25/13 19:41	1000
1,2-Dichloroethane	ND		1000	210	ug/L			11/25/13 19:41	1000
1,1-Dichloroethene	ND		1000	300	ug/L			11/25/13 19:41	1000
1,2-Dichloropropane	ND		1000	95	ug/L			11/25/13 19:41	1000
Ethylbenzene	ND		1000	230	ug/L			11/25/13 19:41	1000
2-Hexanone	ND		5000	160	ug/L			11/25/13 19:41	1000
Methylene Chloride	ND		1000	130	ug/L			11/25/13 19:41	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			11/25/13 19:41	1000
Styrene	ND		1000	97	ug/L			11/25/13 19:41	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			11/25/13 19:41	1000
Tetrachloroethene	ND		1000	150	ug/L			11/25/13 19:41	1000
Toluene	ND		1000	150	ug/L			11/25/13 19:41	1000
trans-1,2-Dichloroethene	ND		1000	170	ug/L			11/25/13 19:41	1000
trans-1,3-Dichloropropene	ND		1000	150	ug/L			11/25/13 19:41	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			11/25/13 19:41	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			11/25/13 19:41	1000
<b>Trichloroethene</b>	<b>27000</b>		1000	140	ug/L			11/25/13 19:41	1000
Vinyl chloride	ND		1000	230	ug/L			11/25/13 19:41	1000
Xylenes, Total	ND		3000	490	ug/L			11/25/13 19:41	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	83			70 - 118				11/25/13 19:41	1000
Dibromofluoromethane (Surr)	110			70 - 128				11/25/13 19:41	1000
1,2-Dichloroethane-d4 (Surr)	106			64 - 135				11/25/13 19:41	1000
Toluene-d8 (Surr)	94			71 - 118				11/25/13 19:41	1000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: MW9R**

Date Collected: 11/19/13 11:10

Date Received: 11/21/13 09:30

**Lab Sample ID: 180-27411-4**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			11/25/13 20:30	500
Benzene	ND		500	53	ug/L			11/25/13 20:30	500
Bromoform	ND		500	96	ug/L			11/25/13 20:30	500
Bromomethane	ND		500	160	ug/L			11/25/13 20:30	500
2-Butanone	ND		2500	270	ug/L			11/25/13 20:30	500
Carbon disulfide	ND		500	110	ug/L			11/25/13 20:30	500
Carbon tetrachloride	ND		500	68	ug/L			11/25/13 20:30	500
Chlorobenzene	ND		500	68	ug/L			11/25/13 20:30	500
Chlorodibromomethane	ND		500	68	ug/L			11/25/13 20:30	500
Chloroethane	ND		500	110	ug/L			11/25/13 20:30	500
<b>Chloroform</b>	<b>150</b>	<b>J B</b>	500	85	ug/L			11/25/13 20:30	500
Chloromethane	ND		500	140	ug/L			11/25/13 20:30	500
<b>cis-1,2-Dichloroethene</b>	<b>4000</b>		500	120	ug/L			11/25/13 20:30	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			11/25/13 20:30	500
Dichlorobromomethane	ND		500	65	ug/L			11/25/13 20:30	500
1,1-Dichloroethane	ND		500	58	ug/L			11/25/13 20:30	500
1,2-Dichloroethane	ND		500	110	ug/L			11/25/13 20:30	500
1,1-Dichloroethene	ND		500	150	ug/L			11/25/13 20:30	500
1,2-Dichloropropane	ND		500	47	ug/L			11/25/13 20:30	500
Ethylbenzene	ND		500	110	ug/L			11/25/13 20:30	500
2-Hexanone	ND		2500	80	ug/L			11/25/13 20:30	500
Methylene Chloride	ND		500	63	ug/L			11/25/13 20:30	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			11/25/13 20:30	500
Styrene	ND		500	48	ug/L			11/25/13 20:30	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			11/25/13 20:30	500
Tetrachloroethene	ND		500	74	ug/L			11/25/13 20:30	500
Toluene	ND		500	75	ug/L			11/25/13 20:30	500
trans-1,2-Dichloroethene	ND		500	85	ug/L			11/25/13 20:30	500
trans-1,3-Dichloropropene	ND		500	74	ug/L			11/25/13 20:30	500
1,1,1-Trichloroethane	ND		500	140	ug/L			11/25/13 20:30	500
1,1,2-Trichloroethane	ND		500	100	ug/L			11/25/13 20:30	500
<b>Trichloroethene</b>	<b>5300</b>		500	72	ug/L			11/25/13 20:30	500
<b>Vinyl chloride</b>	<b>450</b>	<b>J</b>	500	110	ug/L			11/25/13 20:30	500
Xylenes, Total	ND		1500	240	ug/L			11/25/13 20:30	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 118			500
Dibromofluoromethane (Surr)	112		70 - 128			500
1,2-Dichloroethane-d4 (Surr)	108		64 - 135			500
Toluene-d8 (Surr)	98		71 - 118			500

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: MW11R**

**Lab Sample ID: 180-27411-5**

Date Collected: 11/19/13 13:15

Matrix: Water

Date Received: 11/21/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10000	5000	ug/L			11/25/13 20:54	2000
Benzene	ND		2000	210	ug/L			11/25/13 20:54	2000
Bromoform	ND		2000	380	ug/L			11/25/13 20:54	2000
Bromomethane	ND		2000	630	ug/L			11/25/13 20:54	2000
2-Butanone	ND		10000	1100	ug/L			11/25/13 20:54	2000
Carbon disulfide	ND		2000	420	ug/L			11/25/13 20:54	2000
Carbon tetrachloride	ND		2000	270	ug/L			11/25/13 20:54	2000
Chlorobenzene	ND		2000	270	ug/L			11/25/13 20:54	2000
Chlorodibromomethane	ND		2000	270	ug/L			11/25/13 20:54	2000
Chloroethane	ND		2000	430	ug/L			11/25/13 20:54	2000
<b>Chloroform</b>	<b>780 J B</b>		2000	340	ug/L			11/25/13 20:54	2000
Chloromethane	ND		2000	570	ug/L			11/25/13 20:54	2000
<b>cis-1,2-Dichloroethene</b>	<b>4300</b>		2000	470	ug/L			11/25/13 20:54	2000
cis-1,3-Dichloropropene	ND		2000	370	ug/L			11/25/13 20:54	2000
Dichlorobromomethane	ND		2000	260	ug/L			11/25/13 20:54	2000
1,1-Dichloroethane	ND		2000	230	ug/L			11/25/13 20:54	2000
1,2-Dichloroethane	ND		2000	420	ug/L			11/25/13 20:54	2000
1,1-Dichloroethene	ND		2000	590	ug/L			11/25/13 20:54	2000
1,2-Dichloropropane	ND		2000	190	ug/L			11/25/13 20:54	2000
Ethylbenzene	ND		2000	450	ug/L			11/25/13 20:54	2000
2-Hexanone	ND		10000	320	ug/L			11/25/13 20:54	2000
Methylene Chloride	ND		2000	250	ug/L			11/25/13 20:54	2000
4-Methyl-2-pentanone	ND		10000	1100	ug/L			11/25/13 20:54	2000
Styrene	ND		2000	190	ug/L			11/25/13 20:54	2000
1,1,2,2-Tetrachloroethane	ND		2000	400	ug/L			11/25/13 20:54	2000
Tetrachloroethene	ND		2000	300	ug/L			11/25/13 20:54	2000
Toluene	ND		2000	300	ug/L			11/25/13 20:54	2000
trans-1,2-Dichloroethene	ND		2000	340	ug/L			11/25/13 20:54	2000
trans-1,3-Dichloropropene	ND		2000	300	ug/L			11/25/13 20:54	2000
1,1,1-Trichloroethane	ND		2000	570	ug/L			11/25/13 20:54	2000
1,1,2-Trichloroethane	ND		2000	400	ug/L			11/25/13 20:54	2000
<b>Trichloroethene</b>	<b>33000</b>		2000	290	ug/L			11/25/13 20:54	2000
Vinyl chloride	ND		2000	450	ug/L			11/25/13 20:54	2000
Xylenes, Total	ND		6000	980	ug/L			11/25/13 20:54	2000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	82		70 - 118					11/25/13 20:54	2000
Dibromofluoromethane (Surr)	112		70 - 128					11/25/13 20:54	2000
1,2-Dichloroethane-d4 (Surr)	111		64 - 135					11/25/13 20:54	2000
Toluene-d8 (Surr)	93		71 - 118					11/25/13 20:54	2000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: MW12**

**Lab Sample ID: 180-27411-6**

Date Collected: 11/20/13 07:15

Matrix: Water

Date Received: 11/21/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			11/26/13 03:45	1
Benzene	ND		1.0	0.11	ug/L			11/26/13 03:45	1
Bromoform	ND		1.0	0.19	ug/L			11/26/13 03:45	1
Bromomethane	ND		1.0	0.31	ug/L			11/26/13 03:45	1
2-Butanone	ND		5.0	0.55	ug/L			11/26/13 03:45	1
Carbon disulfide	ND		1.0	0.21	ug/L			11/26/13 03:45	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			11/26/13 03:45	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/26/13 03:45	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			11/26/13 03:45	1
Chloroethane	ND		1.0	0.21	ug/L			11/26/13 03:45	1
Chloroform	ND		1.0	0.17	ug/L			11/26/13 03:45	1
Chloromethane	ND		1.0	0.28	ug/L			11/26/13 03:45	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			11/26/13 03:45	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			11/26/13 03:45	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			11/26/13 03:45	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			11/26/13 03:45	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/26/13 03:45	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			11/26/13 03:45	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			11/26/13 03:45	1
Ethylbenzene	ND		1.0	0.23	ug/L			11/26/13 03:45	1
2-Hexanone	ND		5.0	0.16	ug/L			11/26/13 03:45	1
Methylene Chloride	ND		1.0	0.13	ug/L			11/26/13 03:45	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			11/26/13 03:45	1
Styrene	ND		1.0	0.097	ug/L			11/26/13 03:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			11/26/13 03:45	1
Tetrachloroethene	ND		1.0	0.15	ug/L			11/26/13 03:45	1
Toluene	ND		1.0	0.15	ug/L			11/26/13 03:45	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/26/13 03:45	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			11/26/13 03:45	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			11/26/13 03:45	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			11/26/13 03:45	1
<b>Trichloroethene</b>	<b>0.27</b>	<b>J</b>	1.0	0.14	ug/L			11/26/13 03:45	1
Vinyl chloride	ND		1.0	0.23	ug/L			11/26/13 03:45	1
Xylenes, Total	ND		3.0	0.49	ug/L			11/26/13 03:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 118		11/26/13 03:45	1
Dibromofluoromethane (Surr)	117		70 - 128		11/26/13 03:45	1
1,2-Dichloroethane-d4 (Surr)	108		64 - 135		11/26/13 03:45	1
Toluene-d8 (Surr)	93		71 - 118		11/26/13 03:45	1

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: MW12DUP**

**Lab Sample ID: 180-27411-7**

**Matrix: Water**

**Date Collected: 11/20/13 07:15**

**Date Received: 11/21/13 09:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		11/25/13 21:43		1
Benzene	ND		1.0	0.11	ug/L		11/25/13 21:43		1
Bromoform	ND		1.0	0.19	ug/L		11/25/13 21:43		1
Bromomethane	ND		1.0	0.31	ug/L		11/25/13 21:43		1
2-Butanone	ND		5.0	0.55	ug/L		11/25/13 21:43		1
Carbon disulfide	ND		1.0	0.21	ug/L		11/25/13 21:43		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		11/25/13 21:43		1
Chlorobenzene	ND		1.0	0.14	ug/L		11/25/13 21:43		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		11/25/13 21:43		1
Chloroethane	ND		1.0	0.21	ug/L		11/25/13 21:43		1
Chloroform	ND		1.0	0.17	ug/L		11/25/13 21:43		1
Chloromethane	ND		1.0	0.28	ug/L		11/25/13 21:43		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		11/25/13 21:43		1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L		11/25/13 21:43		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		11/25/13 21:43		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		11/25/13 21:43		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		11/25/13 21:43		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		11/25/13 21:43		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		11/25/13 21:43		1
Ethylbenzene	ND		1.0	0.23	ug/L		11/25/13 21:43		1
2-Hexanone	ND		5.0	0.16	ug/L		11/25/13 21:43		1
Methylene Chloride	ND		1.0	0.13	ug/L		11/25/13 21:43		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		11/25/13 21:43		1
Styrene	ND		1.0	0.097	ug/L		11/25/13 21:43		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		11/25/13 21:43		1
Tetrachloroethene	ND		1.0	0.15	ug/L		11/25/13 21:43		1
Toluene	ND		1.0	0.15	ug/L		11/25/13 21:43		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		11/25/13 21:43		1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L		11/25/13 21:43		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		11/25/13 21:43		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		11/25/13 21:43		1
Trichloroethene	ND		1.0	0.14	ug/L		11/25/13 21:43		1
Vinyl chloride	ND		1.0	0.23	ug/L		11/25/13 21:43		1
Xylenes, Total	ND		3.0	0.49	ug/L		11/25/13 21:43		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 118		11/25/13 21:43	1
Dibromofluoromethane (Surr)	101		70 - 128		11/25/13 21:43	1
1,2-Dichloroethane-d4 (Surr)	93		64 - 135		11/25/13 21:43	1
Toluene-d8 (Surr)	98		71 - 118		11/25/13 21:43	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: MW13**

**Lab Sample ID: 180-27411-8**

Date Collected: 11/20/13 10:45

Matrix: Water

Date Received: 11/21/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1300	630	ug/L			11/26/13 07:22	250
Benzene	ND		250	26	ug/L			11/26/13 07:22	250
Bromoform	ND		250	48	ug/L			11/26/13 07:22	250
Bromomethane	ND		250	78	ug/L			11/26/13 07:22	250
2-Butanone	ND		1300	140	ug/L			11/26/13 07:22	250
Carbon disulfide	ND		250	53	ug/L			11/26/13 07:22	250
Carbon tetrachloride	ND		250	34	ug/L			11/26/13 07:22	250
Chlorobenzene	ND		250	34	ug/L			11/26/13 07:22	250
Chlorodibromomethane	ND		250	34	ug/L			11/26/13 07:22	250
Chloroethane	ND		250	54	ug/L			11/26/13 07:22	250
<b>Chloroform</b>	<b>160</b>	<b>J B</b>	250	43	ug/L			11/26/13 07:22	250
Chloromethane	ND		250	71	ug/L			11/26/13 07:22	250
<b>cis-1,2-Dichloroethene</b>	<b>1100</b>		250	59	ug/L			11/26/13 07:22	250
cis-1,3-Dichloropropene	ND		250	47	ug/L			11/26/13 07:22	250
Dichlorobromomethane	ND		250	33	ug/L			11/26/13 07:22	250
1,1-Dichloroethane	ND		250	29	ug/L			11/26/13 07:22	250
1,2-Dichloroethane	ND		250	53	ug/L			11/26/13 07:22	250
1,1-Dichloroethene	ND		250	74	ug/L			11/26/13 07:22	250
1,2-Dichloropropane	ND		250	24	ug/L			11/26/13 07:22	250
Ethylbenzene	ND		250	57	ug/L			11/26/13 07:22	250
2-Hexanone	ND		1300	40	ug/L			11/26/13 07:22	250
Methylene Chloride	ND		250	31	ug/L			11/26/13 07:22	250
4-Methyl-2-pentanone	ND		1300	130	ug/L			11/26/13 07:22	250
Styrene	ND		250	24	ug/L			11/26/13 07:22	250
1,1,2,2-Tetrachloroethane	ND		250	50	ug/L			11/26/13 07:22	250
Tetrachloroethene	ND		250	37	ug/L			11/26/13 07:22	250
Toluene	ND		250	38	ug/L			11/26/13 07:22	250
trans-1,2-Dichloroethene	ND		250	42	ug/L			11/26/13 07:22	250
trans-1,3-Dichloropropene	ND		250	37	ug/L			11/26/13 07:22	250
1,1,1-Trichloroethane	ND		250	72	ug/L			11/26/13 07:22	250
1,1,2-Trichloroethane	ND		250	50	ug/L			11/26/13 07:22	250
<b>Trichloroethene</b>	<b>2500</b>		250	36	ug/L			11/26/13 07:22	250
Vinyl chloride	ND		250	57	ug/L			11/26/13 07:22	250
Xylenes, Total	ND		750	120	ug/L			11/26/13 07:22	250

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 118			250
Dibromofluoromethane (Surr)	118		70 - 128			250
1,2-Dichloroethane-d4 (Surr)	119		64 - 135			250
Toluene-d8 (Surr)	94		71 - 118			250

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: MW14**

**Lab Sample ID: 180-27411-9**

Date Collected: 11/19/13 06:45

Matrix: Water

Date Received: 11/21/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			11/24/13 23:00	1000
Benzene	ND		1000	110	ug/L			11/24/13 23:00	1000
Bromoform	ND		1000	190	ug/L			11/24/13 23:00	1000
Bromomethane	ND		1000	310	ug/L			11/24/13 23:00	1000
2-Butanone	ND		5000	550	ug/L			11/24/13 23:00	1000
Carbon disulfide	ND		1000	210	ug/L			11/24/13 23:00	1000
Carbon tetrachloride	ND		1000	140	ug/L			11/24/13 23:00	1000
Chlorobenzene	ND		1000	140	ug/L			11/24/13 23:00	1000
Chlorodibromomethane	ND		1000	140	ug/L			11/24/13 23:00	1000
Chloroethane	ND		1000	210	ug/L			11/24/13 23:00	1000
<b>Chloroform</b>	<b>350</b>	<b>J B</b>	1000	170	ug/L			11/24/13 23:00	1000
Chloromethane	ND		1000	280	ug/L			11/24/13 23:00	1000
<b>cis-1,2-Dichloroethene</b>	<b>3900</b>		1000	240	ug/L			11/24/13 23:00	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			11/24/13 23:00	1000
Dichlorobromomethane	ND		1000	130	ug/L			11/24/13 23:00	1000
1,1-Dichloroethane	ND		1000	120	ug/L			11/24/13 23:00	1000
1,2-Dichloroethane	ND		1000	210	ug/L			11/24/13 23:00	1000
1,1-Dichloroethene	ND		1000	300	ug/L			11/24/13 23:00	1000
1,2-Dichloropropane	ND		1000	95	ug/L			11/24/13 23:00	1000
Ethylbenzene	ND		1000	230	ug/L			11/24/13 23:00	1000
2-Hexanone	ND		5000	160	ug/L			11/24/13 23:00	1000
Methylene Chloride	ND		1000	130	ug/L			11/24/13 23:00	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			11/24/13 23:00	1000
Styrene	ND		1000	97	ug/L			11/24/13 23:00	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			11/24/13 23:00	1000
Tetrachloroethene	ND		1000	150	ug/L			11/24/13 23:00	1000
Toluene	ND		1000	150	ug/L			11/24/13 23:00	1000
trans-1,2-Dichloroethene	ND		1000	170	ug/L			11/24/13 23:00	1000
trans-1,3-Dichloropropene	ND		1000	150	ug/L			11/24/13 23:00	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			11/24/13 23:00	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			11/24/13 23:00	1000
<b>Trichloroethene</b>	<b>14000</b>		1000	140	ug/L			11/24/13 23:00	1000
Vinyl chloride	ND		1000	230	ug/L			11/24/13 23:00	1000
Xylenes, Total	ND		3000	490	ug/L			11/24/13 23:00	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	80			70 - 118				11/24/13 23:00	1000
Dibromofluoromethane (Surr)	113			70 - 128				11/24/13 23:00	1000
1,2-Dichloroethane-d4 (Surr)	113			64 - 135				11/24/13 23:00	1000
Toluene-d8 (Surr)	92			71 - 118				11/24/13 23:00	1000

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: RINSE BLANK**

**Lab Sample ID: 180-27411-10**

**Matrix: Water**

Date Collected: 11/19/13 09:40

Date Received: 11/21/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	7.7		5.0	2.5	ug/L			11/25/13 21:18	1
Benzene	ND		1.0	0.11	ug/L			11/25/13 21:18	1
Bromoform	ND		1.0	0.19	ug/L			11/25/13 21:18	1
Bromomethane	ND		1.0	0.31	ug/L			11/25/13 21:18	1
2-Butanone	ND		5.0	0.55	ug/L			11/25/13 21:18	1
Carbon disulfide	ND		1.0	0.21	ug/L			11/25/13 21:18	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			11/25/13 21:18	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/25/13 21:18	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			11/25/13 21:18	1
Chloroethane	ND		1.0	0.21	ug/L			11/25/13 21:18	1
Chloroform	ND		1.0	0.17	ug/L			11/25/13 21:18	1
Chloromethane	ND		1.0	0.28	ug/L			11/25/13 21:18	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			11/25/13 21:18	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			11/25/13 21:18	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			11/25/13 21:18	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			11/25/13 21:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/25/13 21:18	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			11/25/13 21:18	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			11/25/13 21:18	1
Ethylbenzene	ND		1.0	0.23	ug/L			11/25/13 21:18	1
2-Hexanone	ND		5.0	0.16	ug/L			11/25/13 21:18	1
Methylene Chloride	ND		1.0	0.13	ug/L			11/25/13 21:18	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			11/25/13 21:18	1
Styrene	ND		1.0	0.097	ug/L			11/25/13 21:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			11/25/13 21:18	1
Tetrachloroethene	ND		1.0	0.15	ug/L			11/25/13 21:18	1
Toluene	ND		1.0	0.15	ug/L			11/25/13 21:18	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/25/13 21:18	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			11/25/13 21:18	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			11/25/13 21:18	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			11/25/13 21:18	1
<b>Trichloroethene</b>	<b>2.3</b>		1.0	0.14	ug/L			11/25/13 21:18	1
Vinyl chloride	ND		1.0	0.23	ug/L			11/25/13 21:18	1
Xylenes, Total	ND		3.0	0.49	ug/L			11/25/13 21:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	86			70 - 118				11/25/13 21:18	1
Dibromofluoromethane (Surr)	119			70 - 128				11/25/13 21:18	1
1,2-Dichloroethane-d4 (Surr)	110			64 - 135				11/25/13 21:18	1
Toluene-d8 (Surr)	93			71 - 118				11/25/13 21:18	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 180-27411-11**

Date Collected: 11/19/13 00:00

Matrix: Water

Date Received: 11/21/13 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			11/24/13 23:24	1
Benzene	ND		1.0	0.11	ug/L			11/24/13 23:24	1
Bromoform	ND		1.0	0.19	ug/L			11/24/13 23:24	1
Bromomethane	ND		1.0	0.31	ug/L			11/24/13 23:24	1
2-Butanone	ND		5.0	0.55	ug/L			11/24/13 23:24	1
Carbon disulfide	ND		1.0	0.21	ug/L			11/24/13 23:24	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			11/24/13 23:24	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/24/13 23:24	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			11/24/13 23:24	1
Chloroethane	ND		1.0	0.21	ug/L			11/24/13 23:24	1
Chloroform	ND		1.0	0.17	ug/L			11/24/13 23:24	1
Chloromethane	ND		1.0	0.28	ug/L			11/24/13 23:24	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			11/24/13 23:24	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			11/24/13 23:24	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			11/24/13 23:24	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			11/24/13 23:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/24/13 23:24	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			11/24/13 23:24	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			11/24/13 23:24	1
Ethylbenzene	ND		1.0	0.23	ug/L			11/24/13 23:24	1
2-Hexanone	ND		5.0	0.16	ug/L			11/24/13 23:24	1
<b>Methylene Chloride</b>	<b>2.5</b>		1.0	0.13	ug/L			11/24/13 23:24	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			11/24/13 23:24	1
Styrene	ND		1.0	0.097	ug/L			11/24/13 23:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			11/24/13 23:24	1
Tetrachloroethene	ND		1.0	0.15	ug/L			11/24/13 23:24	1
Toluene	ND		1.0	0.15	ug/L			11/24/13 23:24	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/24/13 23:24	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			11/24/13 23:24	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			11/24/13 23:24	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			11/24/13 23:24	1
Trichloroethene	ND		1.0	0.14	ug/L			11/24/13 23:24	1
Vinyl chloride	ND		1.0	0.23	ug/L			11/24/13 23:24	1
Xylenes, Total	ND		3.0	0.49	ug/L			11/24/13 23:24	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	86		70 - 118				11/24/13 23:24	1	
Dibromofluoromethane (Surr)	120		70 - 128				11/24/13 23:24	1	
1,2-Dichloroethane-d4 (Surr)	110		64 - 135				11/24/13 23:24	1	
Toluene-d8 (Surr)	94		71 - 118				11/24/13 23:24	1	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

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

**Lab Sample ID:** MB 180-90757/4

**Matrix:** Water

**Analysis Batch:** 90757

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Acetone	ND		1	5.0	2.5	ug/L		11/24/13 22:36	
Benzene	ND		1	1.0	0.11	ug/L		11/24/13 22:36	
Bromoform	ND		1	1.0	0.19	ug/L		11/24/13 22:36	
Bromomethane	ND		1	1.0	0.31	ug/L		11/24/13 22:36	
2-Butanone	ND		1	5.0	0.55	ug/L		11/24/13 22:36	
Carbon disulfide	ND		1	1.0	0.21	ug/L		11/24/13 22:36	
Carbon tetrachloride	ND		1	1.0	0.14	ug/L		11/24/13 22:36	
Chlorobenzene	ND		1	1.0	0.14	ug/L		11/24/13 22:36	
Chlorodibromomethane	ND		1	1.0	0.14	ug/L		11/24/13 22:36	
Chloroethane	ND		1	1.0	0.21	ug/L		11/24/13 22:36	
Chloroform	0.469	J	1	1.0	0.17	ug/L		11/24/13 22:36	
Chloromethane	ND		1	1.0	0.28	ug/L		11/24/13 22:36	
cis-1,2-Dichloroethene	ND		1	1.0	0.24	ug/L		11/24/13 22:36	
cis-1,3-Dichloropropene	ND		1	1.0	0.19	ug/L		11/24/13 22:36	
Dichlorobromomethane	ND		1	1.0	0.13	ug/L		11/24/13 22:36	
1,1-Dichloroethane	ND		1	1.0	0.12	ug/L		11/24/13 22:36	
1,2-Dichloroethane	ND		1	1.0	0.21	ug/L		11/24/13 22:36	
1,1-Dichloroethene	ND		1	1.0	0.30	ug/L		11/24/13 22:36	
1,2-Dichloropropane	ND		1	1.0	0.095	ug/L		11/24/13 22:36	
Ethylbenzene	ND		1	1.0	0.23	ug/L		11/24/13 22:36	
2-Hexanone	ND		1	5.0	0.16	ug/L		11/24/13 22:36	
Methylene Chloride	ND		1	1.0	0.13	ug/L		11/24/13 22:36	
4-Methyl-2-pentanone	ND		1	5.0	0.53	ug/L		11/24/13 22:36	
Styrene	ND		1	1.0	0.097	ug/L		11/24/13 22:36	
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.20	ug/L		11/24/13 22:36	
Tetrachloroethene	ND		1	1.0	0.15	ug/L		11/24/13 22:36	
Toluene	ND		1	1.0	0.15	ug/L		11/24/13 22:36	
trans-1,2-Dichloroethene	ND		1	1.0	0.17	ug/L		11/24/13 22:36	
trans-1,3-Dichloropropene	ND		1	1.0	0.15	ug/L		11/24/13 22:36	
1,1,1-Trichloroethane	ND		1	1.0	0.29	ug/L		11/24/13 22:36	
1,1,2-Trichloroethane	ND		1	1.0	0.20	ug/L		11/24/13 22:36	
Trichloroethene	ND		1	1.0	0.14	ug/L		11/24/13 22:36	
Vinyl chloride	ND		1	1.0	0.23	ug/L		11/24/13 22:36	
Xylenes, Total	ND		1	3.0	0.49	ug/L		11/24/13 22:36	

Surrogate	MB	MB	Dil Fac				
	%Recovery	Qualifier		Limits	Prepared	Analyzed	
4-Bromofluorobenzene (Surr)	79		1	70 - 118		11/24/13 22:36	
Dibromofluoromethane (Surr)	109		1	70 - 128		11/24/13 22:36	
1,2-Dichloroethane-d4 (Surr)	109		1	64 - 135		11/24/13 22:36	
Toluene-d8 (Surr)	91		1	71 - 118		11/24/13 22:36	

**Lab Sample ID:** LCS 180-90757/7

**Matrix:** Water

**Analysis Batch:** 90757

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

Analyte	Spike	LCS	LCS	%Rec.	Limits	Dil Fac
	Added	Result	Qualifier			
Acetone	10.0	10.0		100	22 - 150	
Benzene	10.0	10.0		100	80 - 120	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

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

Lab Sample ID: LCS 180-90757/7

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 90757

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Bromoform	10.0	11.0		ug/L		110	46 - 150
Bromomethane	10.0	9.45		ug/L		94	33 - 150
2-Butanone	10.0	9.40		ug/L		94	39 - 138
Carbon disulfide	10.0	9.66		ug/L		97	54 - 132
Carbon tetrachloride	10.0	11.1		ug/L		111	55 - 150
Chlorobenzene	10.0	10.5		ug/L		105	80 - 120
Chlorodibromomethane	10.0	11.1		ug/L		111	60 - 140
Chloroethane	10.0	11.6		ug/L		116	36 - 142
Chloroform	10.0	10.4		ug/L		104	72 - 127
Chloromethane	10.0	10.8		ug/L		108	50 - 139
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	70 - 120
cis-1,3-Dichloropropene	10.0	8.75		ug/L		88	66 - 120
Dichlorobromomethane	10.0	9.60		ug/L		96	66 - 130
1,1-Dichloroethane	10.0	10.1		ug/L		101	73 - 126
1,2-Dichloroethane	10.0	10.6		ug/L		106	68 - 132
1,1-Dichloroethene	10.0	10.5		ug/L		105	65 - 136
1,2-Dichloropropane	10.0	9.55		ug/L		96	76 - 124
Ethylbenzene	10.0	10.1		ug/L		101	72 - 126
2-Hexanone	10.0	7.76		ug/L		78	25 - 132
Methylene Chloride	10.0	9.49		ug/L		95	63 - 129
4-Methyl-2-pentanone	10.0	8.77		ug/L		88	45 - 145
Styrene	10.0	10.9		ug/L		109	71 - 127
1,1,2,2-Tetrachloroethane	10.0	11.0		ug/L		110	62 - 125
Tetrachloroethene	10.0	10.9		ug/L		109	70 - 135
Toluene	10.0	11.0		ug/L		110	80 - 123
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	73 - 126
trans-1,3-Dichloropropene	10.0	9.49		ug/L		95	65 - 125
1,1,1-Trichloroethane	10.0	10.3		ug/L		103	63 - 133
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	77 - 127
Trichloroethene	10.0	10.5		ug/L		105	73 - 120
Vinyl chloride	10.0	10.5		ug/L		105	53 - 138
Xylenes, Total	20.0	21.1		ug/L		105	76 - 128

### LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 118
Dibromofluoromethane (Surr)	108		70 - 128
1,2-Dichloroethane-d4 (Surr)	102		64 - 135
Toluene-d8 (Surr)	109		71 - 118

Lab Sample ID: 180-27411-9 MS

Client Sample ID: MW14

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 90757

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		10000	9420		ug/L		94	22 - 150
Benzene	ND		10000	9640		ug/L		96	80 - 120
Bromoform	ND		10000	10800		ug/L		108	46 - 150
Bromomethane	ND		10000	9600		ug/L		96	33 - 150

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

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

**Lab Sample ID: 180-27411-9 MS**

**Matrix: Water**

**Analysis Batch: 90757**

**Client Sample ID: MW14**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
2-Butanone	ND		10000	9290		ug/L		93	39 - 138
Carbon disulfide	ND		10000	8730		ug/L		87	54 - 132
Carbon tetrachloride	ND		10000	10700		ug/L		107	55 - 150
Chlorobenzene	ND		10000	10300		ug/L		103	80 - 120
Chlorodibromomethane	ND		10000	10500		ug/L		105	60 - 140
Chloroethane	ND		10000	10700		ug/L		107	36 - 142
Chloroform	350	J B	10000	9760		ug/L		94	72 - 127
Chloromethane	ND		10000	10400		ug/L		104	50 - 139
cis-1,2-Dichloroethene	3900		10000	13900		ug/L		100	70 - 120
cis-1,3-Dichloropropene	ND		10000	9100		ug/L		91	66 - 120
Dichlorobromomethane	ND		10000	9900		ug/L		99	66 - 130
1,1-Dichloroethane	ND		10000	9370		ug/L		94	73 - 126
1,2-Dichloroethane	ND		10000	9980		ug/L		100	68 - 132
1,1-Dichloroethene	ND		10000	10200		ug/L		102	65 - 136
1,2-Dichloropropane	ND		10000	9370		ug/L		94	76 - 124
Ethylbenzene	ND		10000	9870		ug/L		99	72 - 126
2-Hexanone	ND		10000	8080		ug/L		81	25 - 132
Methylene Chloride	ND		10000	9030		ug/L		90	63 - 129
4-Methyl-2-pentanone	ND		10000	9130		ug/L		91	45 - 145
Styrene	ND		10000	10200		ug/L		102	71 - 127
1,1,2,2-Tetrachloroethane	ND		10000	10300		ug/L		103	62 - 125
Tetrachloroethene	ND		10000	10500		ug/L		105	70 - 135
Toluene	ND		10000	10700		ug/L		107	80 - 123
trans-1,2-Dichloroethene	ND		10000	9900		ug/L		99	73 - 126
trans-1,3-Dichloropropene	ND		10000	9710		ug/L		97	65 - 125
1,1,1-Trichloroethane	ND		10000	10200		ug/L		102	63 - 133
1,1,2-Trichloroethane	ND		10000	10800		ug/L		108	77 - 127
Trichloroethene	14000		10000	25000		ug/L		109	73 - 120
Vinyl chloride	ND		10000	10600		ug/L		106	53 - 138
Xylenes, Total	ND		20000	20500		ug/L		102	76 - 128

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	103		70 - 118
Dibromofluoromethane (Surr)	98		70 - 128
1,2-Dichloroethane-d4 (Surr)	100		64 - 135
Toluene-d8 (Surr)	104		71 - 118

**Lab Sample ID: 180-27411-9 MSD**

**Matrix: Water**

**Analysis Batch: 90757**

**Client Sample ID: MW14**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Acetone	ND		10000	9110		ug/L		91	22 - 150	3	35
Benzene	ND		10000	10400		ug/L		104	80 - 120	8	32
Bromoform	ND		10000	10200		ug/L		102	46 - 150	5	35
Bromomethane	ND		10000	8740		ug/L		87	33 - 150	9	35
2-Butanone	ND		10000	9080		ug/L		91	39 - 138	2	35
Carbon disulfide	ND		10000	9830		ug/L		98	54 - 132	12	35

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

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

**Lab Sample ID: 180-27411-9 MSD**

**Matrix: Water**

**Analysis Batch: 90757**

**Client Sample ID: MW14**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Carbon tetrachloride	ND		10000	11400		ug/L		114	55 - 150	7	35	
Chlorobenzene	ND		10000	10400		ug/L		104	80 - 120	2	29	
Chlorodibromomethane	ND		10000	9950		ug/L		100	60 - 140	5	35	
Chloroethane	ND		10000	10500		ug/L		105	36 - 142	2	35	
Chloroform	350	J B	10000	10100		ug/L		98	72 - 127	4	35	
Chloromethane	ND		10000	10800		ug/L		108	50 - 139	4	35	
cis-1,2-Dichloroethene	3900		10000	14900		ug/L		110	70 - 120	7	35	
cis-1,3-Dichloropropene	ND		10000	9500		ug/L		95	66 - 120	4	35	
Dichlorobromomethane	ND		10000	9840		ug/L		98	66 - 130	1	35	
1,1-Dichloroethane	ND		10000	10100		ug/L		101	73 - 126	8	35	
1,2-Dichloroethane	ND		10000	10000		ug/L		100	68 - 132	0	32	
1,1-Dichloroethene	ND		10000	11400		ug/L		114	65 - 136	11	35	
1,2-Dichloropropane	ND		10000	9920		ug/L		99	76 - 124	6	34	
Ethylbenzene	ND		10000	10200		ug/L		102	72 - 126	4	33	
2-Hexanone	ND		10000	7740		ug/L		77	25 - 132	4	35	
Methylene Chloride	ND		10000	9500		ug/L		95	63 - 129	5	35	
4-Methyl-2-pentanone	ND		10000	8690		ug/L		87	45 - 145	5	35	
Styrene	ND		10000	10000		ug/L		100	71 - 127	1	34	
1,1,2,2-Tetrachloroethane	ND		10000	9630		ug/L		96	62 - 125	7	35	
Tetrachloroethene	ND		10000	11300		ug/L		113	70 - 135	7	35	
Toluene	ND		10000	10600		ug/L		106	80 - 123	1	35	
trans-1,2-Dichloroethene	ND		10000	10400		ug/L		104	73 - 126	5	35	
trans-1,3-Dichloropropene	ND		10000	9580		ug/L		96	65 - 125	1	35	
1,1,1-Trichloroethane	ND		10000	10700		ug/L		107	63 - 133	5	35	
1,1,2-Trichloroethane	ND		10000	10400		ug/L		104	77 - 127	4	35	
Trichloroethene	14000		10000	26400	F	ug/L		123	73 - 120	5	35	
Vinyl chloride	ND		10000	11100		ug/L		111	53 - 138	5	35	
Xylenes, Total	ND		20000	20500		ug/L		102	76 - 128	0	32	

**MSD** **MSD**

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 118
Dibromofluoromethane (Surr)	100		70 - 128
1,2-Dichloroethane-d4 (Surr)	91		64 - 135
Toluene-d8 (Surr)	103		71 - 118

**Lab Sample ID: MB 180-90831/3**

**Matrix: Water**

**Analysis Batch: 90831**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			11/25/13 11:51	1
Benzene	ND		1.0	0.11	ug/L			11/25/13 11:51	1
Bromoform	ND		1.0	0.19	ug/L			11/25/13 11:51	1
Bromomethane	ND		1.0	0.31	ug/L			11/25/13 11:51	1
2-Butanone	ND		5.0	0.55	ug/L			11/25/13 11:51	1
Carbon disulfide	ND		1.0	0.21	ug/L			11/25/13 11:51	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			11/25/13 11:51	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/25/13 11:51	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

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

**Lab Sample ID: MB 180-90831/3**

**Matrix: Water**

**Analysis Batch: 90831**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Chlorodibromomethane	ND				1.0	0.14	ug/L			11/25/13 11:51	1
Chloroethane	ND				1.0	0.21	ug/L			11/25/13 11:51	1
Chloroform	0.581	J			1.0	0.17	ug/L			11/25/13 11:51	1
Chloromethane	ND				1.0	0.28	ug/L			11/25/13 11:51	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			11/25/13 11:51	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			11/25/13 11:51	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			11/25/13 11:51	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			11/25/13 11:51	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			11/25/13 11:51	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			11/25/13 11:51	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			11/25/13 11:51	1
Ethylbenzene	ND				1.0	0.23	ug/L			11/25/13 11:51	1
2-Hexanone	ND				5.0	0.16	ug/L			11/25/13 11:51	1
Methylene Chloride	ND				1.0	0.13	ug/L			11/25/13 11:51	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			11/25/13 11:51	1
Styrene	ND				1.0	0.097	ug/L			11/25/13 11:51	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			11/25/13 11:51	1
Tetrachloroethene	ND				1.0	0.15	ug/L			11/25/13 11:51	1
Toluene	ND				1.0	0.15	ug/L			11/25/13 11:51	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			11/25/13 11:51	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			11/25/13 11:51	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			11/25/13 11:51	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			11/25/13 11:51	1
Trichloroethene	ND				1.0	0.14	ug/L			11/25/13 11:51	1
Vinyl chloride	ND				1.0	0.23	ug/L			11/25/13 11:51	1
Xylenes, Total	ND				3.0	0.49	ug/L			11/25/13 11:51	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	96		70 - 118				11/25/13 11:51	1
Dibromofluoromethane (Surr)	114		70 - 128				11/25/13 11:51	1
1,2-Dichloroethane-d4 (Surr)	111		64 - 135				11/25/13 11:51	1
Toluene-d8 (Surr)	99		71 - 118				11/25/13 11:51	1

**Lab Sample ID: LCS 180-90831/6**

**Matrix: Water**

**Analysis Batch: 90831**

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	10.0	8.70		ug/L		87	22 - 150
Benzene	10.0	9.52		ug/L		95	80 - 120
Bromoform	10.0	11.7		ug/L		117	46 - 150
Bromomethane	10.0	8.57		ug/L		86	33 - 150
2-Butanone	10.0	8.27		ug/L		83	39 - 138
Carbon disulfide	10.0	9.74		ug/L		97	54 - 132
Carbon tetrachloride	10.0	10.4		ug/L		104	55 - 150
Chlorobenzene	10.0	10.4		ug/L		104	80 - 120
Chlorodibromomethane	10.0	10.8		ug/L		108	60 - 140
Chloroethane	10.0	10.4		ug/L		104	36 - 142

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

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

Lab Sample ID: LCS 180-90831/6

Matrix: Water

Analysis Batch: 90831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS			Unit	D	%Rec	Limits	5
	Added	Result	Qualifier						
Chloroform	10.0	9.74			ug/L		97	72 - 127	6
Chloromethane	10.0	8.83			ug/L		88	50 - 139	7
cis-1,2-Dichloroethene	10.0	9.93			ug/L		99	70 - 120	8
cis-1,3-Dichloropropene	10.0	8.82			ug/L		88	66 - 120	9
Dichlorobromomethane	10.0	9.64			ug/L		96	66 - 130	10
1,1-Dichloroethane	10.0	9.44			ug/L		94	73 - 126	11
1,2-Dichloroethane	10.0	9.83			ug/L		98	68 - 132	12
1,1-Dichloroethene	10.0	9.41			ug/L		94	65 - 136	13
1,2-Dichloropropane	10.0	9.51			ug/L		95	76 - 124	
Ethylbenzene	10.0	9.67			ug/L		97	72 - 126	
2-Hexanone	10.0	7.77			ug/L		78	25 - 132	
Methylene Chloride	10.0	9.08			ug/L		91	63 - 129	
4-Methyl-2-pentanone	10.0	8.33			ug/L		83	45 - 145	
Styrene	10.0	10.6			ug/L		106	71 - 127	
1,1,2,2-Tetrachloroethane	10.0	10.6			ug/L		106	62 - 125	
Tetrachloroethene	10.0	10.3			ug/L		103	70 - 135	
Toluene	10.0	10.3			ug/L		103	80 - 123	
trans-1,2-Dichloroethene	10.0	9.89			ug/L		99	73 - 126	
trans-1,3-Dichloropropene	10.0	9.53			ug/L		95	65 - 125	
1,1,1-Trichloroethane	10.0	10.4			ug/L		104	63 - 133	
1,1,2-Trichloroethane	10.0	10.1			ug/L		101	77 - 127	
Trichloroethene	10.0	10.2			ug/L		102	73 - 120	
Vinyl chloride	10.0	9.28			ug/L		93	53 - 138	
Xylenes, Total	20.0	20.3			ug/L		101	76 - 128	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		70 - 118
Dibromofluoromethane (Surr)	90		70 - 128
1,2-Dichloroethane-d4 (Surr)	93		64 - 135
Toluene-d8 (Surr)	91		71 - 118

Lab Sample ID: MB 180-90864/3

Matrix: Water

Analysis Batch: 90864

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			11/26/13 00:18	1
Benzene	ND		1.0	0.11	ug/L			11/26/13 00:18	1
Bromoform	ND		1.0	0.19	ug/L			11/26/13 00:18	1
Bromomethane	ND		1.0	0.31	ug/L			11/26/13 00:18	1
2-Butanone	ND		5.0	0.55	ug/L			11/26/13 00:18	1
Carbon disulfide	ND		1.0	0.21	ug/L			11/26/13 00:18	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			11/26/13 00:18	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/26/13 00:18	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			11/26/13 00:18	1
Chloroethane	ND		1.0	0.21	ug/L			11/26/13 00:18	1
Chloroform	0.366	J	1.0	0.17	ug/L			11/26/13 00:18	1
Chloromethane	ND		1.0	0.28	ug/L			11/26/13 00:18	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

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

**Lab Sample ID: MB 180-90864/3**

**Matrix: Water**

**Analysis Batch: 90864**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			11/26/13 00:18	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			11/26/13 00:18	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			11/26/13 00:18	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			11/26/13 00:18	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			11/26/13 00:18	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			11/26/13 00:18	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			11/26/13 00:18	1
Ethylbenzene	ND				1.0	0.23	ug/L			11/26/13 00:18	1
2-Hexanone	ND				5.0	0.16	ug/L			11/26/13 00:18	1
Methylene Chloride	ND				1.0	0.13	ug/L			11/26/13 00:18	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			11/26/13 00:18	1
Styrene	ND				1.0	0.097	ug/L			11/26/13 00:18	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			11/26/13 00:18	1
Tetrachloroethene	ND				1.0	0.15	ug/L			11/26/13 00:18	1
Toluene	ND				1.0	0.15	ug/L			11/26/13 00:18	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			11/26/13 00:18	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			11/26/13 00:18	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			11/26/13 00:18	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			11/26/13 00:18	1
Trichloroethene	ND				1.0	0.14	ug/L			11/26/13 00:18	1
Vinyl chloride	ND				1.0	0.23	ug/L			11/26/13 00:18	1
Xylenes, Total	ND				3.0	0.49	ug/L			11/26/13 00:18	1

### MB MB

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	89		70 - 118				11/26/13 00:18	1
Dibromofluoromethane (Surr)	111		70 - 128				11/26/13 00:18	1
1,2-Dichloroethane-d4 (Surr)	111		64 - 135				11/26/13 00:18	1
Toluene-d8 (Surr)	94		71 - 118				11/26/13 00:18	1

**Lab Sample ID: LCS 180-90864/6**

**Matrix: Water**

**Analysis Batch: 90864**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier					
Acetone	10.0	7.52		ug/L		75	22 - 150	
Benzene	10.0	9.29		ug/L		93	80 - 120	
Bromoform	10.0	9.80		ug/L		98	46 - 150	
Bromomethane	10.0	10.2		ug/L		102	33 - 150	
2-Butanone	10.0	7.53		ug/L		75	39 - 138	
Carbon disulfide	10.0	10.2		ug/L		102	54 - 132	
Carbon tetrachloride	10.0	11.1		ug/L		111	55 - 150	
Chlorobenzene	10.0	9.96		ug/L		100	80 - 120	
Chlorodibromomethane	10.0	9.30		ug/L		93	60 - 140	
Chloroethane	10.0	10.6		ug/L		106	36 - 142	
Chloroform	10.0	9.46		ug/L		95	72 - 127	
Chloromethane	10.0	9.32		ug/L		93	50 - 139	
cis-1,2-Dichloroethene	10.0	9.26		ug/L		93	70 - 120	
cis-1,3-Dichloropropene	10.0	7.92		ug/L		79	66 - 120	

TestAmerica Pittsburgh

# QC Sample Results

Client: Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

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

**Lab Sample ID: LCS 180-90864/6**

**Matrix: Water**

**Analysis Batch: 90864**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike		LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier	Limits				
Dichlorobromomethane	10.0	8.74		ug/L		87	66 - 130	
1,1-Dichloroethane	10.0	9.51		ug/L		95	73 - 126	
1,2-Dichloroethane	10.0	9.36		ug/L		94	68 - 132	
1,1-Dichloroethene	10.0	10.6		ug/L		106	65 - 136	
1,2-Dichloropropane	10.0	8.66		ug/L		87	76 - 124	
Ethylbenzene	10.0	9.62		ug/L		96	72 - 126	
2-Hexanone	10.0	6.55		ug/L		66	25 - 132	
Methylene Chloride	10.0	8.62		ug/L		86	63 - 129	
4-Methyl-2-pentanone	10.0	7.61		ug/L		76	45 - 145	
Styrene	10.0	9.98		ug/L		100	71 - 127	
1,1,2,2-Tetrachloroethane	10.0	9.17		ug/L		92	62 - 125	
Tetrachloroethene	10.0	10.5		ug/L		105	70 - 135	
Toluene	10.0	10.3		ug/L		103	80 - 123	
trans-1,2-Dichloroethene	10.0	10.8		ug/L		108	73 - 126	
trans-1,3-Dichloropropene	10.0	8.66		ug/L		87	65 - 125	
1,1,1-Trichloroethane	10.0	10.7		ug/L		107	63 - 133	
1,1,2-Trichloroethane	10.0	9.39		ug/L		94	77 - 127	
Trichloroethene	10.0	9.97		ug/L		100	73 - 120	
Vinyl chloride	10.0	9.60		ug/L		96	53 - 138	
Xylenes, Total	20.0	20.3		ug/L		102	76 - 128	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Sur)	99		70 - 118
Dibromofluoromethane (Sur)	102		70 - 128
1,2-Dichloroethane-d4 (Sur)	95		64 - 135
Toluene-d8 (Sur)	104		71 - 118

TestAmerica Pittsburgh

# QC Association Summary

Client: Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-27411-1

## GC/MS VOA

### Analysis Batch: 90757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-27411-9	MW14	Total/NA	Water	8260B	5
180-27411-9 MS	MW14	Total/NA	Water	8260B	6
180-27411-9 MSD	MW14	Total/NA	Water	8260B	7
180-27411-11	TRIP BLANK	Total/NA	Water	8260B	8
LCS 180-90757/7	Lab Control Sample	Total/NA	Water	8260B	9
MB 180-90757/4	Method Blank	Total/NA	Water	8260B	10

### Analysis Batch: 90831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-27411-1	MW2	Total/NA	Water	8260B	9
180-27411-2	MW3	Total/NA	Water	8260B	10
180-27411-3	MW4	Total/NA	Water	8260B	11
180-27411-4	MW9R	Total/NA	Water	8260B	12
180-27411-5	MW11R	Total/NA	Water	8260B	13
180-27411-7	MW12DUP	Total/NA	Water	8260B	
180-27411-10	RINSE BLANK	Total/NA	Water	8260B	
LCS 180-90831/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-90831/3	Method Blank	Total/NA	Water	8260B	

### Analysis Batch: 90864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-27411-6	MW12	Total/NA	Water	8260B	
180-27411-8	MW13	Total/NA	Water	8260B	
LCS 180-90864/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-90864/3	Method Blank	Total/NA	Water	8260B	

# TestAmerica Pittsburgh

301 Alpha Drive

Pittsburgh, PA 15238  
Phone: 412.963.7058 Fax: 412.963.2470

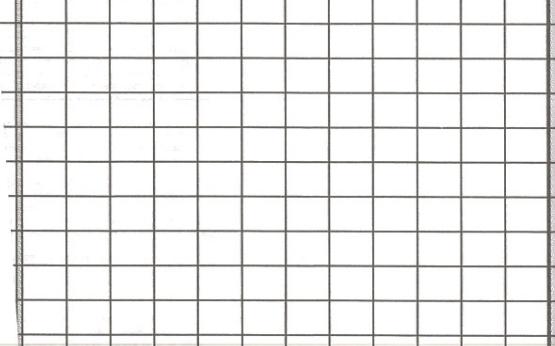
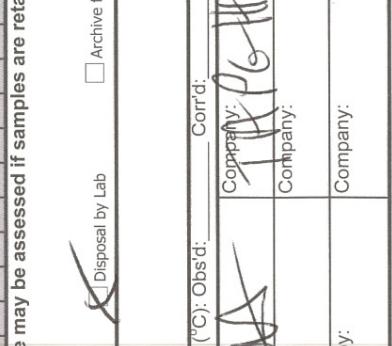
## Chain of Custody Record

**003805**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.

TAL-8210 (07/13)

Client Contact		Project Manager: <u>BRAD ALBERT</u>	Regulatory Program: <input type="checkbox"/> DW <input type="checkbox"/> RCRA <input type="checkbox"/> NPDES <input type="checkbox"/> Other:	Site Contact: <u>ATTQ Lennan</u>	Date: <u>11/20/13</u>	COC No: <u>1122013</u>	
Company Name: <u>KEVIN ELL</u> Address: <u>300 FAIRVIEW ST.</u> City/State/Zip: <u>FREDSBURG, NY 14738</u> Phone: <u>716-922-9102</u> Fax: <u></u>		Tel/Fax: <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day	Lab Contact: <input type="checkbox"/> Carrier:  	Carrier:  	Carrier:  	Sampler: <u>Chuck Becker</u> For Lab Use Only: Walk-in Client: b Sampling: / SDG No.:  	
Project Name: <u></u> Site: <u></u> PO # <u></u>		180-27411 Chain of Custody					Sample Specific Notes:
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.		
MW 2	11/19/13	7:30	G	W	3		
MW 3	11/19/13	8:45	G	W	3		
MW 4	11/19/13	9:20	G	W	3		
MW 9R	11/19/13	11:10	G	W	3		
MW 1R	11/19/13	1:15pm	G	W	3		
MW 1/2	11/20/13	7:15	G	W	3		
MW 12 Dup	11/20/13	7:15	G	W	3		
MW 13	11/20/13	10:45	G	W	3		
MW 14	11/20/13	6:45	G	W	9		
RWS2 BLANK	11/19/13	9:40	G	W	3		
<i>also received TripBlank 11/20/13</i>							
Preservation Used: 1= Ice; 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							
Comments:							
Special Instructions/QC Requirements & Comments:							
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: <u>1122013</u>		Cooler Temp. (°C): Obs'd: <u>11</u>		Corr'd: <u>11</u>	Therm ID No.: <u>11</u>
Relinquished by: <u>Chuck Becker</u>		Date/Time: <u>11/20/13 2:00pm</u>		Received by: <u>Keywell</u>		Date/Time: <u>11/20/13 2:00pm</u>	Date/Time: <u>11/20/13 2:00pm</u>
Relinquished by: <u></u>		Date/Time: <u></u>		Received by: <u></u>		Date/Time: <u></u>	Date/Time: <u></u>
Relinquished by: <u></u>		Date/Time: <u></u>		Received in Laboratory by: <u></u>		Company: <u></u>	Company: <u></u>
Relinquished by: <u></u>		Date/Time: <u></u>		Received by: <u></u>		Company: <u></u>	Company: <u></u>
Relinquished by: <u></u>		Date/Time: <u></u>		Received by: <u></u>		Company: <u></u>	Company: <u></u>

## Login Sample Receipt Checklist

Client: Keywell LLC

Job Number: 180-27411-1

**Login Number:** 27411

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Kovitch, Christina M

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	
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.	False	Received Trip Blank not listed on COC.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	MW12DUP has 2 vials broken,MW14MSD has 2 broken vials
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	MW9R and trip blank have (1 vial each) has bubble >6mm
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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## **APPENDIX B3**

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### **ANALYTICAL DATA REPORTS**

**ANNUAL MONITORING (APRIL 2014)**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-32074-1

Client Project/Site: Frewsburg

For:

SGK Ventures, LLC-fka Keywell LLC

300 Falconer Road

Frewsburg, New York 14738

Attn: Patty Lundin



Authorized for release by:

5/7/2014 2:37:45 PM

David Dunlap, Senior Project Manager

(412)963-2432

[dave.dunlap@testamericainc.com](mailto:dave.dunlap@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

### Job ID: 180-32074-1

Laboratory: TestAmerica Pittsburgh

#### Narrative

##### Job Narrative 180-32074-1

#### Receipt

The samples were received on 4/24/2014 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.5° C.

#### GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) for batch 104336 recovered above the control limits for the following analytes: cis-1,3-dichloropropene and trans-1,3-dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The laboratory control sample (LCS) for batch 104487 recovered above the control limits for the following analyte: trans-1,3-dichloropropene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW2 (180-32074-2), MW3 (180-32074-3), MW4 (180-32074-4), MW9R (180-32074-11), MW11R (180-32074-13), MW11R DUPLICATE (180-32074-14), MW13 (180-32074-16), and MW14 (180-32074-17). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

## Definitions/Glossary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery exceeds the control limits
E	Result exceeded calibration range.

### 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

## Certification Summary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14 *
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-15
Louisiana	NELAP	6	04041	06-30-14
New Hampshire	NELAP	1	203011	04-05-14 *
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	03-31-15
North Carolina DENR	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-15
South Carolina	State Program	4	89014	04-30-14 *
Texas	NELAP	6	T104704528	03-31-15
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14 *
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-14 *
Wisconsin	State Program	5	998027800	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-32074-1	MW1	Water	04/21/14 06:50	04/24/14 08:50
180-32074-2	MW2	Water	04/21/14 07:30	04/24/14 08:50
180-32074-3	MW3	Water	04/21/14 08:20	04/24/14 08:50
180-32074-4	MW4	Water	04/22/14 09:50	04/24/14 08:50
180-32074-5	MW4D	Water	04/22/14 11:05	04/24/14 08:50
180-32074-6	MW5	Water	04/21/14 09:05	04/24/14 08:50
180-32074-7	MW5D	Water	04/21/14 09:55	04/24/14 08:50
180-32074-8	MW6	Water	04/22/14 07:00	04/24/14 08:50
180-32074-9	MW7	Water	04/21/14 13:00	04/24/14 08:50
180-32074-10	MW8	Water	04/21/14 10:55	04/24/14 08:50
180-32074-11	MW9R	Water	04/22/14 09:00	04/24/14 08:50
180-32074-12	MW10	Water	04/21/14 14:15	04/24/14 08:50
180-32074-13	MW11R	Water	04/22/14 07:55	04/24/14 08:50
180-32074-14	MW11R DUPLICATE	Water	04/22/14 07:55	04/24/14 08:50
180-32074-15	MW12	Water	04/21/14 13:45	04/24/14 08:50
180-32074-16	MW13	Water	04/21/14 11:30	04/24/14 08:50
180-32074-17	MW14	Water	04/21/14 12:00	04/24/14 08:50
180-32074-18	RINSE BLANK	Water	04/22/14 11:30	04/24/14 08:50
180-32074-19	T/B	Water	04/22/14 00:00	04/24/14 08:50

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## Method Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT

**Protocol References:**

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

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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## Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

### Client Sample ID: MW1

Date Collected: 04/21/14 06:50  
 Date Received: 04/24/14 08:50

Lab Sample ID: 180-32074-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104336	04/30/14 15:00	DLF	TAL PIT

Instrument ID: CHHP5

### Client Sample ID: MW2

Date Collected: 04/21/14 07:30  
 Date Received: 04/24/14 08:50

Lab Sample ID: 180-32074-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	5000	5 mL	5 mL	104336	04/30/14 15:24	DLF	TAL PIT
					Instrument ID: CHHP5					
Total/NA	Analysis	8260C		500	5 mL	5 mL	104487	05/01/14 20:34	DLF	TAL PIT
					Instrument ID: CHHP5					

### Client Sample ID: MW3

Date Collected: 04/21/14 08:20  
 Date Received: 04/24/14 08:50

Lab Sample ID: 180-32074-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		250	5 mL	5 mL	104336	04/30/14 15:49	DLF	TAL PIT
					Instrument ID: CHHP5					

### Client Sample ID: MW4

Date Collected: 04/22/14 09:50  
 Date Received: 04/24/14 08:50

Lab Sample ID: 180-32074-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1000	5 mL	5 mL	104336	04/30/14 16:13	DLF	TAL PIT
					Instrument ID: CHHP5					

### Client Sample ID: MW4D

Date Collected: 04/22/14 11:05  
 Date Received: 04/24/14 08:50

Lab Sample ID: 180-32074-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104336	04/30/14 17:01	DLF	TAL PIT
					Instrument ID: CHHP5					

# Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

## Client Sample ID: MW5

Date Collected: 04/21/14 09:05  
 Date Received: 04/24/14 08:50

## Lab Sample ID: 180-32074-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104336	04/30/14 17:25	DLF	TAL PIT

Instrument ID: CHHP5

## Client Sample ID: MW5D

Date Collected: 04/21/14 09:55  
 Date Received: 04/24/14 08:50

## Lab Sample ID: 180-32074-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104336	04/30/14 17:49	DLF	TAL PIT

Instrument ID: CHHP5

## Client Sample ID: MW6

Date Collected: 04/22/14 07:00  
 Date Received: 04/24/14 08:50

## Lab Sample ID: 180-32074-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104336	04/30/14 18:13	DLF	TAL PIT

Instrument ID: CHHP5

## Client Sample ID: MW7

Date Collected: 04/21/14 13:00  
 Date Received: 04/24/14 08:50

## Lab Sample ID: 180-32074-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104336	04/30/14 18:37	DLF	TAL PIT

Instrument ID: CHHP5

## Client Sample ID: MW8

Date Collected: 04/21/14 10:55  
 Date Received: 04/24/14 08:50

## Lab Sample ID: 180-32074-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104336	04/30/14 10:35	DLF	TAL PIT

Instrument ID: CHHP5

## Client Sample ID: MW9R

Date Collected: 04/22/14 09:00  
 Date Received: 04/24/14 08:50

## Lab Sample ID: 180-32074-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	5 mL	5 mL	104487	05/01/14 16:32	DLF	TAL PIT

Instrument ID: CHHP5

TestAmerica Pittsburgh

## Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

### Client Sample ID: MW10

Date Collected: 04/21/14 14:15  
 Date Received: 04/24/14 08:50

### Lab Sample ID: 180-32074-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104336	04/30/14 19:26	DLF	TAL PIT

Instrument ID: CHHP5

### Client Sample ID: MW11R

Date Collected: 04/22/14 07:55  
 Date Received: 04/24/14 08:50

### Lab Sample ID: 180-32074-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	5 mL	5 mL	104487	05/01/14 16:56	DLF	TAL PIT

Instrument ID: CHHP5

### Client Sample ID: MW11R DUPLICATE

Date Collected: 04/22/14 07:55  
 Date Received: 04/24/14 08:50

### Lab Sample ID: 180-32074-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	5 mL	5 mL	104487	05/01/14 17:20	DLF	TAL PIT

Instrument ID: CHHP5

### Client Sample ID: MW12

Date Collected: 04/21/14 13:45  
 Date Received: 04/24/14 08:50

### Lab Sample ID: 180-32074-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104640	05/02/14 15:12	DLF	TAL PIT

Instrument ID: CHHP6

### Client Sample ID: MW13

Date Collected: 04/21/14 11:30  
 Date Received: 04/24/14 08:50

### Lab Sample ID: 180-32074-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	5 mL	5 mL	104487	05/01/14 18:33	DLF	TAL PIT

Instrument ID: CHHP5

### Client Sample ID: MW14

Date Collected: 04/21/14 12:00  
 Date Received: 04/24/14 08:50

### Lab Sample ID: 180-32074-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1000	5 mL	5 mL	104487	05/01/14 18:09	DLF	TAL PIT

Instrument ID: CHHP5

TestAmerica Pittsburgh

# Lab Chronicle

Client: SGK Ventures, LLC-fka Keywell LLC  
Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

## Client Sample ID: RINSE BLANK

Date Collected: 04/22/14 11:30  
Date Received: 04/24/14 08:50

## Lab Sample ID: 180-32074-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104487	05/01/14 18:57	DLF	TAL PIT

## Client Sample ID: T/B

Date Collected: 04/22/14 00:00  
Date Received: 04/24/14 08:50

## Lab Sample ID: 180-32074-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	104336	04/30/14 10:59	DLF	TAL PIT

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

### Analyst References:

Lab: TAL PIT

Batch Type: Analysis

DLF = Donald Ferguson

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW1**

Date Collected: 04/21/14 06:50

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-1**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		04/30/14 15:00		1
Benzene	ND		1.0	0.11	ug/L		04/30/14 15:00		1
Bromoform	ND		1.0	0.19	ug/L		04/30/14 15:00		1
Bromomethane	ND		1.0	0.31	ug/L		04/30/14 15:00		1
2-Butanone	ND		5.0	0.55	ug/L		04/30/14 15:00		1
Carbon disulfide	ND		1.0	0.21	ug/L		04/30/14 15:00		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		04/30/14 15:00		1
Chlorobenzene	ND		1.0	0.14	ug/L		04/30/14 15:00		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		04/30/14 15:00		1
Chloroethane	ND		1.0	0.21	ug/L		04/30/14 15:00		1
Chloroform	ND		1.0	0.17	ug/L		04/30/14 15:00		1
Chloromethane	ND		1.0	0.28	ug/L		04/30/14 15:00		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		04/30/14 15:00		1
cis-1,3-Dichloropropene	ND *		1.0	0.19	ug/L		04/30/14 15:00		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		04/30/14 15:00		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		04/30/14 15:00		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		04/30/14 15:00		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		04/30/14 15:00		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		04/30/14 15:00		1
Ethylbenzene	ND		1.0	0.23	ug/L		04/30/14 15:00		1
2-Hexanone	ND		5.0	0.16	ug/L		04/30/14 15:00		1
Methylene Chloride	ND		1.0	0.13	ug/L		04/30/14 15:00		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		04/30/14 15:00		1
Styrene	ND		1.0	0.097	ug/L		04/30/14 15:00		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		04/30/14 15:00		1
Tetrachloroethene	ND		1.0	0.15	ug/L		04/30/14 15:00		1
Toluene	ND		1.0	0.15	ug/L		04/30/14 15:00		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		04/30/14 15:00		1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L		04/30/14 15:00		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		04/30/14 15:00		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		04/30/14 15:00		1
<b>Trichloroethene</b>	<b>0.20 J</b>		1.0	0.14	ug/L		04/30/14 15:00		1
Vinyl chloride	ND		1.0	0.23	ug/L		04/30/14 15:00		1
Xylenes, Total	ND		3.0	0.49	ug/L		04/30/14 15:00		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 118		04/30/14 15:00	1
Dibromofluoromethane (Surr)	96		70 - 128		04/30/14 15:00	1
1,2-Dichloroethane-d4 (Surr)	97		64 - 135		04/30/14 15:00	1
Toluene-d8 (Surr)	105		71 - 118		04/30/14 15:00	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW2**

Date Collected: 04/21/14 07:30

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-2**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2500	1300	ug/L			05/01/14 20:34	500
Benzene	ND		500	53	ug/L			05/01/14 20:34	500
Bromoform	ND		500	96	ug/L			05/01/14 20:34	500
Bromomethane	ND		500	160	ug/L			05/01/14 20:34	500
2-Butanone	ND		2500	270	ug/L			05/01/14 20:34	500
Carbon disulfide	ND		500	110	ug/L			05/01/14 20:34	500
Carbon tetrachloride	ND		500	68	ug/L			05/01/14 20:34	500
Chlorobenzene	ND		500	68	ug/L			05/01/14 20:34	500
Chlorodibromomethane	ND		500	68	ug/L			05/01/14 20:34	500
Chloroethane	ND		500	110	ug/L			05/01/14 20:34	500
Chloroform	ND		500	85	ug/L			05/01/14 20:34	500
Chloromethane	ND		500	140	ug/L			05/01/14 20:34	500
<b>cis-1,2-Dichloroethene</b>	<b>64000</b>	<b>E</b>	500	120	ug/L			05/01/14 20:34	500
cis-1,3-Dichloropropene	ND		500	93	ug/L			05/01/14 20:34	500
Dichlorobromomethane	ND		500	65	ug/L			05/01/14 20:34	500
1,1-Dichloroethane	ND		500	58	ug/L			05/01/14 20:34	500
1,2-Dichloroethane	ND		500	110	ug/L			05/01/14 20:34	500
1,1-Dichloroethene	ND		500	150	ug/L			05/01/14 20:34	500
1,2-Dichloropropane	ND		500	47	ug/L			05/01/14 20:34	500
Ethylbenzene	ND		500	110	ug/L			05/01/14 20:34	500
2-Hexanone	ND		2500	80	ug/L			05/01/14 20:34	500
<b>Methylene Chloride</b>	<b>590</b>		500	63	ug/L			05/01/14 20:34	500
4-Methyl-2-pentanone	ND		2500	260	ug/L			05/01/14 20:34	500
Styrene	ND		500	48	ug/L			05/01/14 20:34	500
1,1,2,2-Tetrachloroethane	ND		500	100	ug/L			05/01/14 20:34	500
Tetrachloroethene	ND		500	74	ug/L			05/01/14 20:34	500
Toluene	ND		500	75	ug/L			05/01/14 20:34	500
<b>trans-1,2-Dichloroethene</b>	<b>85</b>	<b>J</b>	500	85	ug/L			05/01/14 20:34	500
trans-1,3-Dichloropropene	ND *		500	74	ug/L			05/01/14 20:34	500
1,1,1-Trichloroethane	ND		500	140	ug/L			05/01/14 20:34	500
1,1,2-Trichloroethane	ND		500	100	ug/L			05/01/14 20:34	500
<b>Trichloroethene</b>	<b>140</b>	<b>J</b>	500	72	ug/L			05/01/14 20:34	500
<b>Vinyl chloride</b>	<b>9200</b>		500	110	ug/L			05/01/14 20:34	500
Xylenes, Total	ND		1500	240	ug/L			05/01/14 20:34	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100			70 - 118				05/01/14 20:34	500
Dibromofluoromethane (Surr)	101			70 - 128				05/01/14 20:34	500
1,2-Dichloroethane-d4 (Surr)	104			64 - 135				05/01/14 20:34	500
Toluene-d8 (Surr)	95			71 - 118				05/01/14 20:34	500

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	13000	ug/L			04/30/14 15:24	5000
Benzene	ND		5000	530	ug/L			04/30/14 15:24	5000
Bromoform	ND		5000	960	ug/L			04/30/14 15:24	5000
Bromomethane	ND		5000	1600	ug/L			04/30/14 15:24	5000
2-Butanone	ND		25000	2700	ug/L			04/30/14 15:24	5000
Carbon disulfide	ND		5000	1100	ug/L			04/30/14 15:24	5000
Carbon tetrachloride	ND		5000	680	ug/L			04/30/14 15:24	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW2**

**Lab Sample ID: 180-32074-2**

Date Collected: 04/21/14 07:30

Matrix: Water

Date Received: 04/24/14 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5000	680	ug/L			04/30/14 15:24	5000
Chlorodibromomethane	ND		5000	680	ug/L			04/30/14 15:24	5000
Chloroethane	ND		5000	1100	ug/L			04/30/14 15:24	5000
Chloroform	ND		5000	850	ug/L			04/30/14 15:24	5000
Chloromethane	ND		5000	1400	ug/L			04/30/14 15:24	5000
<b>cis-1,2-Dichloroethene</b>	<b>71000</b>		5000	1200	ug/L			04/30/14 15:24	5000
cis-1,3-Dichloropropene	ND *		5000	930	ug/L			04/30/14 15:24	5000
Dichlorobromomethane	ND		5000	650	ug/L			04/30/14 15:24	5000
1,1-Dichloroethane	ND		5000	580	ug/L			04/30/14 15:24	5000
1,2-Dichloroethane	ND		5000	1100	ug/L			04/30/14 15:24	5000
1,1-Dichloroethene	ND		5000	1500	ug/L			04/30/14 15:24	5000
1,2-Dichloropropane	ND		5000	470	ug/L			04/30/14 15:24	5000
Ethylbenzene	ND		5000	1100	ug/L			04/30/14 15:24	5000
2-Hexanone	ND		25000	800	ug/L			04/30/14 15:24	5000
<b>Methylene Chloride</b>	<b>970 J</b>		5000	630	ug/L			04/30/14 15:24	5000
4-Methyl-2-pentanone	ND		25000	2600	ug/L			04/30/14 15:24	5000
Styrene	ND		5000	480	ug/L			04/30/14 15:24	5000
1,1,2,2-Tetrachloroethane	ND		5000	1000	ug/L			04/30/14 15:24	5000
Tetrachloroethene	ND		5000	740	ug/L			04/30/14 15:24	5000
Toluene	ND		5000	750	ug/L			04/30/14 15:24	5000
trans-1,2-Dichloroethene	ND		5000	850	ug/L			04/30/14 15:24	5000
trans-1,3-Dichloropropene	ND *		5000	740	ug/L			04/30/14 15:24	5000
1,1,1-Trichloroethane	ND		5000	1400	ug/L			04/30/14 15:24	5000
1,1,2-Trichloroethane	ND		5000	1000	ug/L			04/30/14 15:24	5000
Trichloroethene	ND		5000	720	ug/L			04/30/14 15:24	5000
<b>Vinyl chloride</b>	<b>12000</b>		5000	1100	ug/L			04/30/14 15:24	5000
Xylenes, Total	ND		15000	2400	ug/L			04/30/14 15:24	5000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	102			70 - 118				04/30/14 15:24	5000
Dibromofluoromethane (Surr)	98			70 - 128				04/30/14 15:24	5000
1,2-Dichloroethane-d4 (Surr)	98			64 - 135				04/30/14 15:24	5000
Toluene-d8 (Surr)	104			71 - 118				04/30/14 15:24	5000

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW3**

Date Collected: 04/21/14 08:20

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-3**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1300	630	ug/L			04/30/14 15:49	250
Benzene	ND		250	26	ug/L			04/30/14 15:49	250
Bromoform	ND		250	48	ug/L			04/30/14 15:49	250
Bromomethane	ND		250	78	ug/L			04/30/14 15:49	250
2-Butanone	ND		1300	140	ug/L			04/30/14 15:49	250
Carbon disulfide	ND		250	53	ug/L			04/30/14 15:49	250
Carbon tetrachloride	ND		250	34	ug/L			04/30/14 15:49	250
Chlorobenzene	ND		250	34	ug/L			04/30/14 15:49	250
Chlorodibromomethane	ND		250	34	ug/L			04/30/14 15:49	250
Chloroethane	ND		250	54	ug/L			04/30/14 15:49	250
Chloroform	ND		250	43	ug/L			04/30/14 15:49	250
Chloromethane	ND		250	71	ug/L			04/30/14 15:49	250
<b>cis-1,2-Dichloroethene</b>	<b>1800</b>		250	59	ug/L			04/30/14 15:49	250
cis-1,3-Dichloropropene	ND *		250	47	ug/L			04/30/14 15:49	250
Dichlorobromomethane	ND		250	33	ug/L			04/30/14 15:49	250
1,1-Dichloroethane	ND		250	29	ug/L			04/30/14 15:49	250
1,2-Dichloroethane	ND		250	53	ug/L			04/30/14 15:49	250
1,1-Dichloroethene	ND		250	74	ug/L			04/30/14 15:49	250
1,2-Dichloropropane	ND		250	24	ug/L			04/30/14 15:49	250
Ethylbenzene	ND		250	57	ug/L			04/30/14 15:49	250
2-Hexanone	ND		1300	40	ug/L			04/30/14 15:49	250
<b>Methylene Chloride</b>	<b>53 J</b>		250	31	ug/L			04/30/14 15:49	250
4-Methyl-2-pentanone	ND		1300	130	ug/L			04/30/14 15:49	250
Styrene	ND		250	24	ug/L			04/30/14 15:49	250
1,1,2,2-Tetrachloroethane	ND		250	50	ug/L			04/30/14 15:49	250
Tetrachloroethene	ND		250	37	ug/L			04/30/14 15:49	250
Toluene	ND		250	38	ug/L			04/30/14 15:49	250
trans-1,2-Dichloroethene	ND		250	42	ug/L			04/30/14 15:49	250
trans-1,3-Dichloropropene	ND *		250	37	ug/L			04/30/14 15:49	250
1,1,1-Trichloroethane	ND		250	72	ug/L			04/30/14 15:49	250
1,1,2-Trichloroethane	ND		250	50	ug/L			04/30/14 15:49	250
<b>Trichloroethene</b>	<b>6100</b>		250	36	ug/L			04/30/14 15:49	250
Vinyl chloride	ND		250	57	ug/L			04/30/14 15:49	250
Xylenes, Total	ND		750	120	ug/L			04/30/14 15:49	250
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	109			70 - 118				04/30/14 15:49	250
Dibromofluoromethane (Surr)	95			70 - 128				04/30/14 15:49	250
1,2-Dichloroethane-d4 (Surr)	94			64 - 135				04/30/14 15:49	250
Toluene-d8 (Surr)	106			71 - 118				04/30/14 15:49	250

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW4**

Date Collected: 04/22/14 09:50

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-4**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			04/30/14 16:13	1000
Benzene	ND		1000	110	ug/L			04/30/14 16:13	1000
Bromoform	ND		1000	190	ug/L			04/30/14 16:13	1000
Bromomethane	ND		1000	310	ug/L			04/30/14 16:13	1000
2-Butanone	ND		5000	550	ug/L			04/30/14 16:13	1000
Carbon disulfide	ND		1000	210	ug/L			04/30/14 16:13	1000
Carbon tetrachloride	ND		1000	140	ug/L			04/30/14 16:13	1000
Chlorobenzene	ND		1000	140	ug/L			04/30/14 16:13	1000
Chlorodibromomethane	ND		1000	140	ug/L			04/30/14 16:13	1000
Chloroethane	ND		1000	210	ug/L			04/30/14 16:13	1000
Chloroform	ND		1000	170	ug/L			04/30/14 16:13	1000
Chloromethane	ND		1000	280	ug/L			04/30/14 16:13	1000
<b>cis-1,2-Dichloroethene</b>	<b>5300</b>		1000	240	ug/L			04/30/14 16:13	1000
cis-1,3-Dichloropropene	ND *		1000	190	ug/L			04/30/14 16:13	1000
Dichlorobromomethane	ND		1000	130	ug/L			04/30/14 16:13	1000
1,1-Dichloroethane	ND		1000	120	ug/L			04/30/14 16:13	1000
1,2-Dichloroethane	ND		1000	210	ug/L			04/30/14 16:13	1000
1,1-Dichloroethene	ND		1000	300	ug/L			04/30/14 16:13	1000
1,2-Dichloropropane	ND		1000	95	ug/L			04/30/14 16:13	1000
Ethylbenzene	ND		1000	230	ug/L			04/30/14 16:13	1000
2-Hexanone	ND		5000	160	ug/L			04/30/14 16:13	1000
<b>Methylene Chloride</b>	<b>550 J</b>		1000	130	ug/L			04/30/14 16:13	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			04/30/14 16:13	1000
Styrene	ND		1000	97	ug/L			04/30/14 16:13	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			04/30/14 16:13	1000
Tetrachloroethene	ND		1000	150	ug/L			04/30/14 16:13	1000
Toluene	ND		1000	150	ug/L			04/30/14 16:13	1000
trans-1,2-Dichloroethene	ND		1000	170	ug/L			04/30/14 16:13	1000
trans-1,3-Dichloropropene	ND *		1000	150	ug/L			04/30/14 16:13	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			04/30/14 16:13	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			04/30/14 16:13	1000
<b>Trichloroethene</b>	<b>25000</b>		1000	140	ug/L			04/30/14 16:13	1000
Vinyl chloride	ND		1000	230	ug/L			04/30/14 16:13	1000
Xylenes, Total	ND		3000	490	ug/L			04/30/14 16:13	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	103			70 - 118				04/30/14 16:13	1000
Dibromofluoromethane (Surr)	98			70 - 128				04/30/14 16:13	1000
1,2-Dichloroethane-d4 (Surr)	97			64 - 135				04/30/14 16:13	1000
Toluene-d8 (Surr)	105			71 - 118				04/30/14 16:13	1000

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW4D**

Date Collected: 04/22/14 11:05

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-5**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		04/30/14 17:01		1
Benzene	ND		1.0	0.11	ug/L		04/30/14 17:01		1
Bromoform	ND		1.0	0.19	ug/L		04/30/14 17:01		1
Bromomethane	ND		1.0	0.31	ug/L		04/30/14 17:01		1
2-Butanone	ND		5.0	0.55	ug/L		04/30/14 17:01		1
Carbon disulfide	ND		1.0	0.21	ug/L		04/30/14 17:01		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		04/30/14 17:01		1
Chlorobenzene	ND		1.0	0.14	ug/L		04/30/14 17:01		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		04/30/14 17:01		1
Chloroethane	ND		1.0	0.21	ug/L		04/30/14 17:01		1
Chloroform	ND		1.0	0.17	ug/L		04/30/14 17:01		1
Chloromethane	ND		1.0	0.28	ug/L		04/30/14 17:01		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		04/30/14 17:01		1
cis-1,3-Dichloropropene	ND *		1.0	0.19	ug/L		04/30/14 17:01		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		04/30/14 17:01		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		04/30/14 17:01		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		04/30/14 17:01		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		04/30/14 17:01		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		04/30/14 17:01		1
Ethylbenzene	ND		1.0	0.23	ug/L		04/30/14 17:01		1
2-Hexanone	ND		5.0	0.16	ug/L		04/30/14 17:01		1
Methylene Chloride	ND		1.0	0.13	ug/L		04/30/14 17:01		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		04/30/14 17:01		1
Styrene	ND		1.0	0.097	ug/L		04/30/14 17:01		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		04/30/14 17:01		1
Tetrachloroethene	ND		1.0	0.15	ug/L		04/30/14 17:01		1
Toluene	ND		1.0	0.15	ug/L		04/30/14 17:01		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		04/30/14 17:01		1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L		04/30/14 17:01		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		04/30/14 17:01		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		04/30/14 17:01		1
Trichloroethene	ND		1.0	0.14	ug/L		04/30/14 17:01		1
Vinyl chloride	ND		1.0	0.23	ug/L		04/30/14 17:01		1
Xylenes, Total	ND		3.0	0.49	ug/L		04/30/14 17:01		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 118		04/30/14 17:01	1
Dibromofluoromethane (Surr)	98		70 - 128		04/30/14 17:01	1
1,2-Dichloroethane-d4 (Surr)	94		64 - 135		04/30/14 17:01	1
Toluene-d8 (Surr)	98		71 - 118		04/30/14 17:01	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW5**

Date Collected: 04/21/14 09:05

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-6**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		04/30/14 17:25		1
Benzene	ND		1.0	0.11	ug/L		04/30/14 17:25		1
Bromoform	ND		1.0	0.19	ug/L		04/30/14 17:25		1
Bromomethane	ND		1.0	0.31	ug/L		04/30/14 17:25		1
2-Butanone	ND		5.0	0.55	ug/L		04/30/14 17:25		1
Carbon disulfide	ND		1.0	0.21	ug/L		04/30/14 17:25		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		04/30/14 17:25		1
Chlorobenzene	ND		1.0	0.14	ug/L		04/30/14 17:25		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		04/30/14 17:25		1
Chloroethane	ND		1.0	0.21	ug/L		04/30/14 17:25		1
Chloroform	ND		1.0	0.17	ug/L		04/30/14 17:25		1
Chloromethane	ND		1.0	0.28	ug/L		04/30/14 17:25		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		04/30/14 17:25		1
cis-1,3-Dichloropropene	ND *		1.0	0.19	ug/L		04/30/14 17:25		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		04/30/14 17:25		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		04/30/14 17:25		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		04/30/14 17:25		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		04/30/14 17:25		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		04/30/14 17:25		1
Ethylbenzene	ND		1.0	0.23	ug/L		04/30/14 17:25		1
2-Hexanone	ND		5.0	0.16	ug/L		04/30/14 17:25		1
Methylene Chloride	ND		1.0	0.13	ug/L		04/30/14 17:25		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		04/30/14 17:25		1
Styrene	ND		1.0	0.097	ug/L		04/30/14 17:25		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		04/30/14 17:25		1
Tetrachloroethene	ND		1.0	0.15	ug/L		04/30/14 17:25		1
Toluene	ND		1.0	0.15	ug/L		04/30/14 17:25		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		04/30/14 17:25		1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L		04/30/14 17:25		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		04/30/14 17:25		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		04/30/14 17:25		1
Trichloroethene	ND		1.0	0.14	ug/L		04/30/14 17:25		1
Vinyl chloride	ND		1.0	0.23	ug/L		04/30/14 17:25		1
Xylenes, Total	ND		3.0	0.49	ug/L		04/30/14 17:25		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 118		04/30/14 17:25	1
Dibromofluoromethane (Surr)	95		70 - 128		04/30/14 17:25	1
1,2-Dichloroethane-d4 (Surr)	98		64 - 135		04/30/14 17:25	1
Toluene-d8 (Surr)	101		71 - 118		04/30/14 17:25	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW5D**

Date Collected: 04/21/14 09:55

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-7**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		04/30/14 17:49		1
Benzene	ND		1.0	0.11	ug/L		04/30/14 17:49		1
Bromoform	ND		1.0	0.19	ug/L		04/30/14 17:49		1
Bromomethane	ND		1.0	0.31	ug/L		04/30/14 17:49		1
2-Butanone	ND		5.0	0.55	ug/L		04/30/14 17:49		1
Carbon disulfide	ND		1.0	0.21	ug/L		04/30/14 17:49		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		04/30/14 17:49		1
Chlorobenzene	ND		1.0	0.14	ug/L		04/30/14 17:49		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		04/30/14 17:49		1
Chloroethane	ND		1.0	0.21	ug/L		04/30/14 17:49		1
Chloroform	ND		1.0	0.17	ug/L		04/30/14 17:49		1
Chloromethane	ND		1.0	0.28	ug/L		04/30/14 17:49		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		04/30/14 17:49		1
cis-1,3-Dichloropropene	ND *		1.0	0.19	ug/L		04/30/14 17:49		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		04/30/14 17:49		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		04/30/14 17:49		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		04/30/14 17:49		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		04/30/14 17:49		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		04/30/14 17:49		1
Ethylbenzene	ND		1.0	0.23	ug/L		04/30/14 17:49		1
2-Hexanone	ND		5.0	0.16	ug/L		04/30/14 17:49		1
Methylene Chloride	ND		1.0	0.13	ug/L		04/30/14 17:49		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		04/30/14 17:49		1
Styrene	ND		1.0	0.097	ug/L		04/30/14 17:49		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		04/30/14 17:49		1
Tetrachloroethene	ND		1.0	0.15	ug/L		04/30/14 17:49		1
Toluene	ND		1.0	0.15	ug/L		04/30/14 17:49		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		04/30/14 17:49		1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L		04/30/14 17:49		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		04/30/14 17:49		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		04/30/14 17:49		1
Trichloroethene	ND		1.0	0.14	ug/L		04/30/14 17:49		1
Vinyl chloride	ND		1.0	0.23	ug/L		04/30/14 17:49		1
Xylenes, Total	ND		3.0	0.49	ug/L		04/30/14 17:49		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 118		04/30/14 17:49	1
Dibromofluoromethane (Surr)	94		70 - 128		04/30/14 17:49	1
1,2-Dichloroethane-d4 (Surr)	97		64 - 135		04/30/14 17:49	1
Toluene-d8 (Surr)	101		71 - 118		04/30/14 17:49	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW6**

Date Collected: 04/22/14 07:00

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-8**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		04/30/14 18:13		1
Benzene	ND		1.0	0.11	ug/L		04/30/14 18:13		1
Bromoform	ND		1.0	0.19	ug/L		04/30/14 18:13		1
Bromomethane	ND		1.0	0.31	ug/L		04/30/14 18:13		1
2-Butanone	ND		5.0	0.55	ug/L		04/30/14 18:13		1
Carbon disulfide	ND		1.0	0.21	ug/L		04/30/14 18:13		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		04/30/14 18:13		1
Chlorobenzene	ND		1.0	0.14	ug/L		04/30/14 18:13		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		04/30/14 18:13		1
Chloroethane	ND		1.0	0.21	ug/L		04/30/14 18:13		1
Chloroform	ND		1.0	0.17	ug/L		04/30/14 18:13		1
Chloromethane	ND		1.0	0.28	ug/L		04/30/14 18:13		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		04/30/14 18:13		1
cis-1,3-Dichloropropene	ND *		1.0	0.19	ug/L		04/30/14 18:13		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		04/30/14 18:13		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		04/30/14 18:13		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		04/30/14 18:13		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		04/30/14 18:13		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		04/30/14 18:13		1
Ethylbenzene	ND		1.0	0.23	ug/L		04/30/14 18:13		1
2-Hexanone	ND		5.0	0.16	ug/L		04/30/14 18:13		1
Methylene Chloride	ND		1.0	0.13	ug/L		04/30/14 18:13		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		04/30/14 18:13		1
Styrene	ND		1.0	0.097	ug/L		04/30/14 18:13		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		04/30/14 18:13		1
Tetrachloroethene	ND		1.0	0.15	ug/L		04/30/14 18:13		1
Toluene	ND		1.0	0.15	ug/L		04/30/14 18:13		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		04/30/14 18:13		1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L		04/30/14 18:13		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		04/30/14 18:13		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		04/30/14 18:13		1
Trichloroethene	ND		1.0	0.14	ug/L		04/30/14 18:13		1
Vinyl chloride	ND		1.0	0.23	ug/L		04/30/14 18:13		1
Xylenes, Total	ND		3.0	0.49	ug/L		04/30/14 18:13		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 118		04/30/14 18:13	1
Dibromofluoromethane (Surr)	98		70 - 128		04/30/14 18:13	1
1,2-Dichloroethane-d4 (Surr)	95		64 - 135		04/30/14 18:13	1
Toluene-d8 (Surr)	105		71 - 118		04/30/14 18:13	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW7**

Date Collected: 04/21/14 13:00  
 Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-9**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		04/30/14 18:37		1
Benzene	ND		1.0	0.11	ug/L		04/30/14 18:37		1
Bromoform	ND		1.0	0.19	ug/L		04/30/14 18:37		1
Bromomethane	ND		1.0	0.31	ug/L		04/30/14 18:37		1
2-Butanone	ND		5.0	0.55	ug/L		04/30/14 18:37		1
Carbon disulfide	ND		1.0	0.21	ug/L		04/30/14 18:37		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		04/30/14 18:37		1
Chlorobenzene	ND		1.0	0.14	ug/L		04/30/14 18:37		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		04/30/14 18:37		1
Chloroethane	ND		1.0	0.21	ug/L		04/30/14 18:37		1
Chloroform	ND		1.0	0.17	ug/L		04/30/14 18:37		1
Chloromethane	ND		1.0	0.28	ug/L		04/30/14 18:37		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		04/30/14 18:37		1
cis-1,3-Dichloropropene	ND *		1.0	0.19	ug/L		04/30/14 18:37		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		04/30/14 18:37		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		04/30/14 18:37		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		04/30/14 18:37		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		04/30/14 18:37		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		04/30/14 18:37		1
Ethylbenzene	ND		1.0	0.23	ug/L		04/30/14 18:37		1
2-Hexanone	ND		5.0	0.16	ug/L		04/30/14 18:37		1
Methylene Chloride	ND		1.0	0.13	ug/L		04/30/14 18:37		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		04/30/14 18:37		1
Styrene	ND		1.0	0.097	ug/L		04/30/14 18:37		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		04/30/14 18:37		1
Tetrachloroethene	ND		1.0	0.15	ug/L		04/30/14 18:37		1
Toluene	ND		1.0	0.15	ug/L		04/30/14 18:37		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		04/30/14 18:37		1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L		04/30/14 18:37		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		04/30/14 18:37		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		04/30/14 18:37		1
<b>Trichloroethene</b>	<b>0.14 J</b>		1.0	0.14	ug/L		04/30/14 18:37		1
Vinyl chloride	ND		1.0	0.23	ug/L		04/30/14 18:37		1
Xylenes, Total	ND		3.0	0.49	ug/L		04/30/14 18:37		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 118		04/30/14 18:37	1
Dibromofluoromethane (Surr)	98		70 - 128		04/30/14 18:37	1
1,2-Dichloroethane-d4 (Surr)	97		64 - 135		04/30/14 18:37	1
Toluene-d8 (Surr)	99		71 - 118		04/30/14 18:37	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW8**

Date Collected: 04/21/14 10:55

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-10**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			04/30/14 10:35	1
Benzene	ND		1.0	0.11	ug/L			04/30/14 10:35	1
Bromoform	ND		1.0	0.19	ug/L			04/30/14 10:35	1
Bromomethane	ND		1.0	0.31	ug/L			04/30/14 10:35	1
2-Butanone	ND		5.0	0.55	ug/L			04/30/14 10:35	1
Carbon disulfide	ND		1.0	0.21	ug/L			04/30/14 10:35	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			04/30/14 10:35	1
Chlorobenzene	ND		1.0	0.14	ug/L			04/30/14 10:35	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			04/30/14 10:35	1
Chloroethane	ND		1.0	0.21	ug/L			04/30/14 10:35	1
Chloroform	ND		1.0	0.17	ug/L			04/30/14 10:35	1
Chloromethane	ND		1.0	0.28	ug/L			04/30/14 10:35	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			04/30/14 10:35	1
cis-1,3-Dichloropropene	ND *		1.0	0.19	ug/L			04/30/14 10:35	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			04/30/14 10:35	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			04/30/14 10:35	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/30/14 10:35	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			04/30/14 10:35	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			04/30/14 10:35	1
Ethylbenzene	ND		1.0	0.23	ug/L			04/30/14 10:35	1
2-Hexanone	ND		5.0	0.16	ug/L			04/30/14 10:35	1
Methylene Chloride	ND		1.0	0.13	ug/L			04/30/14 10:35	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			04/30/14 10:35	1
Styrene	ND		1.0	0.097	ug/L			04/30/14 10:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			04/30/14 10:35	1
Tetrachloroethene	ND		1.0	0.15	ug/L			04/30/14 10:35	1
Toluene	ND		1.0	0.15	ug/L			04/30/14 10:35	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			04/30/14 10:35	1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L			04/30/14 10:35	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			04/30/14 10:35	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			04/30/14 10:35	1
<b>Trichloroethene</b>	<b>0.15 J</b>		1.0	0.14	ug/L			04/30/14 10:35	1
Vinyl chloride	ND		1.0	0.23	ug/L			04/30/14 10:35	1
Xylenes, Total	ND		3.0	0.49	ug/L			04/30/14 10:35	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	103			70 - 118				04/30/14 10:35	1
Dibromofluoromethane (Surr)	99			70 - 128				04/30/14 10:35	1
1,2-Dichloroethane-d4 (Surr)	93			64 - 135				04/30/14 10:35	1
Toluene-d8 (Surr)	105			71 - 118				04/30/14 10:35	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW9R**

**Lab Sample ID: 180-32074-11**

Date Collected: 04/22/14 09:00

Matrix: Water

Date Received: 04/24/14 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1000	500	ug/L			05/01/14 16:32	200
Benzene	ND		200	21	ug/L			05/01/14 16:32	200
Bromoform	ND		200	38	ug/L			05/01/14 16:32	200
Bromomethane	ND		200	63	ug/L			05/01/14 16:32	200
2-Butanone	ND		1000	110	ug/L			05/01/14 16:32	200
Carbon disulfide	ND		200	42	ug/L			05/01/14 16:32	200
Carbon tetrachloride	ND		200	27	ug/L			05/01/14 16:32	200
Chlorobenzene	ND		200	27	ug/L			05/01/14 16:32	200
Chlorodibromomethane	ND		200	27	ug/L			05/01/14 16:32	200
Chloroethane	ND		200	43	ug/L			05/01/14 16:32	200
Chloroform	ND		200	34	ug/L			05/01/14 16:32	200
Chloromethane	ND		200	57	ug/L			05/01/14 16:32	200
<b>cis-1,2-Dichloroethene</b>	<b>3300</b>		200	47	ug/L			05/01/14 16:32	200
cis-1,3-Dichloropropene	ND		200	37	ug/L			05/01/14 16:32	200
Dichlorobromomethane	ND		200	26	ug/L			05/01/14 16:32	200
1,1-Dichloroethane	ND		200	23	ug/L			05/01/14 16:32	200
1,2-Dichloroethane	ND		200	42	ug/L			05/01/14 16:32	200
1,1-Dichloroethene	ND		200	59	ug/L			05/01/14 16:32	200
1,2-Dichloropropane	ND		200	19	ug/L			05/01/14 16:32	200
Ethylbenzene	ND		200	45	ug/L			05/01/14 16:32	200
2-Hexanone	ND		1000	32	ug/L			05/01/14 16:32	200
<b>Methylene Chloride</b>	<b>220</b>		200	25	ug/L			05/01/14 16:32	200
4-Methyl-2-pentanone	ND		1000	110	ug/L			05/01/14 16:32	200
Styrene	ND		200	19	ug/L			05/01/14 16:32	200
1,1,2,2-Tetrachloroethane	ND		200	40	ug/L			05/01/14 16:32	200
Tetrachloroethene	ND		200	30	ug/L			05/01/14 16:32	200
Toluene	ND		200	30	ug/L			05/01/14 16:32	200
<b>trans-1,2-Dichloroethene</b>	<b>39 J</b>		200	34	ug/L			05/01/14 16:32	200
trans-1,3-Dichloropropene	ND *		200	30	ug/L			05/01/14 16:32	200
1,1,1-Trichloroethane	ND		200	57	ug/L			05/01/14 16:32	200
1,1,2-Trichloroethane	ND		200	40	ug/L			05/01/14 16:32	200
<b>Trichloroethene</b>	<b>2800</b>		200	29	ug/L			05/01/14 16:32	200
<b>Vinyl chloride</b>	<b>360</b>		200	45	ug/L			05/01/14 16:32	200
Xylenes, Total	ND		600	98	ug/L			05/01/14 16:32	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 118		05/01/14 16:32	200
Dibromofluoromethane (Surr)	100		70 - 128		05/01/14 16:32	200
1,2-Dichloroethane-d4 (Surr)	103		64 - 135		05/01/14 16:32	200
Toluene-d8 (Surr)	100		71 - 118		05/01/14 16:32	200

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW10**

Date Collected: 04/21/14 14:15

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-12**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L			04/30/14 19:26	1
<b>Benzene</b>	<b>0.17</b>	<b>J</b>	1.0	0.11	ug/L			04/30/14 19:26	1
Bromoform	ND		1.0	0.19	ug/L			04/30/14 19:26	1
Bromomethane	ND		1.0	0.31	ug/L			04/30/14 19:26	1
2-Butanone	ND		5.0	0.55	ug/L			04/30/14 19:26	1
Carbon disulfide	ND		1.0	0.21	ug/L			04/30/14 19:26	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			04/30/14 19:26	1
Chlorobenzene	ND		1.0	0.14	ug/L			04/30/14 19:26	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			04/30/14 19:26	1
Chloroethane	ND		1.0	0.21	ug/L			04/30/14 19:26	1
Chloroform	ND		1.0	0.17	ug/L			04/30/14 19:26	1
Chloromethane	ND		1.0	0.28	ug/L			04/30/14 19:26	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			04/30/14 19:26	1
cis-1,3-Dichloropropene	ND	*	1.0	0.19	ug/L			04/30/14 19:26	1
Dichlorobromomethane	ND		1.0	0.13	ug/L			04/30/14 19:26	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			04/30/14 19:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/30/14 19:26	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			04/30/14 19:26	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			04/30/14 19:26	1
Ethylbenzene	ND		1.0	0.23	ug/L			04/30/14 19:26	1
2-Hexanone	ND		5.0	0.16	ug/L			04/30/14 19:26	1
Methylene Chloride	ND		1.0	0.13	ug/L			04/30/14 19:26	1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L			04/30/14 19:26	1
Styrene	ND		1.0	0.097	ug/L			04/30/14 19:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			04/30/14 19:26	1
Tetrachloroethene	ND		1.0	0.15	ug/L			04/30/14 19:26	1
Toluene	ND		1.0	0.15	ug/L			04/30/14 19:26	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			04/30/14 19:26	1
trans-1,3-Dichloropropene	ND	*	1.0	0.15	ug/L			04/30/14 19:26	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			04/30/14 19:26	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			04/30/14 19:26	1
Trichloroethene	ND		1.0	0.14	ug/L			04/30/14 19:26	1
Vinyl chloride	ND		1.0	0.23	ug/L			04/30/14 19:26	1
Xylenes, Total	ND		3.0	0.49	ug/L			04/30/14 19:26	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	105			70 - 118				04/30/14 19:26	1
Dibromofluoromethane (Surr)	98			70 - 128				04/30/14 19:26	1
1,2-Dichloroethane-d4 (Surr)	97			64 - 135				04/30/14 19:26	1
Toluene-d8 (Surr)	99			71 - 118				04/30/14 19:26	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW11R**

Date Collected: 04/22/14 07:55

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-13**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		500	250	ug/L			05/01/14 16:56	100
Benzene	ND		100	11	ug/L			05/01/14 16:56	100
Bromoform	ND		100	19	ug/L			05/01/14 16:56	100
Bromomethane	ND		100	31	ug/L			05/01/14 16:56	100
2-Butanone	ND		500	55	ug/L			05/01/14 16:56	100
Carbon disulfide	ND		100	21	ug/L			05/01/14 16:56	100
Carbon tetrachloride	ND		100	14	ug/L			05/01/14 16:56	100
Chlorobenzene	ND		100	14	ug/L			05/01/14 16:56	100
Chlorodibromomethane	ND		100	14	ug/L			05/01/14 16:56	100
Chloroethane	ND		100	21	ug/L			05/01/14 16:56	100
Chloroform	ND		100	17	ug/L			05/01/14 16:56	100
Chloromethane	ND		100	28	ug/L			05/01/14 16:56	100
<b>cis-1,2-Dichloroethene</b>	<b>1000</b>		100	24	ug/L			05/01/14 16:56	100
cis-1,3-Dichloropropene	ND		100	19	ug/L			05/01/14 16:56	100
Dichlorobromomethane	ND		100	13	ug/L			05/01/14 16:56	100
1,1-Dichloroethane	ND		100	12	ug/L			05/01/14 16:56	100
1,2-Dichloroethane	ND		100	21	ug/L			05/01/14 16:56	100
1,1-Dichloroethene	ND		100	30	ug/L			05/01/14 16:56	100
1,2-Dichloropropane	ND		100	9.5	ug/L			05/01/14 16:56	100
Ethylbenzene	ND		100	23	ug/L			05/01/14 16:56	100
2-Hexanone	ND		500	16	ug/L			05/01/14 16:56	100
<b>Methylene Chloride</b>	<b>130</b>		100	13	ug/L			05/01/14 16:56	100
4-Methyl-2-pentanone	ND		500	53	ug/L			05/01/14 16:56	100
Styrene	ND		100	9.7	ug/L			05/01/14 16:56	100
1,1,2,2-Tetrachloroethane	ND		100	20	ug/L			05/01/14 16:56	100
Tetrachloroethene	ND		100	15	ug/L			05/01/14 16:56	100
Toluene	ND		100	15	ug/L			05/01/14 16:56	100
trans-1,2-Dichloroethene	ND		100	17	ug/L			05/01/14 16:56	100
trans-1,3-Dichloropropene	ND *		100	15	ug/L			05/01/14 16:56	100
1,1,1-Trichloroethane	ND		100	29	ug/L			05/01/14 16:56	100
1,1,2-Trichloroethane	ND		100	20	ug/L			05/01/14 16:56	100
<b>Trichloroethene</b>	<b>2000</b>		100	14	ug/L			05/01/14 16:56	100
Vinyl chloride	ND		100	23	ug/L			05/01/14 16:56	100
Xylenes, Total	ND		300	49	ug/L			05/01/14 16:56	100
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	103			70 - 118				05/01/14 16:56	100
Dibromofluoromethane (Surr)	95			70 - 128				05/01/14 16:56	100
1,2-Dichloroethane-d4 (Surr)	97			64 - 135				05/01/14 16:56	100
Toluene-d8 (Surr)	102			71 - 118				05/01/14 16:56	100

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW11R DUPLICATE**

**Lab Sample ID: 180-32074-14**

**Matrix: Water**

Date Collected: 04/22/14 07:55

Date Received: 04/24/14 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		500	250	ug/L			05/01/14 17:20	100
Benzene	ND		100	11	ug/L			05/01/14 17:20	100
Bromoform	ND		100	19	ug/L			05/01/14 17:20	100
Bromomethane	ND		100	31	ug/L			05/01/14 17:20	100
2-Butanone	ND		500	55	ug/L			05/01/14 17:20	100
Carbon disulfide	ND		100	21	ug/L			05/01/14 17:20	100
Carbon tetrachloride	ND		100	14	ug/L			05/01/14 17:20	100
Chlorobenzene	ND		100	14	ug/L			05/01/14 17:20	100
Chlorodibromomethane	ND		100	14	ug/L			05/01/14 17:20	100
Chloroethane	ND		100	21	ug/L			05/01/14 17:20	100
Chloroform	ND		100	17	ug/L			05/01/14 17:20	100
Chloromethane	ND		100	28	ug/L			05/01/14 17:20	100
<b>cis-1,2-Dichloroethene</b>	<b>990</b>		100	24	ug/L			05/01/14 17:20	100
cis-1,3-Dichloropropene	ND		100	19	ug/L			05/01/14 17:20	100
Dichlorobromomethane	ND		100	13	ug/L			05/01/14 17:20	100
1,1-Dichloroethane	ND		100	12	ug/L			05/01/14 17:20	100
1,2-Dichloroethane	ND		100	21	ug/L			05/01/14 17:20	100
1,1-Dichloroethene	ND		100	30	ug/L			05/01/14 17:20	100
1,2-Dichloropropane	ND		100	9.5	ug/L			05/01/14 17:20	100
Ethylbenzene	ND		100	23	ug/L			05/01/14 17:20	100
2-Hexanone	ND		500	16	ug/L			05/01/14 17:20	100
<b>Methylene Chloride</b>	<b>110</b>		100	13	ug/L			05/01/14 17:20	100
4-Methyl-2-pentanone	ND		500	53	ug/L			05/01/14 17:20	100
Styrene	ND		100	9.7	ug/L			05/01/14 17:20	100
1,1,2,2-Tetrachloroethane	ND		100	20	ug/L			05/01/14 17:20	100
Tetrachloroethene	ND		100	15	ug/L			05/01/14 17:20	100
Toluene	ND		100	15	ug/L			05/01/14 17:20	100
trans-1,2-Dichloroethene	ND		100	17	ug/L			05/01/14 17:20	100
trans-1,3-Dichloropropene	ND *		100	15	ug/L			05/01/14 17:20	100
1,1,1-Trichloroethane	ND		100	29	ug/L			05/01/14 17:20	100
1,1,2-Trichloroethane	ND		100	20	ug/L			05/01/14 17:20	100
<b>Trichloroethene</b>	<b>2000</b>		100	14	ug/L			05/01/14 17:20	100
Vinyl chloride	ND		100	23	ug/L			05/01/14 17:20	100
Xylenes, Total	ND		300	49	ug/L			05/01/14 17:20	100
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	106			70 - 118				05/01/14 17:20	100
Dibromofluoromethane (Surr)	98			70 - 128				05/01/14 17:20	100
1,2-Dichloroethane-d4 (Surr)	98			64 - 135				05/01/14 17:20	100
Toluene-d8 (Surr)	105			71 - 118				05/01/14 17:20	100

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW12**

Date Collected: 04/21/14 13:45

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-15**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		05/02/14 15:12		1
Benzene	ND		1.0	0.11	ug/L		05/02/14 15:12		1
Bromoform	ND		1.0	0.19	ug/L		05/02/14 15:12		1
Bromomethane	ND		1.0	0.31	ug/L		05/02/14 15:12		1
2-Butanone	ND		5.0	0.55	ug/L		05/02/14 15:12		1
Carbon disulfide	ND		1.0	0.21	ug/L		05/02/14 15:12		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		05/02/14 15:12		1
Chlorobenzene	ND		1.0	0.14	ug/L		05/02/14 15:12		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		05/02/14 15:12		1
Chloroethane	ND		1.0	0.21	ug/L		05/02/14 15:12		1
Chloroform	ND		1.0	0.17	ug/L		05/02/14 15:12		1
Chloromethane	ND		1.0	0.28	ug/L		05/02/14 15:12		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		05/02/14 15:12		1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L		05/02/14 15:12		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		05/02/14 15:12		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		05/02/14 15:12		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		05/02/14 15:12		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		05/02/14 15:12		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		05/02/14 15:12		1
Ethylbenzene	ND		1.0	0.23	ug/L		05/02/14 15:12		1
2-Hexanone	ND		5.0	0.16	ug/L		05/02/14 15:12		1
Methylene Chloride	ND		1.0	0.13	ug/L		05/02/14 15:12		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		05/02/14 15:12		1
Styrene	ND		1.0	0.097	ug/L		05/02/14 15:12		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		05/02/14 15:12		1
Tetrachloroethene	ND		1.0	0.15	ug/L		05/02/14 15:12		1
Toluene	ND		1.0	0.15	ug/L		05/02/14 15:12		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		05/02/14 15:12		1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L		05/02/14 15:12		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		05/02/14 15:12		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		05/02/14 15:12		1
<b>Trichloroethene</b>	<b>0.26 J</b>		1.0	0.14	ug/L		05/02/14 15:12		1
Vinyl chloride	ND		1.0	0.23	ug/L		05/02/14 15:12		1
Xylenes, Total	ND		3.0	0.49	ug/L		05/02/14 15:12		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	114			70 - 118				05/02/14 15:12	1
Dibromofluoromethane (Surr)	114			70 - 128				05/02/14 15:12	1
1,2-Dichloroethane-d4 (Surr)	113			64 - 135				05/02/14 15:12	1
Toluene-d8 (Surr)	95			71 - 118				05/02/14 15:12	1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW13**

Date Collected: 04/21/14 11:30

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-16**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1000	500	ug/L			05/01/14 18:33	200
Benzene	ND		200	21	ug/L			05/01/14 18:33	200
Bromoform	ND		200	38	ug/L			05/01/14 18:33	200
Bromomethane	ND		200	63	ug/L			05/01/14 18:33	200
2-Butanone	ND		1000	110	ug/L			05/01/14 18:33	200
Carbon disulfide	ND		200	42	ug/L			05/01/14 18:33	200
Carbon tetrachloride	ND		200	27	ug/L			05/01/14 18:33	200
Chlorobenzene	ND		200	27	ug/L			05/01/14 18:33	200
Chlorodibromomethane	ND		200	27	ug/L			05/01/14 18:33	200
Chloroethane	ND		200	43	ug/L			05/01/14 18:33	200
Chloroform	ND		200	34	ug/L			05/01/14 18:33	200
Chloromethane	ND		200	57	ug/L			05/01/14 18:33	200
<b>cis-1,2-Dichloroethene</b>	<b>2100</b>		200	47	ug/L			05/01/14 18:33	200
cis-1,3-Dichloropropene	ND		200	37	ug/L			05/01/14 18:33	200
Dichlorobromomethane	ND		200	26	ug/L			05/01/14 18:33	200
1,1-Dichloroethane	ND		200	23	ug/L			05/01/14 18:33	200
1,2-Dichloroethane	ND		200	42	ug/L			05/01/14 18:33	200
1,1-Dichloroethene	ND		200	59	ug/L			05/01/14 18:33	200
1,2-Dichloropropane	ND		200	19	ug/L			05/01/14 18:33	200
Ethylbenzene	ND		200	45	ug/L			05/01/14 18:33	200
2-Hexanone	ND		1000	32	ug/L			05/01/14 18:33	200
<b>Methylene Chloride</b>	<b>270</b>		200	25	ug/L			05/01/14 18:33	200
4-Methyl-2-pentanone	ND		1000	110	ug/L			05/01/14 18:33	200
Styrene	ND		200	19	ug/L			05/01/14 18:33	200
1,1,2,2-Tetrachloroethane	ND		200	40	ug/L			05/01/14 18:33	200
Tetrachloroethene	ND		200	30	ug/L			05/01/14 18:33	200
Toluene	ND		200	30	ug/L			05/01/14 18:33	200
trans-1,2-Dichloroethene	ND		200	34	ug/L			05/01/14 18:33	200
trans-1,3-Dichloropropene	ND *		200	30	ug/L			05/01/14 18:33	200
1,1,1-Trichloroethane	ND		200	57	ug/L			05/01/14 18:33	200
1,1,2-Trichloroethane	ND		200	40	ug/L			05/01/14 18:33	200
<b>Trichloroethene</b>	<b>2500</b>		200	29	ug/L			05/01/14 18:33	200
Vinyl chloride	ND		200	45	ug/L			05/01/14 18:33	200
Xylenes, Total	ND		600	98	ug/L			05/01/14 18:33	200
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	102			70 - 118				05/01/14 18:33	200
Dibromofluoromethane (Surr)	100			70 - 128				05/01/14 18:33	200
1,2-Dichloroethane-d4 (Surr)	102			64 - 135				05/01/14 18:33	200
Toluene-d8 (Surr)	102			71 - 118				05/01/14 18:33	200

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: MW14**

Date Collected: 04/21/14 12:00

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-17**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2500	ug/L			05/01/14 18:09	1000
Benzene	ND		1000	110	ug/L			05/01/14 18:09	1000
Bromoform	ND		1000	190	ug/L			05/01/14 18:09	1000
Bromomethane	ND		1000	310	ug/L			05/01/14 18:09	1000
2-Butanone	ND		5000	550	ug/L			05/01/14 18:09	1000
Carbon disulfide	ND		1000	210	ug/L			05/01/14 18:09	1000
Carbon tetrachloride	ND		1000	140	ug/L			05/01/14 18:09	1000
Chlorobenzene	ND		1000	140	ug/L			05/01/14 18:09	1000
Chlorodibromomethane	ND		1000	140	ug/L			05/01/14 18:09	1000
Chloroethane	ND		1000	210	ug/L			05/01/14 18:09	1000
Chloroform	ND		1000	170	ug/L			05/01/14 18:09	1000
Chloromethane	ND		1000	280	ug/L			05/01/14 18:09	1000
<b>cis-1,2-Dichloroethene</b>	<b>2700</b>		1000	240	ug/L			05/01/14 18:09	1000
cis-1,3-Dichloropropene	ND		1000	190	ug/L			05/01/14 18:09	1000
Dichlorobromomethane	ND		1000	130	ug/L			05/01/14 18:09	1000
1,1-Dichloroethane	ND		1000	120	ug/L			05/01/14 18:09	1000
1,2-Dichloroethane	ND		1000	210	ug/L			05/01/14 18:09	1000
1,1-Dichloroethene	ND		1000	300	ug/L			05/01/14 18:09	1000
1,2-Dichloropropane	ND		1000	95	ug/L			05/01/14 18:09	1000
Ethylbenzene	ND		1000	230	ug/L			05/01/14 18:09	1000
2-Hexanone	ND		5000	160	ug/L			05/01/14 18:09	1000
<b>Methylene Chloride</b>	<b>1300</b>		1000	130	ug/L			05/01/14 18:09	1000
4-Methyl-2-pentanone	ND		5000	530	ug/L			05/01/14 18:09	1000
Styrene	ND		1000	97	ug/L			05/01/14 18:09	1000
1,1,2,2-Tetrachloroethane	ND		1000	200	ug/L			05/01/14 18:09	1000
Tetrachloroethene	ND		1000	150	ug/L			05/01/14 18:09	1000
Toluene	ND		1000	150	ug/L			05/01/14 18:09	1000
trans-1,2-Dichloroethene	ND		1000	170	ug/L			05/01/14 18:09	1000
trans-1,3-Dichloropropene	ND *		1000	150	ug/L			05/01/14 18:09	1000
1,1,1-Trichloroethane	ND		1000	290	ug/L			05/01/14 18:09	1000
1,1,2-Trichloroethane	ND		1000	200	ug/L			05/01/14 18:09	1000
<b>Trichloroethene</b>	<b>15000</b>		1000	140	ug/L			05/01/14 18:09	1000
Vinyl chloride	ND		1000	230	ug/L			05/01/14 18:09	1000
Xylenes, Total	ND		3000	490	ug/L			05/01/14 18:09	1000
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98			70 - 118				05/01/14 18:09	1000
Dibromofluoromethane (Surr)	100			70 - 128				05/01/14 18:09	1000
1,2-Dichloroethane-d4 (Surr)	101			64 - 135				05/01/14 18:09	1000
Toluene-d8 (Surr)	96			71 - 118				05/01/14 18:09	1000

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: RINSE BLANK**

**Lab Sample ID: 180-32074-18**

**Matrix: Water**

Date Collected: 04/22/14 11:30  
 Date Received: 04/24/14 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.8	J	5.0	2.5	ug/L		05/01/14 18:57		1
Benzene	ND		1.0	0.11	ug/L		05/01/14 18:57		1
Bromoform	ND		1.0	0.19	ug/L		05/01/14 18:57		1
Bromomethane	ND		1.0	0.31	ug/L		05/01/14 18:57		1
2-Butanone	ND		5.0	0.55	ug/L		05/01/14 18:57		1
Carbon disulfide	ND		1.0	0.21	ug/L		05/01/14 18:57		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		05/01/14 18:57		1
Chlorobenzene	ND		1.0	0.14	ug/L		05/01/14 18:57		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		05/01/14 18:57		1
Chloroethane	ND		1.0	0.21	ug/L		05/01/14 18:57		1
Chloroform	ND		1.0	0.17	ug/L		05/01/14 18:57		1
Chloromethane	ND		1.0	0.28	ug/L		05/01/14 18:57		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		05/01/14 18:57		1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L		05/01/14 18:57		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		05/01/14 18:57		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		05/01/14 18:57		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		05/01/14 18:57		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		05/01/14 18:57		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		05/01/14 18:57		1
Ethylbenzene	ND		1.0	0.23	ug/L		05/01/14 18:57		1
2-Hexanone	ND		5.0	0.16	ug/L		05/01/14 18:57		1
Methylene Chloride	ND		1.0	0.13	ug/L		05/01/14 18:57		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		05/01/14 18:57		1
Styrene	ND		1.0	0.097	ug/L		05/01/14 18:57		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		05/01/14 18:57		1
Tetrachloroethene	ND		1.0	0.15	ug/L		05/01/14 18:57		1
Toluene	ND		1.0	0.15	ug/L		05/01/14 18:57		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		05/01/14 18:57		1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L		05/01/14 18:57		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		05/01/14 18:57		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		05/01/14 18:57		1
<b>Trichloroethene</b>	<b>0.49</b>	<b>J</b>	1.0	0.14	ug/L		05/01/14 18:57		1
Vinyl chloride	ND		1.0	0.23	ug/L		05/01/14 18:57		1
Xylenes, Total	ND		3.0	0.49	ug/L		05/01/14 18:57		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101			70 - 118			05/01/14 18:57		1
Dibromofluoromethane (Surr)	99			70 - 128			05/01/14 18:57		1
1,2-Dichloroethane-d4 (Surr)	101			64 - 135			05/01/14 18:57		1
Toluene-d8 (Surr)	100			71 - 118			05/01/14 18:57		1

TestAmerica Pittsburgh

# Client Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

**Client Sample ID: T/B**

Date Collected: 04/22/14 00:00

Date Received: 04/24/14 08:50

**Lab Sample ID: 180-32074-19**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	2.5	ug/L		04/30/14 10:59		1
Benzene	ND		1.0	0.11	ug/L		04/30/14 10:59		1
Bromoform	ND		1.0	0.19	ug/L		04/30/14 10:59		1
Bromomethane	ND		1.0	0.31	ug/L		04/30/14 10:59		1
2-Butanone	ND		5.0	0.55	ug/L		04/30/14 10:59		1
Carbon disulfide	ND		1.0	0.21	ug/L		04/30/14 10:59		1
Carbon tetrachloride	ND		1.0	0.14	ug/L		04/30/14 10:59		1
Chlorobenzene	ND		1.0	0.14	ug/L		04/30/14 10:59		1
Chlorodibromomethane	ND		1.0	0.14	ug/L		04/30/14 10:59		1
Chloroethane	ND		1.0	0.21	ug/L		04/30/14 10:59		1
Chloroform	ND		1.0	0.17	ug/L		04/30/14 10:59		1
Chloromethane	ND		1.0	0.28	ug/L		04/30/14 10:59		1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L		04/30/14 10:59		1
cis-1,3-Dichloropropene	ND *		1.0	0.19	ug/L		04/30/14 10:59		1
Dichlorobromomethane	ND		1.0	0.13	ug/L		04/30/14 10:59		1
1,1-Dichloroethane	ND		1.0	0.12	ug/L		04/30/14 10:59		1
1,2-Dichloroethane	ND		1.0	0.21	ug/L		04/30/14 10:59		1
1,1-Dichloroethene	ND		1.0	0.30	ug/L		04/30/14 10:59		1
1,2-Dichloropropane	ND		1.0	0.095	ug/L		04/30/14 10:59		1
Ethylbenzene	ND		1.0	0.23	ug/L		04/30/14 10:59		1
2-Hexanone	ND		5.0	0.16	ug/L		04/30/14 10:59		1
<b>Methylene Chloride</b>	<b>2.0</b>		1.0	0.13	ug/L		04/30/14 10:59		1
4-Methyl-2-pentanone	ND		5.0	0.53	ug/L		04/30/14 10:59		1
Styrene	ND		1.0	0.097	ug/L		04/30/14 10:59		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L		04/30/14 10:59		1
Tetrachloroethene	ND		1.0	0.15	ug/L		04/30/14 10:59		1
Toluene	ND		1.0	0.15	ug/L		04/30/14 10:59		1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L		04/30/14 10:59		1
trans-1,3-Dichloropropene	ND *		1.0	0.15	ug/L		04/30/14 10:59		1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L		04/30/14 10:59		1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L		04/30/14 10:59		1
Trichloroethene	ND		1.0	0.14	ug/L		04/30/14 10:59		1
Vinyl chloride	ND		1.0	0.23	ug/L		04/30/14 10:59		1
Xylenes, Total	ND		3.0	0.49	ug/L		04/30/14 10:59		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	108			70 - 118			04/30/14 10:59		1
Dibromofluoromethane (Surr)	97			70 - 128			04/30/14 10:59		1
1,2-Dichloroethane-d4 (Surr)	95			64 - 135			04/30/14 10:59		1
Toluene-d8 (Surr)	107			71 - 118			04/30/14 10:59		1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

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

**Lab Sample ID:** MB 180-104336/4

**Matrix:** Water

**Analysis Batch:** 104336

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Acetone	ND		1	5.0	2.5	ug/L		04/30/14 10:00	
Benzene	ND		1	1.0	0.11	ug/L		04/30/14 10:00	
Bromoform	ND		1	1.0	0.19	ug/L		04/30/14 10:00	
Bromomethane	ND		1	1.0	0.31	ug/L		04/30/14 10:00	
2-Butanone	ND		1	5.0	0.55	ug/L		04/30/14 10:00	
Carbon disulfide	ND		1	1.0	0.21	ug/L		04/30/14 10:00	
Carbon tetrachloride	ND		1	1.0	0.14	ug/L		04/30/14 10:00	
Chlorobenzene	ND		1	1.0	0.14	ug/L		04/30/14 10:00	
Chlorodibromomethane	ND		1	1.0	0.14	ug/L		04/30/14 10:00	
Chloroethane	ND		1	1.0	0.21	ug/L		04/30/14 10:00	
Chloroform	ND		1	1.0	0.17	ug/L		04/30/14 10:00	
Chloromethane	ND		1	1.0	0.28	ug/L		04/30/14 10:00	
cis-1,2-Dichloroethene	ND		1	1.0	0.24	ug/L		04/30/14 10:00	
cis-1,3-Dichloropropene	ND		1	1.0	0.19	ug/L		04/30/14 10:00	
Dichlorobromomethane	ND		1	1.0	0.13	ug/L		04/30/14 10:00	
1,1-Dichloroethane	ND		1	1.0	0.12	ug/L		04/30/14 10:00	
1,2-Dichloroethane	ND		1	1.0	0.21	ug/L		04/30/14 10:00	
1,1-Dichloroethene	ND		1	1.0	0.30	ug/L		04/30/14 10:00	
1,2-Dichloropropane	ND		1	1.0	0.095	ug/L		04/30/14 10:00	
Ethylbenzene	ND		1	1.0	0.23	ug/L		04/30/14 10:00	
2-Hexanone	ND		1	5.0	0.16	ug/L		04/30/14 10:00	
Methylene Chloride	ND		1	1.0	0.13	ug/L		04/30/14 10:00	
4-Methyl-2-pentanone	ND		1	5.0	0.53	ug/L		04/30/14 10:00	
Styrene	ND		1	1.0	0.097	ug/L		04/30/14 10:00	
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.20	ug/L		04/30/14 10:00	
Tetrachloroethene	ND		1	1.0	0.15	ug/L		04/30/14 10:00	
Toluene	ND		1	1.0	0.15	ug/L		04/30/14 10:00	
trans-1,2-Dichloroethene	ND		1	1.0	0.17	ug/L		04/30/14 10:00	
trans-1,3-Dichloropropene	ND		1	1.0	0.15	ug/L		04/30/14 10:00	
1,1,1-Trichloroethane	ND		1	1.0	0.29	ug/L		04/30/14 10:00	
1,1,2-Trichloroethane	ND		1	1.0	0.20	ug/L		04/30/14 10:00	
Trichloroethene	ND		1	1.0	0.14	ug/L		04/30/14 10:00	
Vinyl chloride	ND		1	1.0	0.23	ug/L		04/30/14 10:00	
Xylenes, Total	ND		1	3.0	0.49	ug/L		04/30/14 10:00	

Surrogate	MB	MB	Dil Fac				
	%Recovery	Qualifier		Limits	Prepared	Analyzed	
4-Bromofluorobenzene (Surr)	101		1	70 - 118		04/30/14 10:00	
Dibromofluoromethane (Surr)	100		1	70 - 128		04/30/14 10:00	
1,2-Dichloroethane-d4 (Surr)	95		1	64 - 135		04/30/14 10:00	
Toluene-d8 (Surr)	102		1	71 - 118		04/30/14 10:00	

**Lab Sample ID:** LCS 180-104336/7

**Matrix:** Water

**Analysis Batch:** 104336

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

Analyte	Spike	LCS	LCS	Dil Fac	%Rec.	Limits
	Added	Result	Qualifier			
Acetone	10.0	6.69		ug/L	67	22 - 150
Benzene	10.0	9.73		ug/L	97	80 - 120

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

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

**Lab Sample ID: LCS 180-104336/7**

**Matrix: Water**

**Analysis Batch: 104336**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike		LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier					
Bromoform	10.0	10.1		ug/L		101	46 - 150	
Bromomethane	10.0	11.0		ug/L		110	33 - 150	
2-Butanone	10.0	8.89		ug/L		89	39 - 138	
Carbon disulfide	10.0	9.47		ug/L		95	54 - 132	
Carbon tetrachloride	10.0	11.8		ug/L		118	55 - 150	
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120	
Chlorodibromomethane	10.0	10.8		ug/L		108	60 - 140	
Chloroethane	10.0	9.75		ug/L		98	36 - 142	
Chloroform	10.0	9.64		ug/L		96	72 - 127	
Chloromethane	10.0	8.75		ug/L		88	50 - 139	
cis-1,2-Dichloroethene	10.0	9.94		ug/L		99	70 - 120	
cis-1,3-Dichloropropene	10.0	12.1 *		ug/L		121	66 - 120	
Dichlorobromomethane	10.0	9.60		ug/L		96	66 - 130	
1,1-Dichloroethane	10.0	9.33		ug/L		93	73 - 126	
1,2-Dichloroethane	10.0	9.73		ug/L		97	68 - 132	
1,1-Dichloroethene	10.0	9.16		ug/L		92	65 - 136	
1,2-Dichloropropane	10.0	9.71		ug/L		97	76 - 124	
Ethylbenzene	10.0	10.7		ug/L		107	72 - 126	
2-Hexanone	10.0	10.6		ug/L		106	25 - 132	
Methylene Chloride	10.0	9.54		ug/L		95	63 - 129	
4-Methyl-2-pentanone	10.0	10.8		ug/L		108	45 - 145	
Styrene	10.0	10.5		ug/L		105	71 - 127	
1,1,2,2-Tetrachloroethane	10.0	9.74		ug/L		97	62 - 125	
Tetrachloroethene	10.0	10.9		ug/L		109	70 - 135	
Toluene	10.0	10.7		ug/L		107	80 - 123	
trans-1,2-Dichloroethene	10.0	9.39		ug/L		94	73 - 126	
trans-1,3-Dichloropropene	10.0	15.0 *		ug/L		150	65 - 125	
1,1,1-Trichloroethane	10.0	11.2		ug/L		112	63 - 133	
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	77 - 127	
Trichloroethene	10.0	9.65		ug/L		96	73 - 120	
Vinyl chloride	10.0	9.02		ug/L		90	53 - 138	
Xylenes, Total	20.0	21.6		ug/L		108	76 - 128	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	94		70 - 118
Dibromofluoromethane (Surr)	88		70 - 128
1,2-Dichloroethane-d4 (Surr)	88		64 - 135
Toluene-d8 (Surr)	99		71 - 118

**Lab Sample ID: 180-32074-10 MS**

**Matrix: Water**

**Analysis Batch: 104336**

**Client Sample ID: MW8**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		10.0	10.4		ug/L		104	22 - 150
Benzene	ND		10.0	9.81		ug/L		98	80 - 120
Bromoform	ND		10.0	10.2		ug/L		102	46 - 150
Bromomethane	ND		10.0	10.9		ug/L		109	33 - 150

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

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

**Lab Sample ID: 180-32074-10 MS**

**Matrix: Water**

**Analysis Batch: 104336**

**Client Sample ID: MW8**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
2-Butanone	ND		10.0	10.1		ug/L		101	39 - 138		
Carbon disulfide	ND		10.0	9.56		ug/L		96	54 - 132		
Carbon tetrachloride	ND		10.0	11.5		ug/L		115	55 - 150		
Chlorobenzene	ND		10.0	9.91		ug/L		99	80 - 120		
Chlorodibromomethane	ND		10.0	10.0		ug/L		100	60 - 140		
Chloroethane	ND		10.0	9.40		ug/L		94	36 - 142		
Chloroform	ND		10.0	9.41		ug/L		94	72 - 127		
Chloromethane	ND		10.0	8.81		ug/L		88	50 - 139		
cis-1,2-Dichloroethene	ND		10.0	9.80		ug/L		98	70 - 120		
cis-1,3-Dichloropropene	ND *		10.0	12.3	F1	ug/L		123	66 - 120		
Dichlorobromomethane	ND		10.0	9.50		ug/L		95	66 - 130		
1,1-Dichloroethane	ND		10.0	9.22		ug/L		92	73 - 126		
1,2-Dichloroethane	ND		10.0	9.69		ug/L		97	68 - 132		
1,1-Dichloroethene	ND		10.0	8.96		ug/L		90	65 - 136		
1,2-Dichloropropane	ND		10.0	9.62		ug/L		96	76 - 124		
Ethylbenzene	ND		10.0	10.6		ug/L		106	72 - 126		
2-Hexanone	ND		10.0	10.9		ug/L		109	25 - 132		
Methylene Chloride	ND		10.0	8.75		ug/L		88	63 - 129		
4-Methyl-2-pentanone	ND		10.0	11.1		ug/L		111	45 - 145		
Styrene	ND		10.0	10.6		ug/L		106	71 - 127		
1,1,2,2-Tetrachloroethane	ND		10.0	9.74		ug/L		97	62 - 125		
Tetrachloroethene	ND		10.0	10.0		ug/L		100	70 - 135		
Toluene	ND		10.0	10.4		ug/L		104	80 - 123		
trans-1,2-Dichloroethene	ND		10.0	9.47		ug/L		95	73 - 126		
trans-1,3-Dichloropropene	ND *		10.0	13.8	F1	ug/L		138	65 - 125		
1,1,1-Trichloroethane	ND		10.0	10.9		ug/L		109	63 - 133		
1,1,2-Trichloroethane	ND		10.0	9.72		ug/L		97	77 - 127		
Trichloroethene	0.15	J	10.0	9.49		ug/L		93	73 - 120		
Vinyl chloride	ND		10.0	8.78		ug/L		88	53 - 138		
Xylenes, Total	ND		20.0	21.5		ug/L		108	76 - 128		

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		70 - 118
Dibromofluoromethane (Surr)	92		70 - 128
1,2-Dichloroethane-d4 (Surr)	90		64 - 135
Toluene-d8 (Surr)	102		71 - 118

**Lab Sample ID: 180-32074-10 MSD**

**Matrix: Water**

**Analysis Batch: 104336**

**Client Sample ID: MW8**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Acetone	ND		10.0	7.76		ug/L		78	22 - 150	29	35
Benzene	ND		10.0	9.81		ug/L		98	80 - 120	0	32
Bromoform	ND		10.0	10.8		ug/L		108	46 - 150	6	35
Bromomethane	ND		10.0	10.9		ug/L		109	33 - 150	0	35
2-Butanone	ND		10.0	10.7		ug/L		107	39 - 138	6	35
Carbon disulfide	ND		10.0	9.41		ug/L		94	54 - 132	2	35

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

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

**Lab Sample ID: 180-32074-10 MSD**

**Matrix: Water**

**Analysis Batch: 104336**

**Client Sample ID: MW8**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Carbon tetrachloride	ND		10.0	11.3		ug/L		113	55 - 150	2	35	
Chlorobenzene	ND		10.0	10.4		ug/L		104	80 - 120	5	29	
Chlorodibromomethane	ND		10.0	11.0		ug/L		110	60 - 140	9	35	
Chloroethane	ND		10.0	9.73		ug/L		97	36 - 142	4	35	
Chloroform	ND		10.0	9.48		ug/L		95	72 - 127	1	35	
Chloromethane	ND		10.0	8.81		ug/L		88	50 - 139	0	35	
cis-1,2-Dichloroethene	ND		10.0	9.78		ug/L		98	70 - 120	0	35	
cis-1,3-Dichloropropene	ND *		10.0	12.7	F1	ug/L		127	66 - 120	3	35	
Dichlorobromomethane	ND		10.0	9.98		ug/L		100	66 - 130	5	35	
1,1-Dichloroethane	ND		10.0	9.53		ug/L		95	73 - 126	3	35	
1,2-Dichloroethane	ND		10.0	9.94		ug/L		99	68 - 132	3	32	
1,1-Dichloroethene	ND		10.0	8.51		ug/L		85	65 - 136	5	35	
1,2-Dichloropropane	ND		10.0	10.1		ug/L		101	76 - 124	5	34	
Ethylbenzene	ND		10.0	10.6		ug/L		106	72 - 126	0	33	
2-Hexanone	ND		10.0	11.7		ug/L		117	25 - 132	7	35	
Methylene Chloride	ND		10.0	9.68		ug/L		97	63 - 129	10	35	
4-Methyl-2-pentanone	ND		10.0	11.8		ug/L		118	45 - 145	6	35	
Styrene	ND		10.0	10.9		ug/L		109	71 - 127	3	34	
1,1,2,2-Tetrachloroethane	ND		10.0	10.3		ug/L		103	62 - 125	6	35	
Tetrachloroethene	ND		10.0	10.5		ug/L		105	70 - 135	5	35	
Toluene	ND		10.0	11.0		ug/L		110	80 - 123	6	35	
trans-1,2-Dichloroethene	ND		10.0	9.47		ug/L		95	73 - 126	0	35	
trans-1,3-Dichloropropene	ND *		10.0	15.4	F1	ug/L		154	65 - 125	11	35	
1,1,1-Trichloroethane	ND		10.0	11.0		ug/L		110	63 - 133	1	35	
1,1,2-Trichloroethane	ND		10.0	11.4		ug/L		114	77 - 127	16	35	
Trichloroethene	0.15	J	10.0	10.2		ug/L		101	73 - 120	7	35	
Vinyl chloride	ND		10.0	9.06		ug/L		91	53 - 138	3	35	
Xylenes, Total	ND		20.0	21.2		ug/L		106	76 - 128	1	32	

### MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 118
Dibromofluoromethane (Surr)	92		70 - 128
1,2-Dichloroethane-d4 (Surr)	91		64 - 135
Toluene-d8 (Surr)	106		71 - 118

**Lab Sample ID: MB 180-104487/6**

**Matrix: Water**

**Analysis Batch: 104487**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			05/01/14 11:05	1
Benzene	ND		1.0	0.11	ug/L			05/01/14 11:05	1
Bromoform	ND		1.0	0.19	ug/L			05/01/14 11:05	1
Bromomethane	ND		1.0	0.31	ug/L			05/01/14 11:05	1
2-Butanone	ND		5.0	0.55	ug/L			05/01/14 11:05	1
Carbon disulfide	ND		1.0	0.21	ug/L			05/01/14 11:05	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			05/01/14 11:05	1
Chlorobenzene	ND		1.0	0.14	ug/L			05/01/14 11:05	1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

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

**Lab Sample ID: MB 180-104487/6**

**Matrix: Water**

**Analysis Batch: 104487**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Chlorodibromomethane	ND				1.0	0.14	ug/L			05/01/14 11:05	1
Chloroethane	ND				1.0	0.21	ug/L			05/01/14 11:05	1
Chloroform	ND				1.0	0.17	ug/L			05/01/14 11:05	1
Chloromethane	ND				1.0	0.28	ug/L			05/01/14 11:05	1
cis-1,2-Dichloroethene	ND				1.0	0.24	ug/L			05/01/14 11:05	1
cis-1,3-Dichloropropene	ND				1.0	0.19	ug/L			05/01/14 11:05	1
Dichlorobromomethane	ND				1.0	0.13	ug/L			05/01/14 11:05	1
1,1-Dichloroethane	ND				1.0	0.12	ug/L			05/01/14 11:05	1
1,2-Dichloroethane	ND				1.0	0.21	ug/L			05/01/14 11:05	1
1,1-Dichloroethene	ND				1.0	0.30	ug/L			05/01/14 11:05	1
1,2-Dichloropropane	ND				1.0	0.095	ug/L			05/01/14 11:05	1
Ethylbenzene	ND				1.0	0.23	ug/L			05/01/14 11:05	1
2-Hexanone	ND				5.0	0.16	ug/L			05/01/14 11:05	1
Methylene Chloride	ND				1.0	0.13	ug/L			05/01/14 11:05	1
4-Methyl-2-pentanone	ND				5.0	0.53	ug/L			05/01/14 11:05	1
Styrene	ND				1.0	0.097	ug/L			05/01/14 11:05	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.20	ug/L			05/01/14 11:05	1
Tetrachloroethene	ND				1.0	0.15	ug/L			05/01/14 11:05	1
Toluene	ND				1.0	0.15	ug/L			05/01/14 11:05	1
trans-1,2-Dichloroethene	ND				1.0	0.17	ug/L			05/01/14 11:05	1
trans-1,3-Dichloropropene	ND				1.0	0.15	ug/L			05/01/14 11:05	1
1,1,1-Trichloroethane	ND				1.0	0.29	ug/L			05/01/14 11:05	1
1,1,2-Trichloroethane	ND				1.0	0.20	ug/L			05/01/14 11:05	1
Trichloroethene	ND				1.0	0.14	ug/L			05/01/14 11:05	1
Vinyl chloride	ND				1.0	0.23	ug/L			05/01/14 11:05	1
Xylenes, Total	ND				3.0	0.49	ug/L			05/01/14 11:05	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	108		108		70 - 118			05/01/14 11:05	1
Dibromofluoromethane (Surr)	98		98		70 - 128			05/01/14 11:05	1
1,2-Dichloroethane-d4 (Surr)	98		98		64 - 135			05/01/14 11:05	1
Toluene-d8 (Surr)	105		105		71 - 118			05/01/14 11:05	1

**Lab Sample ID: LCS 180-104487/9**

**Matrix: Water**

**Analysis Batch: 104487**

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	10.0	6.69		ug/L		67	22 - 150
Benzene	10.0	9.57		ug/L		96	80 - 120
Bromoform	10.0	9.03		ug/L		90	46 - 150
Bromomethane	10.0	11.0		ug/L		110	33 - 150
2-Butanone	10.0	8.47		ug/L		85	39 - 138
Carbon disulfide	10.0	9.26		ug/L		93	54 - 132
Carbon tetrachloride	10.0	11.8		ug/L		118	55 - 150
Chlorobenzene	10.0	9.38		ug/L		94	80 - 120
Chlorodibromomethane	10.0	9.23		ug/L		92	60 - 140
Chloroethane	10.0	10.0		ug/L		100	36 - 142

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

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

**Lab Sample ID: LCS 180-104487/9**

**Matrix: Water**

**Analysis Batch: 104487**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Chloroform	10.0	9.56		ug/L		96	72 - 127
Chloromethane	10.0	9.77		ug/L		98	50 - 139
cis-1,2-Dichloroethene	10.0	9.58		ug/L		96	70 - 120
cis-1,3-Dichloropropene	10.0	11.8		ug/L		118	66 - 120
Dichlorobromomethane	10.0	9.69		ug/L		97	66 - 130
1,1-Dichloroethane	10.0	9.36		ug/L		94	73 - 126
1,2-Dichloroethane	10.0	9.75		ug/L		97	68 - 132
1,1-Dichloroethene	10.0	9.37		ug/L		94	65 - 136
1,2-Dichloropropane	10.0	9.06		ug/L		91	76 - 124
Ethylbenzene	10.0	9.78		ug/L		98	72 - 126
2-Hexanone	10.0	9.45		ug/L		94	25 - 132
Methylene Chloride	10.0	10.2		ug/L		102	63 - 129
4-Methyl-2-pentanone	10.0	9.79		ug/L		98	45 - 145
Styrene	10.0	10.1		ug/L		101	71 - 127
1,1,2,2-Tetrachloroethane	10.0	8.76		ug/L		88	62 - 125
Tetrachloroethene	10.0	9.99		ug/L		100	70 - 135
Toluene	10.0	9.70		ug/L		97	80 - 123
trans-1,2-Dichloroethene	10.0	9.45		ug/L		94	73 - 126
trans-1,3-Dichloropropene	10.0	12.9 *		ug/L		129	65 - 125
1,1,1-Trichloroethane	10.0	11.5		ug/L		115	63 - 133
1,1,2-Trichloroethane	10.0	9.71		ug/L		97	77 - 127
Trichloroethene	10.0	9.75		ug/L		97	73 - 120
Vinyl chloride	10.0	9.45		ug/L		95	53 - 138
Xylenes, Total	20.0	20.0		ug/L		100	76 - 128

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	90		70 - 118
Dibromofluoromethane (Surr)	87		70 - 128
1,2-Dichloroethane-d4 (Surr)	89		64 - 135
Toluene-d8 (Surr)	90		71 - 118

**Lab Sample ID: MB 180-104640/4**

**Matrix: Water**

**Analysis Batch: 104640**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		5.0	2.5	ug/L			05/02/14 10:31	1
Benzene	ND		1.0	0.11	ug/L			05/02/14 10:31	1
Bromoform	ND		1.0	0.19	ug/L			05/02/14 10:31	1
Bromomethane	ND		1.0	0.31	ug/L			05/02/14 10:31	1
2-Butanone	ND		5.0	0.55	ug/L			05/02/14 10:31	1
Carbon disulfide	ND		1.0	0.21	ug/L			05/02/14 10:31	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			05/02/14 10:31	1
Chlorobenzene	ND		1.0	0.14	ug/L			05/02/14 10:31	1
Chlorodibromomethane	ND		1.0	0.14	ug/L			05/02/14 10:31	1
Chloroethane	ND		1.0	0.21	ug/L			05/02/14 10:31	1
Chloroform	ND		1.0	0.17	ug/L			05/02/14 10:31	1
Chloromethane	ND		1.0	0.28	ug/L			05/02/14 10:31	1

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

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

**Lab Sample ID: MB 180-104640/4**

**Matrix: Water**

**Analysis Batch: 104640**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND	ND									
cis-1,2-Dichloroethene			ND		1.0	0.24	ug/L			05/02/14 10:31	1
cis-1,3-Dichloropropene			ND		1.0	0.19	ug/L			05/02/14 10:31	1
Dichlorobromomethane			ND		1.0	0.13	ug/L			05/02/14 10:31	1
1,1-Dichloroethane			ND		1.0	0.12	ug/L			05/02/14 10:31	1
1,2-Dichloroethane			ND		1.0	0.21	ug/L			05/02/14 10:31	1
1,1-Dichloroethene			ND		1.0	0.30	ug/L			05/02/14 10:31	1
1,2-Dichloropropane			ND		1.0	0.095	ug/L			05/02/14 10:31	1
Ethylbenzene			ND		1.0	0.23	ug/L			05/02/14 10:31	1
2-Hexanone			ND		5.0	0.16	ug/L			05/02/14 10:31	1
Methylene Chloride			ND		1.0	0.13	ug/L			05/02/14 10:31	1
4-Methyl-2-pentanone			ND		5.0	0.53	ug/L			05/02/14 10:31	1
Styrene			ND		1.0	0.097	ug/L			05/02/14 10:31	1
1,1,2,2-Tetrachloroethane			ND		1.0	0.20	ug/L			05/02/14 10:31	1
Tetrachloroethene			ND		1.0	0.15	ug/L			05/02/14 10:31	1
Toluene			ND		1.0	0.15	ug/L			05/02/14 10:31	1
trans-1,2-Dichloroethene			ND		1.0	0.17	ug/L			05/02/14 10:31	1
trans-1,3-Dichloropropene			ND		1.0	0.15	ug/L			05/02/14 10:31	1
1,1,1-Trichloroethane			ND		1.0	0.29	ug/L			05/02/14 10:31	1
1,1,2-Trichloroethane			ND		1.0	0.20	ug/L			05/02/14 10:31	1
Trichloroethene			ND		1.0	0.14	ug/L			05/02/14 10:31	1
Vinyl chloride			ND		1.0	0.23	ug/L			05/02/14 10:31	1
Xylenes, Total			ND		3.0	0.49	ug/L			05/02/14 10:31	1

### MB MB

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Surrogate	%Recovery						
4-Bromofluorobenzene (Surr)		112			70 - 118			1
Dibromofluoromethane (Surr)		116			70 - 128			1
1,2-Dichloroethane-d4 (Surr)		111			64 - 135			1
Toluene-d8 (Surr)		95			71 - 118			1

**Lab Sample ID: LCS 180-104640/7**

**Matrix: Water**

**Analysis Batch: 104640**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier					
Acetone		10.0	9.27	ug/L		93	22 - 150	
Benzene		10.0	10.8	ug/L		108	80 - 120	
Bromoform		10.0	13.5	ug/L		135	46 - 150	
Bromomethane		10.0	10.3	ug/L		103	33 - 150	
2-Butanone		10.0	10.1	ug/L		101	39 - 138	
Carbon disulfide		10.0	10.2	ug/L		102	54 - 132	
Carbon tetrachloride		10.0	13.2	ug/L		132	55 - 150	
Chlorobenzene		10.0	10.8	ug/L		108	80 - 120	
Chlorodibromomethane		10.0	12.7	ug/L		127	60 - 140	
Chloroethane		10.0	10.6	ug/L		106	36 - 142	
Chloroform		10.0	11.4	ug/L		114	72 - 127	
Chloromethane		10.0	10.0	ug/L		100	50 - 139	
cis-1,2-Dichloroethene		10.0	10.3	ug/L		103	70 - 120	
cis-1,3-Dichloropropene		10.0	9.32	ug/L		93	66 - 120	

TestAmerica Pittsburgh

# QC Sample Results

Client: SGK Ventures, LLC-fka Keywell LLC

Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

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

**Lab Sample ID: LCS 180-104640/7**

**Matrix: Water**

**Analysis Batch: 104640**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike		LCS		Unit	D	%Rec.		Limits
	Added	Result	Qualifier	%Rec					
Dichlorobromomethane	10.0	11.3		ug/L		113		66 - 130	
1,1-Dichloroethane	10.0	10.6		ug/L		106		73 - 126	
1,2-Dichloroethane	10.0	11.7		ug/L		117		68 - 132	
1,1-Dichloroethene	10.0	10.5		ug/L		105		65 - 136	
1,2-Dichloropropane	10.0	9.91		ug/L		99		76 - 124	
Ethylbenzene	10.0	10.8		ug/L		108		72 - 126	
2-Hexanone	10.0	9.14		ug/L		91		25 - 132	
Methylene Chloride	10.0	9.86		ug/L		99		63 - 129	
4-Methyl-2-pentanone	10.0	9.93		ug/L		99		45 - 145	
Styrene	10.0	11.0		ug/L		110		71 - 127	
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107		62 - 125	
Tetrachloroethene	10.0	10.3		ug/L		103		70 - 135	
Toluene	10.0	11.3		ug/L		113		80 - 123	
trans-1,2-Dichloroethene	10.0	10.5		ug/L		105		73 - 126	
trans-1,3-Dichloropropene	10.0	9.61		ug/L		96		65 - 125	
1,1,1-Trichloroethane	10.0	9.91		ug/L		99		63 - 133	
1,1,2-Trichloroethane	10.0	10.5		ug/L		105		77 - 127	
Trichloroethene	10.0	10.5		ug/L		105		73 - 120	
Vinyl chloride	10.0	11.6		ug/L		116		53 - 138	
Xylenes, Total	20.0	21.9		ug/L		110		76 - 128	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Sur)	103		70 - 118
Dibromofluoromethane (Sur)	100		70 - 128
1,2-Dichloroethane-d4 (Sur)	106		64 - 135
Toluene-d8 (Sur)	103		71 - 118

TestAmerica Pittsburgh

# QC Association Summary

Client: SGK Ventures, LLC-fka Keywell LLC  
 Project/Site: Frewsburg

TestAmerica Job ID: 180-32074-1

## GC/MS VOA

### Analysis Batch: 104336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-32074-1	MW1	Total/NA	Water	8260C	5
180-32074-2 - DL	MW2	Total/NA	Water	8260C	6
180-32074-3	MW3	Total/NA	Water	8260C	7
180-32074-4	MW4	Total/NA	Water	8260C	8
180-32074-5	MW4D	Total/NA	Water	8260C	9
180-32074-6	MW5	Total/NA	Water	8260C	10
180-32074-7	MW5D	Total/NA	Water	8260C	11
180-32074-8	MW6	Total/NA	Water	8260C	12
180-32074-9	MW7	Total/NA	Water	8260C	13
180-32074-10	MW8	Total/NA	Water	8260C	1
180-32074-10 MS	MW8	Total/NA	Water	8260C	2
180-32074-10 MSD	MW8	Total/NA	Water	8260C	3
180-32074-12	MW10	Total/NA	Water	8260C	4
180-32074-19	T/B	Total/NA	Water	8260C	5
LCS 180-104336/7	Lab Control Sample	Total/NA	Water	8260C	6
MB 180-104336/4	Method Blank	Total/NA	Water	8260C	7

### Analysis Batch: 104487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-32074-2	MW2	Total/NA	Water	8260C	1
180-32074-11	MW9R	Total/NA	Water	8260C	2
180-32074-13	MW11R	Total/NA	Water	8260C	3
180-32074-14	MW11R DUPLICATE	Total/NA	Water	8260C	4
180-32074-16	MW13	Total/NA	Water	8260C	5
180-32074-17	MW14	Total/NA	Water	8260C	6
180-32074-18	RINSE BLANK	Total/NA	Water	8260C	7
LCS 180-104487/9	Lab Control Sample	Total/NA	Water	8260C	8
MB 180-104487/6	Method Blank	Total/NA	Water	8260C	9

### Analysis Batch: 104640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-32074-15	MW12	Total/NA	Water	8260C	1
LCS 180-104640/7	Lab Control Sample	Total/NA	Water	8260C	2
MB 180-104640/4	Method Blank	Total/NA	Water	8260C	3

**TestAmerica Pittsburgh**  
301 Alpha Drive

**Chain of Custody Record**

**004221**

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.  
TEL: 8210 (0713)

Pittsburgh, PA 15236 Fax: 412.922.2170  
Phone: 412.922.2158 Fax: 412.922.2170

Regulatory Program:  DW  NPDES  RCRA  Other:

COC No: 0422224  
1 of 2 COCS

Company Name: **SAK VENTURES LLC.** Project Manager: **PATRY LUNDIN** Site Contact: **SARAH DIAZ** Date: **4/22/14** COC No: **0422224**  
Address: **300 Falconer St.** Tel/Fax: **722-9102** Analysis Turnaround Time Lab Contact: **DAVE DIAZ** Carrier:  
City/State/Zip: **Albion, NY 14220**  CALENDAR DAYS  WORKING DAYS Sampler: **Chuck Becker**

Fax:

Project Name:

Site:

PO #

TAT if different from Below  
 2 weeks  
 1 week  
 2 days  
 1 day

Filtered Sample (Y/N)  
Perform MS / MSD (Y/N)  
**8260 B-LL-TEL 3.2**  
**LOW LEVEL**  
**5 SEP. CIS/TRANS DCE**

180-32074 Chain of Custody



HOLD

SHORT

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:
MW 1	4/21/14	6:50	G	W	3	NN3
MW 2	4/21/14	7:30	G	W	3	NN3
MW 3	4/21/14	8:20	G	W	3	NN3
MW 4	4/21/14	9:50	G	W	3	NN3
MW 4D	4/21/14	11:05	G	W	3	NN3
MW 5	4/21/14	9:05	G	W	3	NN3
MW 5D	4/21/14	9:55	G	W	3	NN3
MW 6	4/22/14	1:00	G	W	3	NN3
MW 7	4/22/14	1:00	G	W	3	NN3
MW 8	4/22/14	10:55	G	W	9	NN3
MW 9R	4/22/14	9:00	G	W	3	NN3
MW 10	4/22/14	2:15	G	W	3	NN3

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

Return to Client  Disposal by lab  Archive for \_\_\_\_\_ Months

**Special Instructions/QC Requirements & Comments:**

Custody Seals Intact:  Yes  No

Custody Seal No.:  Cooler Temp. (°C): Obs'd: \_\_\_\_\_ Con'd: \_\_\_\_\_ Therm ID No.: \_\_\_\_\_

Retained by: **Mark Becker**

Received by: **John Wilson** Company: **SAK Ventures LLC** Date/Time: **4/22/14** Received by: **John Wilson** Company: **SAK Ventures LLC** Date/Time: **4/24/14 8:50**

Relinquished by:

Received in Laboratory by: \_\_\_\_\_ Company: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Relinquished by:

Received in Laboratory by: \_\_\_\_\_ Company: \_\_\_\_\_ Date/Time: \_\_\_\_\_

# TestAmerica Pittsburgh

## Chain of Custody Record

004222

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.

Pittsburgh, PA 15238  
Phone: 412.963.7474 Fax: 412.963.2470

Regulatory Program:  DW  NPDES  RCRA  Other:

Client Contact

## Login Sample Receipt Checklist

Client: SGK Ventures, LLC

Job Number: 180-32074-1

**Login Number:** 32074

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Watson, Debbie

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	
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.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	