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October 11, 2013

Mr. Derrick Williams Georgia Environmental Protection Division 2 Martin Luther King, Jr. Dr. SE Suite 1462 East Tower Atlanta, GA 30334

RE: 3<sup>rd</sup> Semi-Annual Progress Report, April 12, 2013, Diamond Rug and Carpet Mills, Eton, Murray County, Georgia; HSI#10534

Dear Mr. Williams:

GaiaTech Incorporated (GAIATECH) is submitting this progress report to update the status of the former Diamond Rug and Carpet Mills facility (currently operating as Mohawk Industries and hereinafter referred to as the "Site") located in Eton, Murray County, Georgia. This update details the findings of the last semi-annual sampling event, updates the Conceptual Site Model (CSM) for the Site, and provides conclusions and recommendations as detailed in subsequent sections.

#### INTRODUCTION AND BACKGROUND

The subject property is located at 4140 North Highway 411 just north of the city limit in Murray County, Georgia. **Figure 1** in **Attachment 1** illustrates the location of this Site. The Site is currently used for manufacturing carpet and is presently owned by the Aladdin Manufacturing Division of Mohawk Industries, Inc. (Mohawk).

The property is located within an industrial area on the north side of Eton Georgia. It is bounded on the north by a small tufting operation and undeveloped land, to the east by CSX railroad line that is bounded further to the east by other industrial facilities, to the south by Beaulieau Industries and to the west of US Highway 411 by Superior Carpets. See **Figure 2** in **Attachment 1** for a Site layout map.

#### **CURRENT REGULATORY STATUS**

The Site was listed on the Georgia Hazardous Site Inventory (HSI) for a release of tetrachloroethene (PCE) in groundwater at a concentration exceeding a reportable quantity on April 9, 1999. The Site was designated as a Class II Site with HSI No. 10534. Since then, numerous Site investigation and reporting activities have been conducted by others to further characterize the release.

GaiaTech, Inc. (GaiaTech) was retained by Mohawk to respond to a November 9, 2010 Notice of Deficiency (NOD) letter from the Georgia Environmental Protection Division (GEPD) regarding an Interim Remedial Status Report prepared by Conestoga Rovers in June of 2005. In the letter, the GEPD required additional clarification to the June 2005 report, as well as additional sampling to define and characterize the extent of impact of various regulated substances in soil and groundwater.

GaiaTech conducted limited soil and groundwater sampling in November 2011 followed by the preparation and submission of a Voluntary Investigation and Remediation Plan (VIRP) Application dated December 14, 2011. The VIRP was submitted in lieu of a Corrective Action Plan, which would have been required under the Georgia Hazardous Site Response Program. The VIRP Application was approved by the Georgia EPD on April 12, 2012. The VIRP Approval letter outlined minimum schedule requirements, for assessment and reporting milestones. The following details the relative milestones and items completed, which are as follows:

- Semi-Annual Progress Reports October 12 and April 12 through October 12, 2016. A total of two (2) Semi-Annual Progress Reports have been Submitted to date: October 12, 2012:
- Complete Horizontal Delineation on the Qualifying Property Must be demonstrated in the April 12, 2013 Semi-Annual Progress Report (12 months from VIRP Approval);
- Complete Horizontal Delineation on all Impacted Properties Must be demonstrated in the April 12, 2014 Semi-Annual Progress Report (24 months from VIRP Approval);
- Complete Horizontal and Vertical Delineation, Finalization of Remedial Plan, and a Cost Estimation for Remedial Implementation Must be demonstrated in the October 12, 2014 Semi-Annual Progress Report (30 months from VIRP Approval);
- Submission of Compliance Status Report April 12, 2017.

To date, three of the above milestones have been completed by Mohawk (i.e., complete horizontal delineation on the qualifying property and all impacted properties). The remainder of this report details the findings of the 3<sup>rd</sup> Semi-Annual sampling event.

### 3<sup>RD</sup> SEMI-ANNUAL GROUNDWATER SAMPLING ACTIVITIES

A semi-annual groundwater sampling event was conducted on September 12, 2013 to provide continued data evaluation of the groundwater plume. Samples were collected from the following monitoring wells:

• OW-2, OW-5, OW-7, OW-8D, OW-9, OW-10, OW-11, OW-12, OW-13, and MWW-1

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### Top Casing Survey and Groundwater Elevation Measurements

Water level information from the September sampling event is summarized on **Table 1** in **Attachment 2**. The water level data was used to determine the volume of water to be purged from each well prior to sample collection, as well as the static groundwater elevation in each well. GaiaTech measured the relative top of casing elevations of newly installed wells utilizing previously recorded survey data from existing Site monitoring wells. Discrepancies in the elevations of existing monitoring wells necessitated a new round of top of casing measurements such that an accurate portrayal of the potentiometric surface could be depicted. Individual monitoring well purge volumes were calculated as follows:

Depth of well (ft) - Static water level (ft) = Column of water (ft)

Column of water (linear ft) x 0.17 gallons/ft. x 3 well volumes = Gallons of water to purge

Prior to well purging and sampling, the depth to water in each monitoring well was measured at the marking indication for the top of casing elevation with an electronic water level indicator. Each well measurement was recorded by slowly lowering the indicator probe into the well until the audible and visual signal indicated the static water surface had been reached. Subsequently, the elevation was then recorded to the nearest 0.01 foot. The well data was recorded on field logs which are included in the Water Quality Sampling Forms in **Attachment 3**. The groundwater elevation of select monitoring wells was utilized to prepare a potentiometric map of water levels recorded on September 12, 2013. This potentiometric map for the shallow unconfined water table is included as **Figure 3** in **Attachment 1**. According to potentiometric data, groundwater at the property appears to be flowing to the southeast towards Mill Creek.

#### Well Purging

Well purging and sampling activities were conducted in accordance with the U.S. Environmental Protection Agency (EPA) Science and Ecosystem Support Division (SESD) Operating Procedure (OP) for Groundwater Sampling (SESDPROC-301-R2, March 2013; Sections 3.2.1.1.1 and 3.2.1.1.2).

Prior to sample collection, monitoring wells were purged via peristaltic pump. The pump and discharge tubing or peristaltic suction tubing was slowly lowered into the well, and placed approximately in the center of the measured water column. If the top of the water column interface was discernible during pump deployment, then the pump was lowered a distance of approximately half of the calculated static water column. In the event that the top of the static water column was not discernible during pump deployment, then, upon encountering the bottom of the well, the pump was raised a distance of approximately half of the static water column to position the pump in the middle of the static water column.

The monitoring wells were purged at a low flow rate in an attempt not to evacuate all the water from the wells such that the water column was not purged dry. However, many of the

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monitoring wells were purged dry. During the purging process, the flow was adjusted as necessary to mimic the natural recharge rate of the well in order to minimize aquifer stress. During the well purging process, discrete samples were collected at pre-determined intervals and analyzed for field parameters which included temperature, pH, specific conductance, turbidity, dissolved oxygen (DO), total dissolved solids (TDS), and oxidation-reduction potential (ORP). The results of these measurements are presented on the Water Quality Sampling Forms in **Attachment 3**. The wells were purged of a minimum of three well volumes, until the field parameters stabilized, or until the wells were purged dry, whichever occurred first.

### Sampling Procedures

Groundwater sampling was conducted in accordance with procedures outlined in SESD Operating Procedures for Groundwater Sampling (SESDPROC-301-R2, March 2013; Sections 4.3.1.1 and 4.3.1.3). Groundwater samples were collected following well purging and appropriate recharge. Copies of the data recorded during purging activities are included in the Water Quality Sampling Forms shown in **Attachment 3**.

Samples were collected via the "straw method" whereby the tubing was allowed to fill with groundwater, the pump was shut off, and the suction portion of the tubing was withdrawn from the well with a thumb placed over the tubing end. The tubing was then withdrawn from the well and then carefully poured into the supplied laboratory containers. The laboratory-supplied sample containers were then carefully filled and labeled. Required sample volumes, types of containers, sample preservatives, and holding times followed guidelines presented in SESD the most current guidelines.

Sample containers were labeled and placed in iced containers for storage to maintain a temperature of 4° C. Chain-of-custody procedures were utilized to record and document sample times and changes of possession.

#### Decontamination Procedures

The only non-disposable sampling equipment utilized during Site activities was the electronic water level indicator. Subsequent to measuring groundwater elevations as described above, the electronic water level indicator tape was decontaminated between each monitoring well measurement in accordance with SESDPROC-205-R2, December 2011, by:

- Alconox and tap water wash;
- Tap water rinse; and
- Deionized water rinse.

In addition to decontamination procedures, monitoring wells were measured from least to most impacted to minimize any potential cross-contamination issues.

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### Analytical Procedures

Analytical parameters included VOCs utilizing EPA Method 8260B.

### CONCEPTUAL SITE MODEL UPDATE

The Conceptual Site Model (CSM) will be updated and revised as Site assessment and receptor characterization activities continue. The following is the updated CSM as of the data available at the time of this report.

#### Soil Data

The VIRP submitted in December 2011 stated that the concentrations of remaining soils did not exceed the notification concentrations found in Appendix I of the Rules for Hazardous Site Response of Type 1 Risk Reduction Standard. The GEPD disagreed in the VIRP comment letter dated April 12, 2012 (Comment #4) pointing out that soil boring BH-5 exhibited a PCE concentration of 0.580 mg/kg, which does not meet the Type 1 RRS of 0.500 mg/kg.

BH-5 was collected on May 14, 2002 and was advanced within the area of the gravel drain field. A soil sample collected at a 2 foot depth interval exhibited a PCE concentration of 0.580 mg/kg. This area was later remediated via soil injection of potassium permanganate in December 2002, April 2003, and June 2004. The concentration of BH-5 indicated that PCE exceeded RRS criteria in May of 2002; however, the sample location was never re-sampled subsequent to the permanganate treatment to verify that the detection had been successfully remediated.

In order to verify that past soil remedial efforts had reduced soil PCE concentrations in and around the location of the sample collected form BH-5 in 2002, a total of five additional soil borings were installed in and around the location of BH-5 in February of 2013. Analytical testing results indicated no detections of PCE or other VOCs above the laboratory detection limits. Thus, the assessment data indicates that not latent soil sources remain at the Site.

### Groundwater Data

A total of three (3) additional groundwater monitoring wells were installed in February 2013 and a fourth well was installed in March 2013 to define the horizontal extent of groundwater impact on the VRP property. Monitoring wells OW-2, OW-5, OW-7, OW-9 to OW-13, and MWW-1 were sampled to evaluate the horizontal distribution and concentration of the shallow groundwater plume during the September 2013 semi-annual sampling event, while monitoring well OW-8D was sampled to evaluate the vertical distribution of the groundwater plume. The following summarizes analytical findings of the sampling efforts:

### Volatile Organic Compounds

None of the shallow monitoring wells described above for evaluating the horizontal extent of the groundwater plume contained concentrations in excess of the laboratory detection limit. Monitoring well OW-8D, sampled to evaluate the vertical extent of

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impact, contained concentrations of 1,1-Dichloroethane ( $12 \mu g/L$ ), 1,1-Dichloroethene ( $18 \mu g/L$ ), and Tetrachloroethene ( $78 \mu g/L$ ) in excess of the laboratory detection limit. All other concentrations of VOCs were reported below the laboratory detection limits. The analytical data suggests that the shallow groundwater plume has decreased to below laboratory reporting limits, while select concentrations of VOC constituents in the deeper monitoring point (OW-8D) have increased compared to prior sampling events. Analytical data are summarized on **Table 2** in **Attachment 2** while the laboratory analytical data reports and accreditation are provided in **Attachment 4**. **Figure 4** in **Attachment 1** summarizes the current detections of VOCs.

### Receptor Survey

### Groundwater Pathway

The groundwater plume had been horizontally defined on the VRP property. The off-Site migration of the groundwater plume may be monitored through periodic sampling (as necessary), to demonstrate that that the plume is not migrating to a receptor point. No drinking water receptors have been identified within applicable radii. Thus, there is no complete exposure pathway for groundwater.

### Surface Water Pathway

Mill Creek is located approximately 1,000 feet east of the Site (see Figure 1) and flows in a north-south direction. Topographic gradients in the vicinity of the property slope in a southeasterly direction toward Mill Creek mirroring groundwater flow direction data from Site monitoring wells. Potentiometric data gathered during September 2013 indicates that shallow groundwater flow is flowing toward Mill Creek. Presently, the shallow groundwater plume is below laboratory detection limit concentrations for all analyzed constituents. As such, there is no complete surface water pathway.

### Soil Pathway

The VIRP comment letter dated April 12, 2012 indicated that a detection of PCE of 0.580 mg/kg at soil boring BH-5 at 2 feet did not meet any RRS criteria. Additionally, the comment letter further stated that, because the RRS criteria are exceeded, the EPD cannot confirm that the inhalation, ingestion, and dermal contact risks are minimal. However, the area in/around BH-5 was treated with potassium permanganate injections in 2002, 2003, and 2004. Thus, it is likely that this detection of PCE in BH-5 at 2 feet was remediated to below RRS criteria as a result of these remedial efforts.

Post-remedial evaluation of the location of BH-5 was conducted in February of 2013 via the installation of five soil borings in /around the location of BH-5. Laboratory analytical testing results indicated concentrations of VOCs in all samples below the laboratory detection limits. As such, the soil pathway is incomplete and not a risk to human health or environmental receptors.

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### Vapor Intrusion Pathway

As stated in the 1<sup>st</sup> Semi-annual Progress Report dated October 12, 2012, the only groundwater monitoring well evaluating impacts below building structures was monitoring well OW-6. The concentration of groundwater detected in OW-6 during the September 2012 sampling event were entered into the EPA's Groundwater Concentration to Indoor Air Concentration (GWC-IAC) Calculator Version 2.0, May 2012 RSLs. Evaluating these levels using the OSWER calculator indicated that the shallow groundwater levels of PCE are below the guidance levels using a 1 x 10<sup>-5</sup> risk factor based on residential usage. Therefore, the vapor exposure pathway does not pose a significant risk to workers at the Site.

#### ADDITIONAL GROUNDWATER ASSESSMENT

The horizontal extent of shallow groundwater impact has been defined and presently, the monitoring wells evaluated as part of this 3<sup>rd</sup> semi-annual sampling update do not contain VOC concentrations in excess of laboratory detection limits. Presently, monitoring well OW-8D is the deepest well at the VIRP property. The most recent round of groundwater samples collected in September 2013 indicates that concentration trend in OW-8D is increasing. Deeper groundwater assessment activities will continue as the CSM is updated with the goal of vertical delineation within 30 months of VIRP approval as detailed in the April 12, 2012 schedule.

#### **CORRECTIVE ACTION EVALUATION**

The remedial levels that the VRP property has to meet in order to demonstrate compliance with applicable RRS is as follows:

Regulated Constituent	CAS Number	Type 1/3 RRS Criteria (µg/l)	Type 2/4 Criteria (μg/l)	Most Recent Detection (μg/l)*
1,1-Dichloroethane (1,1-DCA)	75-34-3	4,000	NC	12 (OW-8D)
1,1-Dichloroethene (1,1-DCE)	75-35-4	7	NC	18 (OW-8D)
Tetrachloroethene (PCE)	127-18-4	5	19/98**	78 (OW-8D)

#### **Notes**:

ND - Not Detected

NC - Not Calculated.

<sup>\*-</sup> Based upon laboratory analytical testing data from September 2013.

<sup>\*\*-</sup> Based upon the approved Type 2 RRS for PCE in comment #5 of EPD's April 12, 2012 VIRP Comment Letter.

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A comparison of the most recent concentrations of regulated substances to respective RRS criteria indicates that groundwater is in compliance with applicable clean-up criteria with the exception of 1,1-DCE, which exceeds the Type 1/3 RRS criteria of 7  $\mu$ g/L. Future activities may include the preparation of a Site-specific Type 4 RRS for 1,1,-DCE. The Type 2 standard for PCE is exceeded in OW-8D, but is below the Type 4 RRS of 98  $\mu$ g/L.

Currently, the only concentrations of regulated constituents are being reported in the deep monitoring well OW-8D. The nearest receptor is Mill Creek, located approximately 1,000 feet east of the Site. As such, no corrective action activities are planned for groundwater detections as they pose no significant risk to a human and/or environmental receptor.

GaiaTech corresponded with Jason Metzger and Antonia Beavers with the Georgia EPD on September 26, 2013 to discuss the current Site data and the possibility of submitting a Compliance Status Report (CSR) in lieu of this current 3<sup>rd</sup> Semi-Annual Progress Report. According to the Georgia EPD, vertical delineation of the groundwater plume would be required, even if no drinking water receptors are identified since the Site was listed on the HSI for the "Groundwater Pathway". As such, Mohawk plans on certifying compliance with applicable RRSs subsequent to vertical delineation completion. Complete vertical delineation of the groundwater plume is required prior to October 12, 2014, per the VIRP Milestone Schedule.

### PROFESSIONAL CERTIFICATION AND SUMMARY OF HOURS

The professional certification and summary of hours in included in **Attachment 5**.

Please do not hesitate to contact any of the undersigned if you have any questions or need additional information.

Sincerely,

GAIATECH INCORPORATED

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Attachments:

Attachment 1 - Maps

Figure 1 - Site Location Map

Figure 2 - Site Layout and Sample Location Map

Attachment 2 - Tables

Table 1 - Soil Analytical Testing Data Summary Table

Table 2 - Sub-Slab Soil Gas Testing Data Summary Table

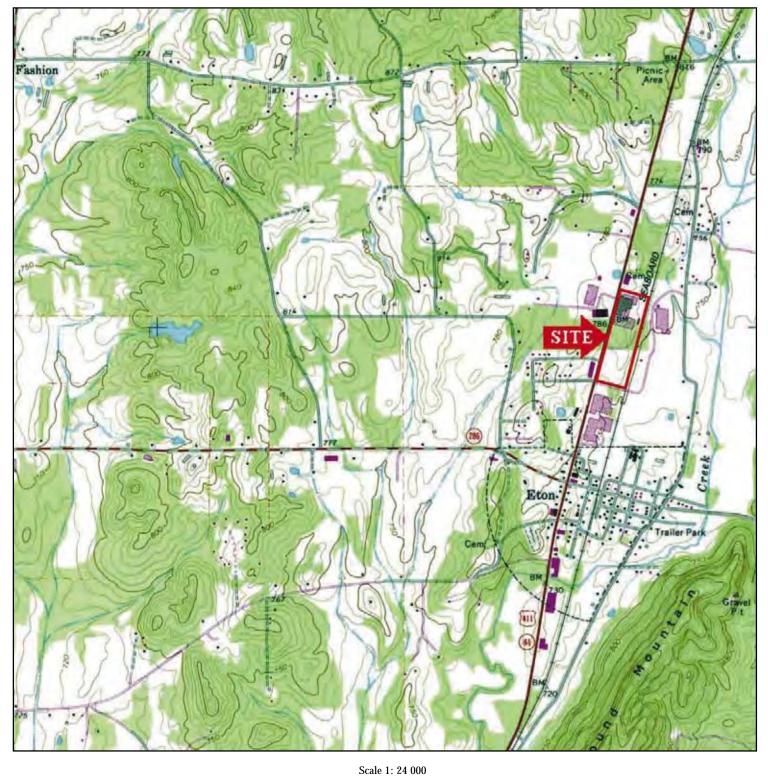
Attachment 3 - Monitoring Well Purging and Sampling Information

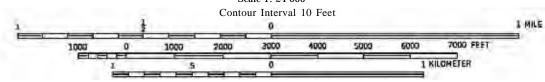
Attachment 4 - Laboratory Analytical Data Reports

Attachment 5 - Professional Certification and Summary of Hours



**MAPS** 







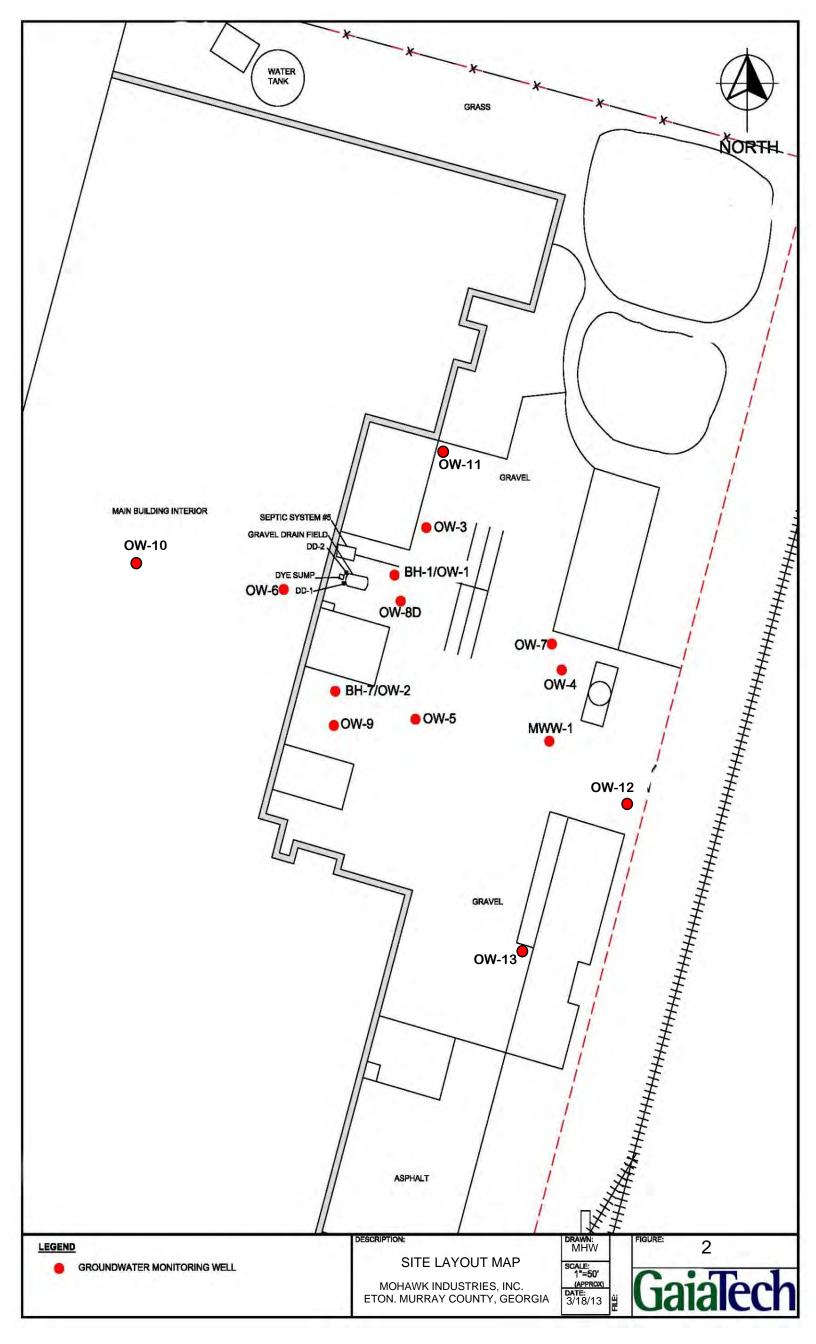
Quadrangle Location

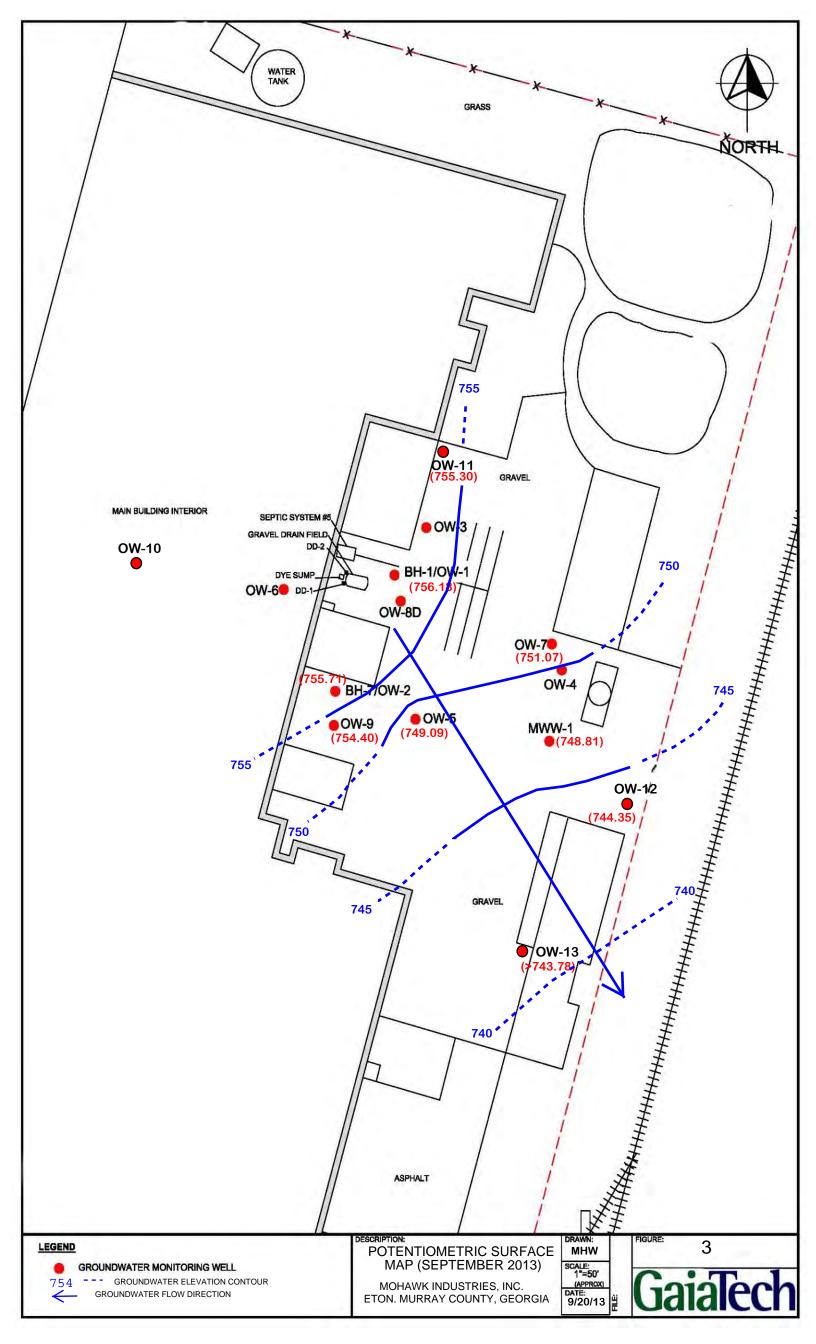
UNITED STATES GEOLOGICAL SURVEY DEPARTMENT OF THE INTERIOR/USGS CHATWORTH QUADRANGLE GEORGIA 7.5 MINUTE SERIES (TOPOGRAPHIC)

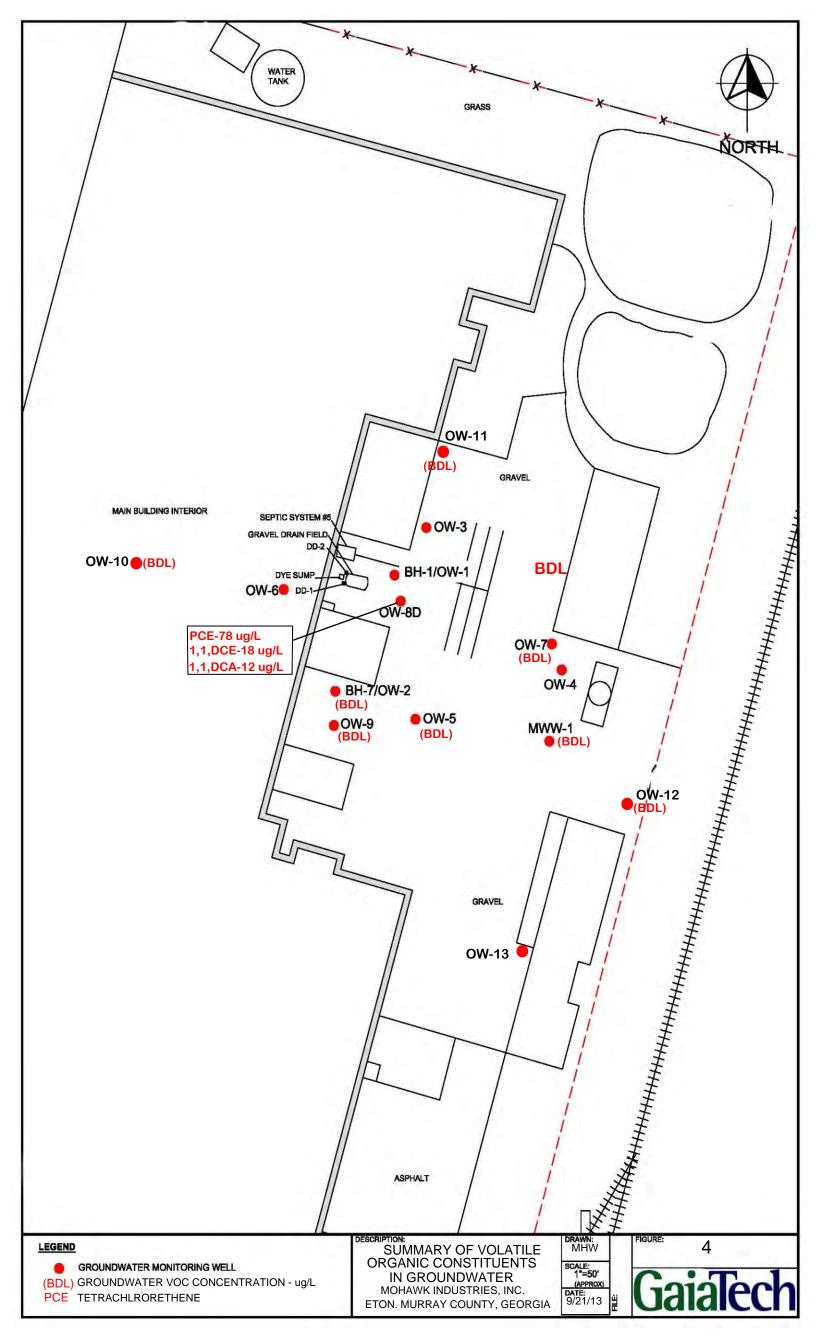
7.5 MINUTE SERIES (TOPOGRAPHIC) 1972 PHOTOREVISED 1985











### **ATTACHMENT 2**

**TABLES** 

## TABLE 1 SUMMARY OF GROUNDWATER ELEVATION DATA

### Mohawk Industries Eton, Georgia GaiaTech Project No. 152194.300.00

Well I.D.	Date	Top of Casing Elevation (feet)	Total Well Depth (feet)	Screen Interval (feet)	Screened Interval Elevation (feet)	Depth to Groundwater (feet)	Water Level Elevation (feet)
	03/16/11	775 70				-	-
OVAL 4	09/07/12	775.72	10.50	22 to 20	750 70 to 747 70	19.40	756.32
OW-1	03/18/13	774.04	19.50	23 to 28	752.72 to 747.72	18.65	756.29
	09/12/13	774.94				18.76	756.18
	03/16/11	775.80				14.21	761.59
OW-2	09/07/12	775.80	28.00	23 to 28	752.80 to 747.80	18.49	757.31
OW-2	03/18/13	775.02	20.00	25 10 20	732.00 10 747.00	15.58	759.44
	09/12/13	770.02				19.31	755.71
OW-3	03/16/11	775.46	28.00	23 to 28	752.46 to 747.46	24.11	751.35
	09/07/12	770.40	20.00	20 10 20	702.40 10 747.40	Destr	
	03/16/11	774.56				23.21	751.35
OW-5	02/25/13	771.00	28.00	23 to 28	751.56 to 746.56	14.60	759.96
<b>3.1. 3</b>	03/18/13	773.80	20.00	20 10 20	701.00 10 740.00	16.69	757.11
	09/12/13	5.55				24.71	749.09
	03/16/11	778.63				31.99	746.64
OW-6	09/07/13	7.0.00	42.90	23 to 28	730.73 to 735.73	36.41	742.22
	03/18/13	779.52				29.21	750.31
	03/16/11					NS	NS
	09/07/12	772.56				19.46	753.10
OW-7	02/25/13		28.00	23 to 28	749.56 to 744.56	12.28	760.28
	03/18/13	772.56				15.61	756.95
	09/12/13	7.2.00				21.49	751.07
	03/16/11	774.88				28.60	746.28
OW-8D	09/07/13		48.82	TBD	TBD to 726.06	40.82	734.06
S	03/18/13	774.88	10.02		10 10 120100	29.89	744.99
	09/12/13					36.96	737.92
	03/16/11					12.86	763.04
	09/07/12	775.90				20.81	755.09
OW-9	02/25/13		28.00	23 to 28	752.90 to 747.90	15.16	760.74
	03/18/13	775.14				17.14	758.00
	09/12/13					20.74	754.40
	02/25/13					40.48	738.97
OW-10	03/18/13	779.45	45.00	30 to 45	764.45 to 749.45	37.95	741.50
	09/12/13					37.55	741.90
<b></b>	02/25/13		20.55	4	<b>-0.0</b>	13.75	761.59
OW-11	03/18/13	775.34	30.00	15 to 30	760.34 to 745.34	15.71	759.63
	09/12/13					20.04	755.30
<b></b>	02/25/13		22.22	45	<b></b>	14.22	756.24
OW-12	03/18/13	770.46	30.00	15 to 30	755.46 to 740.46	17.91	752.55
	09/12/13					26.11	744.35
OW-13	03/18/13	773.78	30.00	15 to 30	758.78 to 743.78	22.33	751.45
	09/12/13		33.30	13 13 33		DF	RY
	03/16/11					20.00	753.35
	09/07/12	773.35				24.23	749.12
MWW-1	02/25/13		35.00	20 to 35	753.35 to 738.35	15.41	757.94
	03/18/13	772.58				17.13	755.45
	09/12/13	112.00				23.77	748.81

### NOTES:

TBD - Well construction details not available. Additional measures may be implemented to gather data gaps.

<sup>\*</sup>Monitoring wells were re-surveyed on 3/18/13 to a common benchmark. Newly recorded elevations are indicated in top of casing elevation column.

NS - Not Sampled.

NA - Not Applicable.

## TABLE 2 GROUNDWATER ANALYTICAL SUMMARY - VOLATILE ORGANIC COMPOUNDS

### Mohawk Industries Eton, Georgia GaiaTech Project No. 152194.300.00

				Con	centration,	ug/l				
Sample Location	Date Collected	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2- DCE	PCE	TCE	Vinyl Chloride		
	5/21/2002	ND	7.7	13	ND	96	ND	ND		
	2/4/2003	ND	ND	ND	5.8	66	ND	ND		
	6/25/2003	ND	6.5	ND	ND	73	ND	ND		
OW-1	11/21/2003	ND	ND	ND	5.4	6.3	ND	ND		
OW-1	3/4/2004	ND	ND	ND	14	17	ND	ND		
	8/13/2004	ND	ND	ND	ND	73	ND	ND		
	1/28/2005	ND	ND	ND	7.6	7.8	ND	ND		
	9/7/2012	Well Damaged - Obstruction at 19.5 ft.								
	5/21/2002	ND	19	14	ND	29	ND	ND		
	2/4/2003	ND	13	ND	ND	ND	ND	ND		
	6/25/2003	ND	8	ND	ND	ND	ND	ND		
	11/21/2003	ND	ND	ND	ND	ND	ND	ND		
014/0	3/4/2004	ND	ND	ND	ND	ND	ND	ND		
OW-2	8/13/2004	ND	ND	ND	ND	ND	ND	ND		
	12/2/2004	ND	12	ND	ND	ND	ND	ND		
	3/16/2011	ND	ND	ND	ND	6	ND	ND		
	9/7/2012	ND	ND	ND	ND	ND	ND	ND		
	9/12/2013	ND	ND	ND	ND	ND	ND	ND		
	5/21/2002	ND	ND	ND	ND	ND	ND	ND		
	8/25/2003	ND	ND	ND	ND	ND	ND	ND		
0.14.2	11/21/2003	ND	ND	ND	ND	ND	ND	ND		
OW-3	3/4/2004	ND	ND	ND	ND	ND	ND	ND		
	8/13/2004	ND	ND	ND	ND	ND	ND	ND		
	9/7/2012			V	/ell Destroye	ed				
	5/21/2002	ND	7.3	ND	ND	5.5	ND	ND		
OW-4	2/4/2003	ND	5.2	ND	ND	6.7	ND	ND		
	8/13/2004	ND	ND	ND	ND	ND	ND	ND		
	5/21/2002	ND	ND	ND	ND	ND	ND	ND		
OW-5	2/25/2013	ND	ND	ND	ND	11	ND	ND		
	9/12/2013	ND	ND	ND	ND	ND	ND	ND		
	8/13/2004	ND	22	ND	ND	ND	ND	ND		
0)4/ 0	12/2/2004	ND	40	ND	ND	ND	ND	ND		
OW-6	3/16/2011	ND	17	6	ND	5	ND	ND		
	9/7/2012	ND	34	5	ND	6.4	ND	ND		
	8/13/2004	ND	ND	ND	ND	ND	ND	ND		
	12/2/2004	ND	ND	ND	ND	ND	ND	ND		
OW-7	9/7/2012	ND	ND	ND	ND	ND	ND	ND		
	2/25/2013	ND	ND	ND	ND	ND	ND	ND		
	9/12/2013	ND	ND	ND	ND	ND	ND	ND		

## TABLE 2 GROUNDWATER ANALYTICAL SUMMARY - VOLATILE ORGANIC COMPOUNDS

### Mohawk Industries Eton, Georgia GaiaTech Project No. 152194.300.00

Commis	Data			Con	centration,	ug/l		
Sample Location	Date Collected	1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2- DCE	PCE	TCE	Vinyl Chloride
	5/18/2005	ND	13	8.5	ND	6.5	ND	ND
OW-8D	3/16/2011	ND	9	11	ND	31	ND	ND
O V V - 6 D	9/7/2012	ND	8.1	8.3	ND	17	ND	ND
	9/12/2013	ND	12.0	18.0	ND	78	ND	ND
	5/18/2005	ND	ND	ND	ND	ND	ND	ND
	3/16/2011	ND	ND	ND	ND	ND	ND	ND
OW-9	9/7/2012	ND	ND	ND	ND	ND	ND	ND
	2/25/2013	ND	ND	ND	ND	ND	ND	ND
	9/12/2013	ND	ND	ND	ND	ND	ND	ND
OW-10	2/25/2013	ND	ND	ND	ND	ND	ND	ND
O VV-10	9/12/2013	ND	ND	ND	ND	ND	ND	ND
OW-11	2/25/2013	ND	ND	ND	ND	ND	ND	ND
OW-11	9/12/2013	ND	ND	ND	ND	ND	ND	ND
OW-12	2/25/2013	ND	ND	ND	ND	ND	ND	ND
OW-12	9/12/2013	ND	ND	ND	ND	ND	ND	ND
	3/18/2013	ND	ND	ND	ND	ND	ND	ND
OW-13	9/12/2013				Dry			
	5/31/2002	ND	ND	ND	ND	32	ND	ND
	2/4/2003	ND	ND	ND	ND	ND	ND	ND
	6/25/2003	ND	ND	ND	ND	ND	ND	ND
	11/21/2003	ND	ND	ND	ND	ND	ND	ND
MWW-1	3/4/2004	ND	ND	ND	ND	ND	ND	ND
INI VV VV - I	8/13/2004	ND	ND	ND	ND	13	ND	ND
	12/2/2004	ND	ND	ND	ND	13	ND	ND
	3/16/2011	ND	ND	ND	ND	ND	ND	ND
	9/7/2012	ND	ND	ND	ND	10	ND	ND
	9/12/2013	ND	ND	ND	ND	ND	ND	ND

### NOTES:

ND - Not detected above laboratory detection limits.

### **ATTACHMENT 3**

MONITORING WELL PURGING AND SAMPLING INFORMATION

Monitoring Well Purging & Sampling Information									
Project: Diamond Rug	g and Carpet Mills (Mohawk)	<b>Project No.:</b> 150314.421.00				Date: 9/21/13			
Well Information									
Well Identification No:	OW-5 Location:	Eton, Georgia							
Well Diameter:	1-Inch Well Cons	ruction: Schedule 40 PVC							
Total Well Depth from		00 feet							
Depth to Water from To		'1 feet							
Length of Static Water	Column: 3.2	29 feet							
Well Observations									
General Condition of W	/ell: Good	General Condition of surro	ounding area: Good						
LNAPL observation: NA	Ą	Method of measure: NA							
		W 12							
	= Height (Ht) of water in (1-inch well)	well x K							
	(2-inch well)								
	(3-inch well)								
	? (4-inch well)								
Volume of water in well	,	gallons/linear ft.			0.39	gallons			
	(i iii /i i i i i i i i i i i i i i i i	(1 well volume)				(3 well volumes)			
Well Purging		( · ······················)				(0 11011 101011100)			
Purging method: Perista	altic								
Well Volumes	рН	Conductivity (ms/cm)	Dissolved Oxygen	Temperature ( <sup>0</sup> C)	ORP	Turbidity (NTUs)			
Initial Reading	4.44	0.040	3.50	18.77	450	133			
1	4.53	0.044	3.33	18.66	433	64			
2									
2									
4									
5									
6									
Purged To Dryness:	Purged dry after one we	I volume.							
Sample Information									
Method of sampling:	Straw Method								
		use sampling equipment per ea	sch well ner sampling event	Non-disposal sampling equipm	ent decontaminated ne	r annlicable LISEPA SESD			
procedures.	dares. Dealeated, one time	ase sampling equipment per ce	ion well per sampling event.	Non disposal sampling equipm	chi decontaminated pe	applicable GGEI 71 GEGD			
Sample ID	Container	Preservative		Analys	ses				
NII 0040 0111 -				,					
MI-0913-OW-5	2-40ML	HCL		VOCs via EPA N	Method 8260				
	Preservation: Ice Filled C								
	nalytical Environmental Se	ervices, Inc.	Via: Hand Delivery						
Chain of Custody comp									
GaiaTech Personnel:	William H.	Lucas & Michael H. Wilson							

Project: Diamond Ru	g and Carpet Mills (Mohawk)	Project No.: 150314.421.00				Date: 9/21/13
Well Information	<u> </u>	<u>'</u>				
Well Identification No:	OW-2 Location:	Eton, Georgia				
Well Diameter:	1-Inch Well Cons	truction: Schedule 40 PVC				
Total Well Depth from	TOC: 28.	00 feet				
Depth to Water from T	OC: 19.	31 feet				
_ength of Static Water	Column: 8.	69 feet				
Well Observations						
General Condition of V	Vell: Good	General Condition of surro	ounding area: Good			
LNAPL observation: N	A	Method of measure: NA				
	II = Height (Ht) of water in	well x K				
	4 (1-inch well) 7 (2-inch well)					
	1 (3-inch well)					
	2 (4-inch well)					
Volume of water in wel	,	gallons/linear ft.			1.04	gallons
	()	(1 well volume)				(3 well volumes)
Well Purging						,
Purging method: Perist	altic					
Well Volumes	рН	Conductivity (ms/cm)	Dissolved Oxygen	Temperature (°C)	ORP	Turbidity (NTUs
Initial Reading	6.33	0.196	2.28	18.71	175	410
1	6.21	0.194	2.05	18.77	176	27
2						
2						
4						
5						
6	D I I (6 4 II	.1				
Purged To Dryness:	Purged dry after 1 well v	olume.				
Sample Information						
Method of sampling:	Straw Method					
Decontamination proce		use sampling equipment per ea	nch well per sampling event.	Non-disposal sampling equipm	ent decontaminated pe	er applicable USEPA SESD
procedures.	1 2					
Sample ID	Container	Preservative		Analys	es	
MI-0913-OW-2	2-40ML	HCL		VOCs via EPA N	Method 8260	
Sample Transport and	Preservation: Ice Filled (	<u>l</u> Cooler				
	nalytical Environmental S		Via: Hand Delivery			
	-		<u> </u>			

		Monitoring Well	l Purging & Sam	pling Information		
	and Carpet Mills (Mohawk)	<b>Project No.:</b> 150314.421.00				Date: 9/21/13
Vell Information						
Vell Identification No:	OW-7 Location:	Eton, Georgia				
Vell Diameter:		ruction: Schedule 40 PVC				
otal Well Depth from T		00 feet				
Depth to Water from TO	<u>C:</u> 21.4	9 feet				
ength of Static Water C	Column: 6.5	51 feet				
Well Observations						
Seneral Condition of We	ell: Good	General Condition of surro	ounding area: Good			
NAPL observation: NA		Method of measure: NA				_
/olume of water in well	= Height (Ht) of water in	well x K				
vhere: K = 0.04	(1-inch well)					
0.17	(2-inch well)					
0.571	(3-inch well)					
0.652	(4-inch well)					
olume of water in well	(Ht. x K): <b>0.26</b>	gallons/linear ft.			0.78	gallons
		(1 well volume)				(3 well volumes)
Vell Purging						
urging method: Peristal	tic					
Well Volumes	рН	Conductivity (ms/cm)	Dissolved Oxygen	Temperature (°C)	ORP	Turbidity (NTUs)
Initial Reading	5.69	0.307	7.80	18.07	293	5.8
1	5.69	0.297	4.60	17.86	292	3.7
2						
3						
4						
5						
6						
Purged To Dryness:	Purged dry after one we	l volume.				<u> </u>
Sample Information						
	Straw Method					
		use sampling equipment per ea	ch well per sampling event.	Non-disposal sampling equipm	ent decontaminated pe	r applicable USEPA SESD
rocedures.						
Sample ID	Container	Preservative		Analys	ses	
MI-0913-OW-7	2 - 40 ml	HCL		Method 8260B Vo	latile Organics	
Sample Transport and F	Preservation: Ice Filled C	) oolor				
			Vio: Hand Delivery			
	alytical Environmental Se	ervices, inc.	Via: Hand Delivery			
Chain of Custody compl						
aiaTech Personnel:	William H.	Lucas & Michael H. Wilson				

Project: Diamond Pug	and Carpet Mills (Mohawk)	Project No.: 150314.421.00				Date: 9/21/13
Well Information	and Carpet Willis (Worlawk)	F10 ect No.: 130314.421.00				Date. 9/21/13
Well Identification No:	OW-8D Location:	Eton, Georgia				
Well Diameter:		struction: Schedule 40 PVC				
Total Well Depth from 7	OC: 48.	82 feet				
Depth to Water from TO	OC: <b>36.</b>	96 feet				
ength of Static Water	Column: 11.	86 feet				
Well Observations General Condition of W	ell: Good	General Condition of surro	ounding area. Good			
LNAPL observation: NA		Method of measure: NA	driding area. Cood			
		Motriou of Modedie: 1171				
Volume of water in well	= Height (Ht) of water in	well x K				
	(1-inch well)					
	(2-inch well)					
	(3-inch well)					
	(4-inch well)					
Volume of water in well	(Ht. x K): <b>0.47</b>	gallons/linear ft.			1.42	gallons
Noll Durging		(1 well volume)				(3 well volumes)
Well Purging Purging method: Perista	ltic					
				0		
Well Volumes	рН	Conductivity (ms/cm)	Dissolved Oxygen	Temperature ( <sup>0</sup> C)	ORP	Turbidity (NTUs)
Initial Reading	4.97	0.024	1.87	22.39	299	977
1	4.77	0.022	1.64	21.97	274	654
2	4.62	0.023	0.85	21.46	290	33
3	4.66	0.022	0.88	21.50	277	56
4						
5						
6						
Purged To Dryness:	Purged dry after 3 well	volumes.				
Sample Information						
Method of sampling:	Straw Method					
		vuos compling aquipment per oc	noh wall par campling avent	Non diaposal campling aguipm	ant decenteminated no	or applicable LISEDA SEST
procedures.	uu co. Deuloateu, one time	e use sampling equipment per ea		Tron-disposal sampling equipm	ен иесонанилатей ре 	ei applicable USEFA SESL
Sample ID	Container	Preservative		Analys	ses	
MI-0913-OW-8D	2 - 40 ml	HCL		Method 8260B Vol	atile Organics	
OI		2				
	Preservation: Ice Filled alytical Environmental S		Via: Hand Delivery			
)   - D (' · · · (' · · · ^						

Monitoring Well Purging & Sampling Information									
Project: Diamond Rug	and Carpet Mills (Mohawk)	<b>Project No.</b> : 150314.421.00				Date: 9/21/13			
Well Information									
Well Identification No:	OW-9 Location:	Eton, Georgia							
Well Diameter:	1-Inch Well Cons	truction: Schedule 40 PVC							
Total Well Depth from T	OC: 28.	00 feet							
Depth to Water from TC	OC: <b>20.</b>	74 feet							
Length of Static Water (	Column: 7.	26 feet							
Well Observations									
General Condition of W	ell: Good	General Condition of surro	ounding area: Good						
LNAPL observation: NA		Method of measure: NA							
Nalisara af siata i a siali	Hainkt (Ht) of water in								
Volume of water in well where: K = 0.04	= Heignt (Ht) of water in (1-inch well)	well x K							
	(2-inch well)								
	(3-inch well)								
	(4-inch well)								
Volume of water in well	,	gallons/linear ft.			0.87	gallons			
	,	(1 well volume)				(3 well volumes)			
Well Purging						,			
Purging method: Peristal	tic								
Well Volumes	рН	Conductivity (ms/cm)	Dissolved Oxygen	Temperature (°C)	ORP	Turbidity (NTUs)			
Initial Reading	5.51	0.348	4.49	19.14	279	182			
1	6.33	0.268	2.81	19.60	257	91.4			
2	6.31	0.271	2.77	19.55	245	7.9			
3	6.28	0.270	2.22	19.49	234	8.9			
4									
5									
6									
Purged To Dryness:	Purged dry after 3 well v	volumes							
Sample Information									
	Straw Method								
		una campling aquipment per co	ach well per compling event	Non-disposal sampling equipm	ant desentaminated no	or applicable LISEDA SEST			
procedures.	iui es. Deulcaleu, Ulle IIIIle	use sampling equipment per ea	ion wen per sampling event.	rion-disposal sampling equipm	en decontaminated pe	applicable USEFA SESL			
Sample ID	Container	Preservative		Analys	ses				
-				·					
MI-0913-OW-9	2 - 40 ml	HCL		Method 8260B Vol	atile Organics				
Sample Transport and F	Preservation: Ice Filled (	Cooler							
Sample Destination: An			Via: Hand Delivery						
Chain of Custody compl		,							
GaiaTech Personnel:		Lucas & Michael H. Wilson							

		Monitoring Well Pu │	<u> </u>	•		
	ug and Carpet Mills (Mohawk)	<b>Project No.:</b> 150314.421.00				Date: 9/21/13
Well Information						
Well Identification No:		Eton, Georgia				
Well Diameter:	•	ruction: Schedule 40 PVC				
Total Well Depth from		0 feet				
Depth to Water from T		5 feet				
Length of Static Water	r Column: 7.4	5 feet				
Well Observations						
General Condition of \	Well: Good	General Condition of surro	ounding area: Good			
LNAPL observation: N	IA	Method of measure: NA				
Volume of water in we	ell = Height (Ht) of water in	woll v K				
	4 (1-inch well)	WOII A IX				
	7 (2-inch well)					
	1 (3-inch well)					
	2 (4-inch well)					
Volume of water in we	,	gallons/linear ft.			3.80	gallons
	, ,	(1 well volume)				(3 well volumes)
Well Purging		,				,/
	ble speed electric submersible	e well pump.				
Well Volumes	nU	Conductivity	Discolused Organia	T	ODD	TL ( / A   T.   )
vveii voiumes	pН	Conductivity (ms/cm)	Dissolved Oxygen	Temperature ( <sup>0</sup> C)	ORP	Turbidity (NTUs)
Initial Reading	5.69	0.179	2.07	19.2	186	446
1	5.70	0.181	2.13	19.08	187	98
2	5.69	0.180	2.21	18.98	184	9.9
3						
4						
5						
6						
Purged To Dryness:	Purged dry after 2 well v	olumes.				•
Sample Information						
Method of sampling:						
Decontamination proceprocedures.	edures: Dedicated, one time	use sampling equipment per ea	ich well per sampling event.	Non-disposal sampling equipm	ent decontaminated pe	er applicable USEPA SESE
Sample ID	Container	Preservative		Analys	:AS	
Odilipie ID	Jonanie	i rescivative		Allalys		
MI-0913-OW-10	2 - 40ML	HCL		VOCs via EPA N	Aothod 8260	
IVII-0813-0VV-10	Z - 4UIVIL	ΠUL		VOUS VIA EPA II	115ti 10ti 020t	
Sample Transport and	I Preservation:					
Sample Destination:			Via:			
Chain of Custody com	nleted:		v ion			
nain oi Cheidheach chin						

Bests ( D) 15	-10	Desired N. Arcold (2)			1	D-1- 0/04/40
Project: Diamond Rug an Well Information	nd Carpet Mills (Mohawk)	Project No.: 150314.421.00				Date: 9/21/13
Well Identification No:	OW-11 Location:	Eton, Georgia				
Well Diameter:		struction: Schedule 40 PVC				
Total Well Depth from TC	•	00 feet				
Depth to Water from TOC		.04 feet				
 _ength of Static Water Co		.96 feet				
· ·						
Well Observations						
General Condition of Wel	: Good	General Condition of surro	ounding area: Good			
LNAPL observation: NA		Method of measure: NA				
		11 17				
Volume of water in well = where: $K = 0.04$ (	Height (Ht) of water in I-inch well)	I Well X K				
	r-inch weil) 2-inch well)					
1	B-inch well)					
	I-inch well)					
Volume of water in well (F	· · · · · · · · · · · · · · · · · · ·	gallons/linear ft.			5.08	gallons
	,	(1 well volume)				(3 well volumes)
Well Purging						
Purging method: Variable	speed electric submersit	ole well pump.				
Well Volumes	рН	Conductivity (ms/cm)	Dissolved Oxygen	Temperature (°C)	ORP	Turbidity (NTUs)
Initial Reading	4.66	0.180	1.11	21.97	270	907
1	5.01	0.021	0.91	21.85	251	123
2	5.03	0.020	0.93	21.9	245	8
3	5.02	0.020	0.99	21.88	236	8.9
4						
5						
6						
Purged To Dryness:						
Sample Information						
Method of sampling:						
Decontamination procedu procedures.	res: Dedicated, one time	e use sampling equipment per ea	ach well per sampling event.	Non-disposal sampling equipm	ent decontaminated pe	er applicable USEPA SESL
Sample ID	Container	Preservative		Analys	ses	
•						
MI-0213-OW-11	2 - 40ML	HCL		VOCs via EPA N	Method 8260	
Sample Transport and Pr	eservation:					
Sample Destination: Chain of Custody comple			Via:			

			nging and Devel	opment Information	<u> </u>	
Project: Diamond Ru	ug and Carpet Mills (Mohawk)	<b>Project No.:</b> 150314.421.00				Date: 9/21/13
Well Information						
Well Identification No:	OW-12 Location:	Eton, Georgia				
Well Diameter:		ruction: Schedule 40 PVC				
Total Well Depth from		00 feet				
Depth to Water from T		1 feet				
_ength of Static Water	r Column: 3.8	9 feet				
Well Observations						
General Condition of V	Well: Good	General Condition of surro	ounding area: Good			
LNAPL observation: N	IA	Method of measure: NA				
Volume of water in we	ell = Height (Ht) of water in	well x K				
	4 (1-inch well)					
	7 (2-inch well)					
	1 (3-inch well)					
	2 (4-inch well)					
Volume of water in we	ell (Ht. x K): <b>0.66</b>	gallons/linear ft.			1.98	gallons
		(1 well volume)				(3 well volumes)
Well Purging	hla aa aa dalaatsia ay baa aa ih l					
Purging method: Varial	ble speed electric submersibl	e well pump.				
Well Volumes	рН	Conductivity (ms/cm)	Dissolved Oxygen	Temperature ( <sup>0</sup> C)	ORP	Turbidity (NTUs)
Initial Reading	5.56	0.356	3.47	17.5	130	165
1	5.44	0.343	3.65	17.53	131	64
2	5.41	0.345	3.17	17.51	126	8.6
3						
4						
5						
6						
Purged To Dryness:	Purged dry after 2 well v	olumes				
Sample Information						
Method of sampling:						
<del>_</del>	edures: Dedicated, one time	use sampling equipment per ea	ach well per sampling event.	Non-disposal sampling equipm	ent decontaminated pe	er applicable USEPA SESD
procedures.	1 2	<del></del>				
Sample ID	Container	Preservative		Analys	ses	
MI-0913-OW-12	2 - 40ML	HCL		VOCs via EPA N	Method 8260	
Sample Transport and	I Preservation:					
Sample Destination:			Via:			
Chain of Custody com	pleted:					
	•	Lucas & Michael H. Wilson				

		Monitoring Well Pu		<u> </u>	-	
Project: Diamond Rug and	Carpet Mills (Mohawk)	<b>Project No.:</b> 150314.421.00				Date: 9/21/13
Vell Information	MANAL A Landing	Etan Oannia				
	MWW-1 Location:	Eton, Georgia				
/ell Diameter:		struction: Schedule 40 PVC				
otal Well Depth from TOC		00 feet				
Depth to Water from TOC:		77 feet				
ength of Static Water Colu	<u>ımn: 11.</u>	23 feet				
Vell Observations						
General Condition of Well:	Good	General Condition of surro	ounding area: Good			
NAPL observation: NA		Method of measure: NA				
Volume of water in well = F	eight (Ht) of water in	well x K				
	nch well)					
0.17 (2-	nch well)					
0.571 (3-	nch well)					
0.652 (4-	nch well)					
Volume of water in well (Ht	x K): <b>1.91</b>	gallons/linear ft.			5.73	gallons
		(1 well volume)				(3 well volumes)
Well Purging						
Purging method: Variable sp	eed electric submersib	le well pump.		1		
Well Volumes	рН	Conductivity (ms/cm)	Dissolved Oxygen	Temperature (°C)	ORP	Turbidity (NTUs)
Initial Reading	5.65	0.356	6.18	18.69	274	288
1	5.97	0.348	4.49	19.14	279	182
2	6.24	0.282	2.55	19.76	261	110
3	6.20	0.285	2.45	19.70	255	44
4						
5						
6						
Purged To Dryness: Pu	rged dry after 3 well v	volumes.				
Sample Information						
Method of sampling:						
Decontamination procedure procedures.	s: Dedicated, one time	use sampling equipment per ea	acn well per sampling event.	Non-disposal sampling equipm	ent decontaminated pe	r applicable USEPA SESD
Sample ID	Container	Preservative		Analys	ses	
Campic ib	- Container	i reservative		Analys		
MI-0913-OW-MWW-1	2 - 40ML	HCL		VOCs via EPA N	Method 8260	
1011-03 13-0 44-14144 44-1	Z - 4UIVIL	HOL		VOCS VIA EPA N	MELLIUU OZOU	
2						
Sample Transport and Pres	servation:		\ P			
Sample Destination:			Via:			
Chain of Custody complete	1					

### **ATTACHMENT 4**

# LABORATORY ANALYTICAL DATA REPORTS

### ANALYTICAL ENVIRONMENTAL SERVICES, INC.



September 20, 2013

Mike Wilson
GaiaTech, Inc.
3525 Piedmont Rd. NE
Atlanta
GA 30305

TEL: (404) 812-0001 FAX: (404) 812-1992

RE: Mohawk

Dear Mike Wilson: Order No: 1309804

Analytical Environmental Services, Inc. received 11 samples on 9/13/2013 9:50:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- -NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
- -AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Dorothy deBruyn

Project Manager

CHAIN OF CUSTODY

1000 gas

Work Order:

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

**AES** TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

7 712  $\mathfrak{A}$ 2 No # of Containers  $\geq$ Same Day Rush (auth req.) your results, place bottle to check on the status of Fax? Y(N Turnaround Time Request Standard 5 Business Days www.aesatlanta.com Next Business Day Rush SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. Visit our website NO SAMPLE 2 Business Day Rush Fotal # of Containers RECEIPT orders, etc. STATE PROGRAM (if any): REMARKS DATA PACKAGE: Other E-mail 3 0000 PROJECT INFORMATION ANALYSIS REQUESTED PRESERVATION (See codes) MOHOWIK P. (2) INVOICE TO: (IF DIFFERENT FROM ABOVE) SEND REPORT TO: SITE ADDRESS: PROJECT NAME PROJECT # 十十十 DOOTE # <del>(حمده) ۱۵۲۵ کردی</del> DATE/TIME 3  $\mathfrak{F}$ 3  $\mathfrak{F}$ 3 3 (ges coges) SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE. Matrix UPS MAIL COURIER Composite SHIPMENT METHOD VIA VIA Grab OTHER ATLENTA, GA 88 200 <u>ه</u> FedEx o O REYHOUND SAMPLED CLIENT शायाड 7/12 SIGNATURE RECEIVED OUT DATE/TIME 9-13-13 SSS 13-0W 12(20UP ma-0913-0412 MI- 09 13-0413 MI-09 13-0WBD MI-0913-MWW MI-0915-0410 2 MO -SI 60-IW me - 0913 - 049 mt-0913-0011 SM0-2160-IW SAMPLE ID GAINTECH, INC Z Z SPECIAL INSTRUCTIONS/COMMENTS MHW) MI-0915 SAMPLED BY: WHO **VELINOUISHED BY** FE OMPANY 10 14

O = Other (specify) NA = None
White Copy - Original; Yellow Copy - Client W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice SW = Surface Water GW = Groundwater SE = Sediment SO = Soil MATRIX CODES: A = Air PRESERVATIVE CODES:

Page 2 of 29

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW2

Project Name:MohawkCollection Date:9/12/2013 1:05:00 PMLab ID:1309804-001Matrix:Groundwater

Date:

20-Sep-13

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst		
TCL VOLATILE ORGANICS SW8260B			(SW5030B)								
1,1,1-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,1,2,2-Tetrachloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,1,2-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,1-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,1-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,2,4-Trichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,2-Dibromo-3-chloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,2-Dibromoethane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,2-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,2-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,2-Dichloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,3-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
1,4-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
2-Butanone		BRL	50		ug/L	181211	1	09/18/2013 16:39	AK		
2-Hexanone		BRL	10		ug/L	181211	1	09/18/2013 16:39	AK		
4-Methyl-2-pentanone		BRL	10		ug/L	181211	1	09/18/2013 16:39	AK		
Acetone		BRL	50		ug/L	181211	1	09/18/2013 16:39	AK		
Benzene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Bromodichloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Bromoform		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Bromomethane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Carbon disulfide		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Carbon tetrachloride		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Chlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Chloroethane		BRL	10		ug/L	181211	1	09/18/2013 16:39	AK		
Chloroform		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Chloromethane		BRL	10		ug/L	181211	1	09/18/2013 16:39	AK		
cis-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
cis-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Cyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Dibromochloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Dichlorodifluoromethane		BRL	10		ug/L	181211	1	09/18/2013 16:39	AK		
Ethylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Freon-113		BRL	10		ug/L	181211	1	09/18/2013 16:39	AK		
Isopropylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
m,p-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Methyl acetate		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Methyl tert-butyl ether		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Methylcyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Methylene chloride		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
o-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		

Qualifiers:

BRL Below reporting limit

Narr See case narrative

NC Not confirmed

<sup>\*</sup> Value exceeds maximum contaminant level

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

<sup>&</sup>gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

<sup>&</sup>lt; Less than Result value

J Estimated value detected below Reporting Limit

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW2

Project Name:MohawkCollection Date:9/12/2013 1:05:00 PMLab ID:1309804-001Matrix:Groundwater

Date:

20-Sep-13

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst		
TCL VOLATILE ORGANICS SW8260B		(SW5030B)									
Styrene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Tetrachloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Toluene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
trans-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
trans-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Trichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Trichlorofluoromethane		BRL	5.0		ug/L	181211	1	09/18/2013 16:39	AK		
Vinyl chloride		BRL	2.0		ug/L	181211	1	09/18/2013 16:39	AK		
Surr: 4-Bromofluorobenzene		89.6	64.6-123		%REC	181211	1	09/18/2013 16:39	AK		
Surr: Dibromofluoromethane		107	76.6-133		%REC	181211	1	09/18/2013 16:39	AK		
Surr: Toluene-d8		99.9	77.8-120		%REC	181211	1	09/18/2013 16:39	AK		

Qualifiers:

\* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW5

Project Name:MohawkCollection Date:9/12/2013 6:45:00 PMLab ID:1309804-002Matrix:Groundwater

Date:

20-Sep-13

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst		
TCL VOLATILE ORGANICS SW8260	В	(SW5030B)								
1,1,1-Trichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,1,2-Trichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,1-Dichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,1-Dichloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,2-Dibromoethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,2-Dichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,2-Dichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,2-Dichloropropane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,3-Dichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
1,4-Dichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
2-Butanone	BRL	50		ug/L	181211	1	09/18/2013 17:07	AK		
2-Hexanone	BRL	10		ug/L	181211	1	09/18/2013 17:07	AK		
4-Methyl-2-pentanone	BRL	10		ug/L	181211	1	09/18/2013 17:07	AK		
Acetone	BRL	50		ug/L	181211	1	09/18/2013 17:07	AK		
Benzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Bromodichloromethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Bromoform	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Bromomethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Carbon disulfide	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Carbon tetrachloride	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Chlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Chloroethane	BRL	10		ug/L	181211	1	09/18/2013 17:07	AK		
Chloroform	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Chloromethane	BRL	10		ug/L	181211	1	09/18/2013 17:07	AK		
cis-1,2-Dichloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
cis-1,3-Dichloropropene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Cyclohexane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Dibromochloromethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Dichlorodifluoromethane	BRL	10		ug/L	181211	1	09/18/2013 17:07	AK		
Ethylbenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Freon-113	BRL	10		ug/L	181211	1	09/18/2013 17:07	AK		
Isopropylbenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
m,p-Xylene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Methyl acetate	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Methyl tert-butyl ether	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Methylcyclohexane	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
Methylene chloride	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		
o-Xylene	BRL	5.0		ug/L	181211	1	09/18/2013 17:07	AK		

Qualifiers:

BRL Below reporting limit

Narr See case narrative

NC Not confirmed

<sup>\*</sup> Value exceeds maximum contaminant level

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

<sup>&</sup>gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

<sup>&</sup>lt; Less than Result value

J Estimated value detected below Reporting Limit

Trichlorofluoromethane

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Vinyl chloride

Surr: Toluene-d8

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW5

BRL

BRL

86.6

109

99.2

 Project Name:
 Mohawk
 Collection Date:
 9/12/2013 6:45:00 PM

 Lab ID:
 1309804-002
 Matrix:
 Groundwater

Reporting Dilution Result Qual Units BatchID Date Analyzed Analyst Analyses Limit Factor TCL VOLATILE ORGANICS SW8260B (SW5030B) BRL ug/L 5.0 181211 09/18/2013 17:07 AK Styrene BRL ug/L 181211 09/18/2013 17:07 ΑK Tetrachloroethene 5.0 ug/L Toluene **BRL** 5.0 181211 09/18/2013 17:07 AK trans-1,2-Dichloroethene BRL 5.0 ug/L 181211 1 09/18/2013 17:07 ΑK ug/L trans-1,3-Dichloropropene **BRL** 5.0 181211 09/18/2013 17:07 AK Trichloroethene BRL 5.0 ug/L 181211 09/18/2013 17:07 AK

5.0

2.0

64.6-123

76.6-133

77.8-120

ug/L

ug/L

%REC

%REC

%REC

181211

181211

181211

181211

181211

Date:

20-Sep-13

09/18/2013 17:07

09/18/2013 17:07

09/18/2013 17:07

09/18/2013 17:07

09/18/2013 17:07

AK

AK

ΑK

AK

ΑK

Qualifiers:

\* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW7

Project Name:MohawkCollection Date:9/12/2013 2:15:00 PMLab ID:1309804-003Matrix:Groundwater

Date:

20-Sep-13

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst		
TCL VOLATILE ORGANICS SW8260	В	(SW5030B)								
1,1,1-Trichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,1,2-Trichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,1-Dichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,1-Dichloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,2-Dibromoethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,2-Dichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,2-Dichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,2-Dichloropropane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,3-Dichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
1,4-Dichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
2-Butanone	BRL	50		ug/L	181211	1	09/18/2013 17:35	AK		
2-Hexanone	BRL	10		ug/L	181211	1	09/18/2013 17:35	AK		
4-Methyl-2-pentanone	BRL	10		ug/L	181211	1	09/18/2013 17:35	AK		
Acetone	BRL	50		ug/L	181211	1	09/18/2013 17:35	AK		
Benzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Bromodichloromethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Bromoform	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Bromomethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Carbon disulfide	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Carbon tetrachloride	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Chlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Chloroethane	BRL	10		ug/L	181211	1	09/18/2013 17:35	AK		
Chloroform	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Chloromethane	BRL	10		ug/L	181211	1	09/18/2013 17:35	AK		
cis-1,2-Dichloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
cis-1,3-Dichloropropene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Cyclohexane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Dibromochloromethane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Dichlorodifluoromethane	BRL	10		ug/L	181211	1	09/18/2013 17:35	AK		
Ethylbenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Freon-113	BRL	10		ug/L	181211	1	09/18/2013 17:35	AK		
Isopropylbenzene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
m,p-Xylene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Methyl acetate	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Methyl tert-butyl ether	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Methylcyclohexane	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
Methylene chloride	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		
o-Xylene	BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK		

Qualifiers:

BRL Below reporting limit

Narr See case narrative

NC Not confirmed

<sup>\*</sup> Value exceeds maximum contaminant level

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

<sup>&</sup>gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

<sup>&</sup>lt; Less than Result value

J Estimated value detected below Reporting Limit

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW7

Project Name:MohawkCollection Date:9/12/2013 2:15:00 PMLab ID:1309804-003Matrix:Groundwater

Date:

20-Sep-13

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS	SW8260B				(SW	/5030B)			
Styrene		BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK
Tetrachloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK
Toluene		BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK
trans-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK
trans-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK
Trichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK
Trichlorofluoromethane		BRL	5.0		ug/L	181211	1	09/18/2013 17:35	AK
Vinyl chloride		BRL	2.0		ug/L	181211	1	09/18/2013 17:35	AK
Surr: 4-Bromofluorobenzene		87.7	64.6-123		%REC	181211	1	09/18/2013 17:35	AK
Surr: Dibromofluoromethane		107	76.6-133		%REC	181211	1	09/18/2013 17:35	AK
Surr: Toluene-d8		100	77.8-120		%REC	181211	1	09/18/2013 17:35	AK

Qualifiers:

\* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

 Client:
 GaiaTech, Inc.
 Client Sample ID:
 MI-0913-OW8D

 Project Name:
 Mohawk
 Collection Date:
 9/12/2013 4:00:00 PM

Lab ID:1309804-004Matrix:Groundwater

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS	SW8260B				(SV	V5030B)			
1,1,1-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,1,2,2-Tetrachloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,1,2-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,1-Dichloroethane		12	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,1-Dichloroethene		18	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,2,4-Trichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,2-Dibromo-3-chloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,2-Dibromoethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,2-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,2-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,2-Dichloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,3-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
1,4-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
2-Butanone		BRL	50		ug/L	181211	1	09/18/2013 18:04	AK
2-Hexanone		BRL	10		ug/L	181211	1	09/18/2013 18:04	AK
4-Methyl-2-pentanone		BRL	10		ug/L	181211	1	09/18/2013 18:04	AK
Acetone		BRL	50		ug/L	181211	1	09/18/2013 18:04	AK
Benzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Bromodichloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Bromoform		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Bromomethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Carbon disulfide		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Carbon tetrachloride		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Chlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Chloroethane		BRL	10		ug/L	181211	1	09/18/2013 18:04	AK
Chloroform		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Chloromethane		BRL	10		ug/L	181211	1	09/18/2013 18:04	AK
cis-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
cis-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Cyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Dibromochloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Dichlorodifluoromethane		BRL	10		ug/L	181211	1	09/18/2013 18:04	AK
Ethylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Freon-113		BRL	10		ug/L	181211	1	09/18/2013 18:04	AK
Isopropylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
m,p-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Methyl acetate		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Methyl tert-butyl ether		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Methylcyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Methylene chloride		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
o-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK

Qualifiers:

BRL Below reporting limit

Date:

20-Sep-13

Narr See case narrative

<sup>\*</sup> Value exceeds maximum contaminant level

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

<sup>&</sup>gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

<sup>&</sup>lt; Less than Result value

J Estimated value detected below Reporting Limit

 Client:
 GaiaTech, Inc.
 Client Sample ID:
 MI-0913-OW8D

 Project Name:
 Mohawk
 Collection Date:
 9/12/2013 4:00:00 PM

Lab ID: 1309804-004 Matrix: Groundwater

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS	SW8260B				(SW	V5030B)			
Styrene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Tetrachloroethene		78	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Toluene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
trans-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
trans-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Trichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Trichlorofluoromethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:04	AK
Vinyl chloride		BRL	2.0		ug/L	181211	1	09/18/2013 18:04	AK
Surr: 4-Bromofluorobenzene		88.4	64.6-123		%REC	181211	1	09/18/2013 18:04	AK
Surr: Dibromofluoromethane		108	76.6-133		%REC	181211	1	09/18/2013 18:04	AK
Surr: Toluene-d8		109	77.8-120		%REC	181211	1	09/18/2013 18:04	AK

Qualifiers:

\* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

Date:

20-Sep-13

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW9

Project Name:MohawkCollection Date:9/12/2013 1:20:00 PMLab ID:1309804-005Matrix:Groundwater

Date:

20-Sep-13

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS	SW8260B				(SV	V5030B)			
1,1,1-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,1,2,2-Tetrachloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,1,2-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,1-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,1-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,2,4-Trichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,2-Dibromo-3-chloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,2-Dibromoethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,2-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,2-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,2-Dichloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,3-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
1,4-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
2-Butanone		BRL	50		ug/L	181211	1	09/18/2013 18:32	AK
2-Hexanone		BRL	10		ug/L	181211	1	09/18/2013 18:32	AK
4-Methyl-2-pentanone		BRL	10		ug/L	181211	1	09/18/2013 18:32	AK
Acetone		BRL	50		ug/L	181211	1	09/18/2013 18:32	AK
Benzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Bromodichloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Bromoform		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Bromomethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Carbon disulfide		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Carbon tetrachloride		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Chlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Chloroethane		BRL	10		ug/L	181211	1	09/18/2013 18:32	AK
Chloroform		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Chloromethane		BRL	10		ug/L	181211	1	09/18/2013 18:32	AK
cis-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
cis-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Cyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Dibromochloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Dichlorodifluoromethane		BRL	10		ug/L	181211	1	09/18/2013 18:32	AK
Ethylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Freon-113		BRL	10		ug/L	181211	1	09/18/2013 18:32	AK
Isopropylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
m,p-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Methyl acetate		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Methyl tert-butyl ether		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Methylcyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Methylene chloride		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
o-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK

Qualifiers:

BRL Below reporting limit

Narr See case narrative

<sup>\*</sup> Value exceeds maximum contaminant level

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

<sup>&</sup>gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

<sup>&</sup>lt; Less than Result value

J Estimated value detected below Reporting Limit

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW9

Project Name: Mohawk Collection Date: 9/12/2013 1:20:00 PM

Date:

20-Sep-13

Lab ID:1309804-005Matrix:Groundwater

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS S	SW8260B				(SW	/5030B)			
Styrene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Tetrachloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Toluene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
trans-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
trans-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Trichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Trichlorofluoromethane		BRL	5.0		ug/L	181211	1	09/18/2013 18:32	AK
Vinyl chloride		BRL	2.0		ug/L	181211	1	09/18/2013 18:32	AK
Surr: 4-Bromofluorobenzene		85.8	64.6-123		%REC	181211	1	09/18/2013 18:32	AK
Surr: Dibromofluoromethane		112	76.6-133		%REC	181211	1	09/18/2013 18:32	AK
Surr: Toluene-d8		104	77.8-120		%REC	181211	1	09/18/2013 18:32	AK

Qualifiers:

\* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW10

**Project Name:** Mohawk Collection Date: 9/12/2013 12:00:00 PM

Date:

20-Sep-13

Lab ID:1309804-006Matrix:Groundwater

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS	SW8260B				(SV	V5030B)			
1,1,1-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,1,2,2-Tetrachloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,1,2-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,1-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,1-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,2,4-Trichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,2-Dibromo-3-chloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,2-Dibromoethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,2-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,2-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,2-Dichloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,3-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
1,4-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
2-Butanone		BRL	50		ug/L	181211	1	09/18/2013 19:00	AK
2-Hexanone		BRL	10		ug/L	181211	1	09/18/2013 19:00	AK
4-Methyl-2-pentanone		BRL	10		ug/L	181211	1	09/18/2013 19:00	AK
Acetone		BRL	50		ug/L	181211	1	09/18/2013 19:00	AK
Benzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Bromodichloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Bromoform		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Bromomethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Carbon disulfide		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Carbon tetrachloride		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Chlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Chloroethane		BRL	10		ug/L	181211	1	09/18/2013 19:00	AK
Chloroform		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Chloromethane		BRL	10		ug/L	181211	1	09/18/2013 19:00	AK
cis-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
cis-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Cyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Dibromochloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Dichlorodifluoromethane		BRL	10		ug/L	181211	1	09/18/2013 19:00	AK
Ethylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Freon-113		BRL	10		ug/L	181211	1	09/18/2013 19:00	AK
Isopropylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
m,p-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Methyl acetate		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Methyl tert-butyl ether		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Methylcyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Methylene chloride		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
o-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK

Qualifiers:

Narr See case narrative

<sup>\*</sup> Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

<sup>&</sup>gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

<sup>&</sup>lt; Less than Result value

J Estimated value detected below Reporting Limit

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW10

**Project Name:** Mohawk Collection Date: 9/12/2013 12:00:00 PM

Date:

20-Sep-13

Lab ID: 1309804-006 Matrix: Groundwater

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS	SW8260B				(SV	V5030B)			
Styrene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Tetrachloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Toluene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
trans-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
trans-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Trichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Trichlorofluoromethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:00	AK
Vinyl chloride		BRL	2.0		ug/L	181211	1	09/18/2013 19:00	AK
Surr: 4-Bromofluorobenzene		86.6	64.6-123		%REC	181211	1	09/18/2013 19:00	AK
Surr: Dibromofluoromethane		107	76.6-133		%REC	181211	1	09/18/2013 19:00	AK
Surr: Toluene-d8		102	77.8-120		%REC	181211	1	09/18/2013 19:00	AK

Qualifiers:

\* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

MI-0913-OW11 Client: GaiaTech, Inc. **Client Sample ID:** Project Name: Mohawk **Collection Date:** 9/12/2013 4:10:00 PM

Lab ID: 1309804-007 Matrix: Groundwater

Reporting Dilution Result Qual Units BatchID Analyses Date Analyzed Analyst Limit Factor TCL VOLATILE ORGANICS SW8260B (SW5030B) BRL ug/L 5.0 181211 09/18/2013 19:28 ΑK 1,1,1-Trichloroethane BRL 5.0 ug/L 181211 09/18/2013 19:28 AK 1,1,2,2-Tetrachloroethane ug/L 1,1,2-Trichloroethane BRL 5.0 181211 09/18/2013 19:28 AK BRL 5.0 ug/L 181211 1 09/18/2013 19:28 AK 1,1-Dichloroethane 1,1-Dichloroethene **BRL** 5.0 ug/L 181211 09/18/2013 19:28 AK BRL 5.0 ug/L 181211 09/18/2013 19:28 ΑK 1,2,4-Trichlorobenzene 1 BRL ug/L 181211 09/18/2013 19:28 1,2-Dibromo-3-chloropropane 5.0 AK ug/L 181211 1,2-Dibromoethane BRL 5.0 09/18/2013 19:28 AK 1,2-Dichlorobenzene **BRL** 5.0 ug/L 181211 09/18/2013 19:28 AK ug/L **BRL** 5.0 181211 09/18/2013 19:28 1,2-Dichloroethane AK BRL 5.0 ug/L 181211 1 09/18/2013 19:28 AK 1,2-Dichloropropane ug/L 1,3-Dichlorobenzene BRL 5.0 181211 1 09/18/2013 19:28 AK BRL 5.0 ug/L 181211 09/18/2013 19:28 AK 1,4-Dichlorobenzene 1 ug/L 2-Butanone BRL 50 181211 09/18/2013 19:28 AK BRL ug/L 181211 10 09/18/2013 19:28 AK 2-Hexanone 4-Methyl-2-pentanone **BRL** 10 ug/L 181211 09/18/2013 19:28 AK BRL 50 ug/L 181211 09/18/2013 19:28 AK Acetone BRL ug/L 181211 09/18/2013 19:28 Benzene 5.0 AK ug/L BRL 5.0 181211 1 09/18/2013 19:28 AK Bromodichloromethane ug/L 181211 Bromoform **BRL** 5.0 09/18/2013 19:28 AK ug/L **BRL** 5.0 181211 09/18/2013 19:28 Bromomethane AK ug/L Carbon disulfide BRL 5.0 181211 09/18/2013 19:28 AK ug/L Carbon tetrachloride BRL 5.0 181211 09/18/2013 19:28 AK Chlorobenzene BRL 5.0 ug/L 181211 09/18/2013 19:28 AK ug/L Chloroethane BRL 10 181211 09/18/2013 19:28 AK BRL ug/L 5.0 181211 1 09/18/2013 19:28 AK Chloroform Chloromethane **BRL** 10 ug/L 181211 09/18/2013 19:28 AK BRL 5.0 ug/L 181211 09/18/2013 19:28 ΑK cis-1,2-Dichloroethene cis-1,3-Dichloropropene BRL 5.0 ug/L 181211 09/18/2013 19:28 AK ug/L BRL 5.0 181211 09/18/2013 19:28 AK Cyclohexane ug/L 181211 Dibromochloromethane **BRL** 5.0 09/18/2013 19:28 AK ug/L **BRL** 10 181211 09/18/2013 19:28 Dichlorodifluoromethane AK BRL 5.0 ug/L 181211 1 09/18/2013 19:28 AK Ethylbenzene Freon-113 BRL 10 ug/L 181211 1 09/18/2013 19:28 AK BRL 5.0 ug/L 181211 09/18/2013 19:28 AK Isopropylbenzene 1 ug/L m,p-Xvlene BRL 5.0 181211 09/18/2013 19:28 AK BRL ug/L 181211 5.0 09/18/2013 19:28 AK Methyl acetate ug/L Methyl tert-butyl ether **BRL** 5.0 181211 09/18/2013 19:28 AK Methylcyclohexane BRL 5.0 ug/L 181211 09/18/2013 19:28 ΑK BRL ug/L 181211 09/18/2013 19:28 Methylene chloride 5.0 AK ug/L

Qualifiers:

o-Xylene

BRL Below reporting limit BRL

5.0

181211

1

Date:

20-Sep-13

See case narrative Narr

Not confirmed

09/18/2013 19:28

AK

Value exceeds maximum contaminant level

Н Holding times for preparation or analysis exceeded

Analyte not NELAC certified

В Analyte detected in the associated method blank

Greater than Result value

Estimated (value above quantitation range)

Spike Recovery outside limits due to matrix

Less than Result value

Estimated value detected below Reporting Limit

Client: GaiaTech, Inc. Client Sample ID: MI-0913-OW11

Project Name:MohawkCollection Date:9/12/2013 4:10:00 PMLab ID:1309804-007Matrix:Groundwater

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS	SW8260B				(SW	V5030B)			
Styrene		BRL	5.0		ug/L	181211	1	09/18/2013 19:28	AK
Tetrachloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 19:28	AK
Toluene		BRL	5.0		ug/L	181211	1	09/18/2013 19:28	AK
trans-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 19:28	AK
trans-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 19:28	AK
Trichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 19:28	AK
Trichlorofluoromethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:28	AK
Vinyl chloride		BRL	2.0		ug/L	181211	1	09/18/2013 19:28	AK
Surr: 4-Bromofluorobenzene		85.9	64.6-123		%REC	181211	1	09/18/2013 19:28	AK
Surr: Dibromofluoromethane		110	76.6-133		%REC	181211	1	09/18/2013 19:28	AK
Surr: Toluene-d8		103	77.8-120		%REC	181211	1	09/18/2013 19:28	AK

Qualifiers:

\* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

Date:

20-Sep-13

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

 Client:
 GaiaTech, Inc.
 Client Sample ID:
 MI-0913-OW12

 Project Name:
 Mohawk
 Collection Date:
 9/12/2013 6:00:00 PM

Lab ID: 1309804-008 Matrix: Groundwater

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS	SW8260B				(SV	V5030B)			
1,1,1-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,1,2,2-Tetrachloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,1,2-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,1-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,1-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,2,4-Trichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,2-Dibromo-3-chloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,2-Dibromoethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,2-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,2-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,2-Dichloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,3-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
1,4-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
2-Butanone		BRL	50		ug/L	181211	1	09/18/2013 19:56	AK
2-Hexanone		BRL	10		ug/L	181211	1	09/18/2013 19:56	AK
4-Methyl-2-pentanone		BRL	10		ug/L	181211	1	09/18/2013 19:56	AK
Acetone		BRL	50		ug/L	181211	1	09/18/2013 19:56	AK
Benzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Bromodichloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Bromoform		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Bromomethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Carbon disulfide		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Carbon tetrachloride		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Chlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Chloroethane		BRL	10		ug/L	181211	1	09/18/2013 19:56	AK
Chloroform		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Chloromethane		BRL	10		ug/L	181211	1	09/18/2013 19:56	AK
cis-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
cis-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Cyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Dibromochloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Dichlorodifluoromethane		BRL	10		ug/L	181211	1	09/18/2013 19:56	AK
Ethylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Freon-113		BRL	10		ug/L	181211	1	09/18/2013 19:56	AK
Isopropylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
m,p-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Methyl acetate		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Methyl tert-butyl ether		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Methylcyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Methylene chloride		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
o-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK

Qualifiers:

Date:

20-Sep-13

Narr See case narrative

<sup>\*</sup> Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

<sup>&</sup>gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

<sup>&</sup>lt; Less than Result value

J Estimated value detected below Reporting Limit

Client:GaiaTech, Inc.Client Sample ID:MI-0913-OW12Project Name:MohawkCollection Date:9/12/2013 6:00:00 PM

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW	8260B			(SW	V5030B)			
Styrene	BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Tetrachloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Toluene	BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Trichloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Trichlorofluoromethane	BRL	5.0		ug/L	181211	1	09/18/2013 19:56	AK
Vinyl chloride	BRL	2.0		ug/L	181211	1	09/18/2013 19:56	AK
Surr: 4-Bromofluorobenzene	86.3	64.6-123		%REC	181211	1	09/18/2013 19:56	AK
Surr: Dibromofluoromethane	107	76.6-133		%REC	181211	1	09/18/2013 19:56	AK
Surr: Toluene-d8	102	77.8-120		%REC	181211	1	09/18/2013 19:56	AK

Date:

20-Sep-13

Qualifiers:

\* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

Client:GaiaTech, Inc.Client Sample ID:MI-0913-MWW1Project Name:MohawkCollection Date:9/12/2013 2:30:00 PM

Date:

20-Sep-13

Lab ID:1309804-010Matrix:Groundwater

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analys
TCL VOLATILE ORGANICS	SW8260B				(SV	V5030B)			
1,1,1-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,1,2,2-Tetrachloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,1,2-Trichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,1-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,1-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,2,4-Trichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,2-Dibromo-3-chloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,2-Dibromoethane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,2-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,2-Dichloroethane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,2-Dichloropropane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,3-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
1,4-Dichlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
2-Butanone		BRL	50		ug/L	181211	1	09/18/2013 20:24	AK
2-Hexanone		BRL	10		ug/L	181211	1	09/18/2013 20:24	AK
4-Methyl-2-pentanone		BRL	10		ug/L	181211	1	09/18/2013 20:24	AK
Acetone		BRL	50		ug/L	181211	1	09/18/2013 20:24	AK
Benzene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Bromodichloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Bromoform		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Bromomethane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Carbon disulfide		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Carbon tetrachloride		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Chlorobenzene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Chloroethane		BRL	10		ug/L	181211	1	09/18/2013 20:24	AK
Chloroform		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Chloromethane		BRL	10		ug/L	181211	1	09/18/2013 20:24	AK
cis-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
cis-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Cyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Dibromochloromethane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Dichlorodifluoromethane		BRL	10		ug/L	181211	1	09/18/2013 20:24	AK
Ethylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Freon-113		BRL	10		ug/L	181211	1	09/18/2013 20:24	AK
Isopropylbenzene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
m,p-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Methyl acetate		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Methyl tert-butyl ether		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Methylcyclohexane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Methylene chloride		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
o-Xylene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK

Qualifiers:

Narr See case narrative

<sup>\*</sup> Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

<sup>&</sup>gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

NC Not confirmed

<sup>&</sup>lt; Less than Result value

J Estimated value detected below Reporting Limit

Client:GaiaTech, Inc.Client Sample ID:MI-0913-MWW1Project Name:MohawkCollection Date:9/12/2013 2:30:00 PM

Lab ID: 1309804-010 Matrix: Groundwater

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW	8260B				(SW	/5030B)			
Styrene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Tetrachloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Toluene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
trans-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
trans-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Trichloroethene		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Trichlorofluoromethane		BRL	5.0		ug/L	181211	1	09/18/2013 20:24	AK
Vinyl chloride		BRL	2.0		ug/L	181211	1	09/18/2013 20:24	AK
Surr: 4-Bromofluorobenzene		85.8	64.6-123		%REC	181211	1	09/18/2013 20:24	AK
Surr: Dibromofluoromethane		109	76.6-133		%REC	181211	1	09/18/2013 20:24	AK
Surr: Toluene-d8		103	77.8-120		%REC	181211	1	09/18/2013 20:24	AK

Qualifiers:

\* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

Date:

20-Sep-13

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

 Client:
 GaiaTech, Inc.
 Client Sample ID:
 MI-0913-0W12(DUP)

 Project Name:
 Mohawk
 Collection Date:
 9/12/2013 6:05:00 PM

 Lab ID:
 1309804-011
 Matrix:
 Groundwater

Date:

20-Sep-13

Reporting Dilution Result Qual Units BatchID Analyses Date Analyzed Analyst Limit Factor TCL VOLATILE ORGANICS SW8260B (SW5030B) BRL ug/L 5.0 181211 09/19/2013 00:23 AR 1,1,1-Trichloroethane BRL 5.0 ug/L 181211 09/19/2013 00:23 AR 1,1,2,2-Tetrachloroethane ug/L 1,1,2-Trichloroethane BRL 5.0 181211 09/19/2013 00:23 AR BRL 5.0 ug/L 181211 1 09/19/2013 00:23 AR 1,1-Dichloroethane 1,1-Dichloroethene **BRL** 5.0 ug/L 181211 09/19/2013 00:23 AR BRL 5.0 ug/L 181211 09/19/2013 00:23 AR 1 1,2,4-Trichlorobenzene BRL ug/L 181211 09/19/2013 00:23 1,2-Dibromo-3-chloropropane 5.0 AR ug/L 181211 1,2-Dibromoethane BRL 5.0 09/19/2013 00:23 AR 1,2-Dichlorobenzene **BRL** 5.0 ug/L 181211 09/19/2013 00:23 AR ug/L **BRL** 5.0 181211 09/19/2013 00:23 1,2-Dichloroethane AR BRL 5.0 ug/L 181211 1 09/19/2013 00:23 AR 1,2-Dichloropropane ug/L 1,3-Dichlorobenzene BRL 5.0 181211 1 09/19/2013 00:23 AR BRL 5.0 ug/L 181211 09/19/2013 00:23 AR 1,4-Dichlorobenzene 1 ug/L 2-Butanone BRL 50 181211 09/19/2013 00:23 AR BRL ug/L 181211 09/19/2013 00:23 10 AR 2-Hexanone 4-Methyl-2-pentanone **BRL** 10 ug/L 181211 09/19/2013 00:23 AR BRL 50 ug/L 181211 09/19/2013 00:23 AR Acetone BRL ug/L 181211 09/19/2013 00:23 Benzene 5.0 AR ug/L BRL 5.0 181211 1 09/19/2013 00:23 AR Bromodichloromethane ug/L 181211 09/19/2013 00:23 Bromoform **BRL** 5.0 1 AR ug/L **BRL** 5.0 181211 09/19/2013 00:23 Bromomethane AR ug/L Carbon disulfide BRL 5.0 181211 09/19/2013 00:23 AR ug/L Carbon tetrachloride BRL 5.0 181211 09/19/2013 00:23 AR Chlorobenzene BRL 5.0 ug/L 181211 1 09/19/2013 00:23 AR ug/L Chloroethane BRL 10 181211 09/19/2013 00:23 AR BRL ug/L 5.0 181211 1 09/19/2013 00:23 AR Chloroform Chloromethane **BRL** 10 ug/L 181211 1 09/19/2013 00:23 AR BRL 5.0 ug/L 181211 09/19/2013 00:23 AR cis-1,2-Dichloroethene 1 cis-1,3-Dichloropropene BRL 5.0 ug/L 181211 09/19/2013 00:23 AR ug/L BRL 5.0 181211 09/19/2013 00:23 AR Cyclohexane ug/L 181211 Dibromochloromethane **BRL** 5.0 09/19/2013 00:23 AR ug/L **BRL** 10 181211 09/19/2013 00:23 Dichlorodifluoromethane AR BRL 5.0 ug/L 181211 1 09/19/2013 00:23 AR Ethylbenzene Freon-113 BRL 10 ug/L 181211 1 09/19/2013 00:23 AR BRL 5.0 ug/L 181211 09/19/2013 00:23 AR Isopropylbenzene 1 ug/L m,p-Xvlene BRL 5.0 181211 09/19/2013 00:23 AR BRL ug/L 181211 5.0 1 09/19/2013 00:23 AR Methyl acetate ug/L Methyl tert-butyl ether **BRL** 5.0 181211 09/19/2013 00:23 AR Methylcyclohexane BRL 5.0 ug/L 181211 09/19/2013 00:23 AR BRL ug/L 181211 09/19/2013 00:23 Methylene chloride 5.0 AR

Qualifiers:

o-Xylene

BRL Below reporting limit

BRL

5.0

181211

1

Narr See case narrative

NC Not confirmed

ug/L

09/19/2013 00:23

AR

<sup>\*</sup> Value exceeds maximum contaminant level

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

Second Second

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

<sup>&</sup>lt; Less than Result value

J Estimated value detected below Reporting Limit

**Client Sample ID:** MI-0913-0W12(DUP) Client: GaiaTech, Inc. **Collection Date:** 9/12/2013 6:05:00 PM Project Name: Mohawk Lab ID:

Date:

20-Sep-13

1309804-011 Matrix: Groundwater

Analyses		Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW	8260B				(SW	V5030B)			
Styrene		BRL	5.0		ug/L	181211	1	09/19/2013 00:23	AR
Tetrachloroethene		BRL	5.0		ug/L	181211	1	09/19/2013 00:23	AR
Toluene		BRL	5.0		ug/L	181211	1	09/19/2013 00:23	AR
trans-1,2-Dichloroethene		BRL	5.0		ug/L	181211	1	09/19/2013 00:23	AR
trans-1,3-Dichloropropene		BRL	5.0		ug/L	181211	1	09/19/2013 00:23	AR
Trichloroethene		BRL	5.0		ug/L	181211	1	09/19/2013 00:23	AR
Trichlorofluoromethane		BRL	5.0		ug/L	181211	1	09/19/2013 00:23	AR
Vinyl chloride		BRL	2.0		ug/L	181211	1	09/19/2013 00:23	AR
Surr: 4-Bromofluorobenzene		94.8	64.6-123		%REC	181211	1	09/19/2013 00:23	AR
Surr: Dibromofluoromethane		105	76.6-133		%REC	181211	1	09/19/2013 00:23	AR
Surr: Toluene-d8		101	77.8-120		%REC	181211	1	09/19/2013 00:23	AR

Qualifiers:

Value exceeds maximum contaminant level

BRL Below reporting limit

Η Holding times for preparation or analysis exceeded

Analyte not NELAC certified

Analyte detected in the associated method blank

Greater than Result value

E Estimated (value above quantitation range)

Spike Recovery outside limits due to matrix

Narr See case narrative

Not confirmed

Less than Result value

Client:GaiaTech, Inc.Client Sample ID:TRIP BLANKProject Name:MohawkCollection Date:9/12/2013Lab ID:1309804-012Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8	260B			(SV	V5030B)			
1,1,1-Trichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,1,2-Trichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,1-Dichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,1-Dichloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,2-Dibromoethane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,2-Dichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,2-Dichloroethane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,2-Dichloropropane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,3-Dichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
1,4-Dichlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
2-Butanone	BRL	50		ug/L	181211	1	09/18/2013 23:55	AR
2-Hexanone	BRL	10		ug/L	181211	1	09/18/2013 23:55	AR
4-Methyl-2-pentanone	BRL	10		ug/L	181211	1	09/18/2013 23:55	AR
Acetone	BRL	50		ug/L	181211	1	09/18/2013 23:55	AR
Benzene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Bromodichloromethane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Bromoform	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Bromomethane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Carbon disulfide	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Carbon tetrachloride	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Chlorobenzene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Chloroethane	BRL	10		ug/L	181211	1	09/18/2013 23:55	AR
Chloroform	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Chloromethane	BRL	10		ug/L	181211	1	09/18/2013 23:55	AR
cis-1,2-Dichloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
cis-1,3-Dichloropropene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Cyclohexane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Dibromochloromethane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Dichlorodifluoromethane	BRL	10		ug/L	181211	1	09/18/2013 23:55	AR
Ethylbenzene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Freon-113	BRL	10		ug/L	181211	1	09/18/2013 23:55	AR
Isopropylbenzene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
m,p-Xylene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Methyl acetate	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Methyl tert-butyl ether	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Methylcyclohexane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
Methylene chloride	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR
o-Xylene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR

Qualifiers:

BRL Below reporting limit

Date:

20-Sep-13

Narr See case narrative

<sup>\*</sup> Value exceeds maximum contaminant level

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

<sup>&</sup>gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

<sup>&</sup>lt; Less than Result value

J Estimated value detected below Reporting Limit

Client:GaiaTech, Inc.Client Sample ID:TRIP BLANKProject Name:MohawkCollection Date:9/12/2013Lab ID:1309804-012Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst			
TCL VOLATILE ORGANICS SW826	0B	B (SW5030B)									
Styrene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR			
Tetrachloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR			
Toluene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR			
trans-1,2-Dichloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR			
trans-1,3-Dichloropropene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR			
Trichloroethene	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR			
Trichlorofluoromethane	BRL	5.0		ug/L	181211	1	09/18/2013 23:55	AR			
Vinyl chloride	BRL	2.0		ug/L	181211	1	09/18/2013 23:55	AR			
Surr: 4-Bromofluorobenzene	95.5	64.6-123		%REC	181211	1	09/18/2013 23:55	AR			
Surr: Dibromofluoromethane	106	76.6-133		%REC	181211	1	09/18/2013 23:55	AR			
Surr: Toluene-d8	105	77.8-120		%REC	181211	1	09/18/2013 23:55	AR			

Date:

20-Sep-13

Qualifiers:

\* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

## Sample/Cooler Receipt Checklist

Client GAIA		Work Order Nun	nber 1309804
Checklist completed by Signature Date	9/13/13		
Carrier name: FedExUPS Courier ClientUS	S Mail Other		
Shipping container/cooler in good condition?	Yes _	No Not	Present
Custody seals intact on shipping container/cooler?	Yes	No _ Not	Present
Custody seals intact on sample bottles?	Yes	No Not	Present 🖊
Container/Temp Blank temperature in compliance? (4°C±2)*	Yes _	No	
Cooler #1 Cooler #2 Cooler #3	Cooler #4	Cooler#5	Cooler #6
Chain of custody present?	Yes _	No	
Chain of custody signed when relinquished and received?	Yes _	No	
Chain of custody agrees with sample labels?	Yes _	No	
Samples in proper container/bottle?	Yes _	No	
Sample containers intact?	Yes _/	No	
Sufficient sample volume for indicated test?	Yes _	No	
All samples received within holding time?	Yes _/	No	
Was TAT marked on the COC?	Yes _	No	
Proceed with Standard TAT as per project history?	Yes	No Not	Applicable _
Water - VOA vials have zero headspace? No VOA vials su	bmitted	Yes Z	No
Water - pH acceptable upon receipt?	Yes _	No _ Not	Applicable
Adjusted?	Chec	cked by	
Sample Condition: Good Other(Explain)			
(For diffusive samples or AIHA lead) Is a known blank include	ed? Yes	No	

#### See Case Narrative for resolution of the Non-Conformance.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample\_Cooler\_Receipt\_Checklist

<sup>\*</sup> Samples do not have to comply with the given range for certain parameters.

Rpt Lim Reporting Limit

mental Services, Inc Date: 20-Sep-13

Client: GaiaTech, Inc.
Project Name: Mohawk
Workorder: 1309804

# ANALYTICAL QC SUMMARY REPORT

BatchID: 181211

Sample ID: MB-181211 SampleType: MBLK	Client ID: TestCode: TCL VOLATILE ORGANICS SW8260B		В		its: <b>ug/L</b> tchID: <b>181211</b>		Date: <b>09</b> /2	17/2013 17/2013			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									
Qualifiers: > Greater than Result v	value		< Less	than Result value			В	Analyte detected in the	associated method	blank	
BRL Below reporting limit	it		E Estim	nated (value above quantit	ation range)		Н	Holding times for prepa	ration or analysis e	exceeded	
J Estimated value det	ected below Reporting Lim	it	N Anal	yte not NELAC certified			R	RPD outside limits due	to matrix		

S Spike Recovery outside limits due to matrix

1309804

ANALYTICAL QC SUMMARY REPORT

Date:

20-Sep-13

BatchID: 181211

# Client: GaiaTech, Inc. Project Name: Mohawk

Workorder:

Sample ID: MB-181211 Client ID: Prep Date: 09/17/2013 Run No: 252099 Units: ug/L TestCode: TCL VOLATILE ORGANICS SW8260B SampleType: MBLK BatchID: 181211 Analysis Date: 09/17/2013 Seq No: **5291571** %REC %RPD Analyte Result **RPT Limit** SPK value SPK Ref Val Low Limit High Limit RPD Ref Val RPD Limit Qual cis-1,2-Dichloroethene **BRL** 5.0 5.0 cis-1,3-Dichloropropene BRL Cyclohexane BRL 5.0 Dibromochloromethane BRL 5.0 Dichlorodifluoromethane BRL 10 Ethylbenzene BRL 5.0 Freon-113 BRL 10 Isopropylbenzene BRL 5.0 5.0 m,p-Xylene BRL Methyl acetate BRL 5.0 Methyl tert-butyl ether 5.0 BRL Methylcyclohexane BRL 5.0 Methylene chloride **BRL** 5.0 o-Xylene BRL 5.0 BRL 5.0 Styrene Tetrachloroethene BRL 5.0 Toluene BRL 5.0 trans-1,2-Dichloroethene **BRL** 5.0 trans-1,3-Dichloropropene 5.0 BRL Trichloroethene BRL 5.0 Trichlorofluoromethane BRL 5.0 Vinyl chloride BRL 2.0 Surr: 4-Bromofluorobenzene 0 41.86 50.00 83.7 64.6 123 Surr: Dibromofluoromethane 55.55 0 50.00 111 76.6 133

Surr: Toluene-d8

BRL Below reporting limit

Rpt Lim Reporting Limit

J Estimated value detected below Reporting Limit

53.80

0

< Less than Result value

50.00

E Estimated (value above quantitation range)

108

77.8

120

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

· · ·

Mohawk

1309804

**Client:** 

**Project Name:** 

Workorder:

GaiaTech, Inc.

ANALYTICAL QC SUMMARY REPORT

Date:

20-Sep-13

BatchID: 181211

Sample ID: LCS-181211 SampleType: LCS	•				Units: ug/L Prep Date: BatchID: 181211 Analysis Dat			e: <b>09/17/2013</b> Run No: <b>252099</b> Date: <b>09/17/2013</b> Seq No: <b>5291572</b>		
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC		High Limit	RPD Ref		RPD Limit Qual
1,1-Dichloroethene	53.06	5.0	50.00		106	61.1	142			
Benzene	49.64	5.0	50.00		99.3	73.5	130			
Chlorobenzene	58.24	5.0	50.00		116	72.4	123			
Γoluene	53.64	5.0	50.00		107	73.6	130			
Γrichloroethene	53.23	5.0	50.00		106	70	135			
Surr: 4-Bromofluorobenzene	52.20	0	50.00		104	64.6	123			
Surr: Dibromofluoromethane	58.89	0	50.00		118	76.6	133			
Surr: Toluene-d8	53.74	0	50.00		107	77.8	120			
Sample ID: 1309351-003AMS	Client ID:				Uni	ts: ug/L	Prep	Date:	09/17/2013	Run No: <b>252099</b>
SampleType: MS	TestCode: TCI	VOLATILE ORGA	ANICS SW8260	В	Bat	chID: 181211	Ana	llysis Date:	09/17/2013	Seq No: <b>5291583</b>
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	Val %RPD	RPD Limit Qual
1,1-Dichloroethene	1016	100	1000		102	60	168			
Benzene	1107	100	1000	121.4	98.6	66.6	148			
Chlorobenzene	1159	100	1000		116	71.9	135			
Гoluene	1002	100	1000		100	68	149			
Γrichloroethene	1089	100	1000		109	71.1	154			
Surr: 4-Bromofluorobenzene	1017	0	1000		102	64.6	123			
Surr: Dibromofluoromethane	1129	0	1000		113	76.6	133			
Surr: Toluene-d8	1006	0	1000		101	77.8	120			
Sample ID: 1309351-003AMSD SampleType: MSD	Client ID: TestCode: TCI	VOLATILE ORGA	ANICS SW8260	В	Uni Bat	ts: <b>ug/L</b> chID: <b>181211</b>	•	Date:	09/17/2013 09/17/2013	Run No: <b>252099</b> Seq No: <b>5291584</b>
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	Val %RPD	RPD Limit Qual
1,1-Dichloroethene	985.2	100	1000		98.5	60	168	1016	3.08	18.6
Benzene	1051	100	1000	121.4	92.9	66.6	148	1107	5.23	20
Qualifiers: > Greater than Result value  BRL Below reporting limit  J Estimated value detect  Rpt Lim Reporting Limit	ed below Reporting Limit		E Estim N Analy	than Result value ated (value above quantit te not NELAC certified Recovery outside limits of			Н	•	in the associated method preparation or analysis e ts due to matrix	

Client: GaiaTech, Inc.

ANALYTICAL QC SUMMARY REPORT

Date:

20-Sep-13

**Project Name:** Mohawk **Workorder:** 1309804

BatchID: 181211

Sample ID: 1309351-003AMSD SampleType: MSD	Client ID: TestCode: TO	CL VOLATILE ORGA	ANICS SW8260	В	Uni Bat	ts: <b>ug/L</b> chID: <b>181211</b>		Date: <b>09/17/</b> lysis Date: <b>09/17/</b>		Run No: <b>252099</b> Seq No: <b>5291584</b>
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Chlorobenzene	1126	100	1000		113	71.9	135	1159	2.84	20
Toluene	971.8	100	1000		97.2	68	149	1002	3.08	20
Trichloroethene	1056	100	1000		106	71.1	154	1089	3.02	20
Surr: 4-Bromofluorobenzene	1013	0	1000		101	64.6	123	1017	0	0
Surr: Dibromofluoromethane	1121	0	1000		112	76.6	133	1129	0	0
Surr: Toluene-d8	986.4	0	1000		98.6	77.8	120	1006	0	0

Qualifiers: > Greater than Result value

BRL Below reporting limit

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

# **ATTACHMENT 5**

PROFESSIONAL CERTIFICATIONAND SUMMARY OF HOURS

#### PROFESSIONAL CERTIFICATION AND SUMMARY OF HOURS

I certify that I am a qualified groundwater scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by me or by a subordinate working under my direction.

David S. Buchalter, P.E. Georgia Professional Engineer

# MONTHLY SUMMARY AND DESCRIPTION OF PROFESSIONAL GEOLOGIST HOURS

Quantity Units	Unito	nits Time Period - Description of Activities		Hours	
	Ullits	its Time Period + Description of Activities —			Subtotal
		September 12 to October 12, 2013			
		Review of Field Activities and Semi-Annual Progress Report			
2.00	Hours	Sr. Project Manager (David S. Buchalter, P.E.)			2.00

PG MONTHLY HOURS TOTAL => 2.00

Hours Thru 12-11 Peachtree Environmental