October 1, 2014

RECEIVED
Land Protection Branch
OCT 7 2014
Hazardous Waste

Ms. Antonia S. Beavers
Georgia Environmental Protection Division
Land Protection Branch – Response and Remediation
2 Martin Luther King, Jr. Dr. SE
Suite 1054 East Tower
Atlanta, GA 30334-9000

RE: 5th Semi-Annual Progress Report
Diamond Rug and Carpet Mills, Eton, Murray County, Georgia
HSI #10534
RPS GaiaTech Project No. 154742.421.00

Dear Ms. Beavers:

GaiaTech Inc. DBA RPS GaiaTech (RPS 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 activity since the last semi-annual update the Conceptual Site Model (CSM) for the Site, and provides conclusions and recommendations as detailed in subsequent sections.

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.

RPS 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.

RPS 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 completed VIRP milestone date, which are as follows:

- **Semi-Annual Progress Reports** - October 12 and April 12 through October 12, 2016. A total of three (3) Semi-Annual Progress Reports have been submitted to date including: October 12, 2012; April 12, 2013; and October 12, 2013 progress reports. This brief letter update constitutes the 4th Semiannual Progress Report update.

- **Complete Horizontal Delineation on the Qualifying Property** - Must be demonstrated in the April 12, 2013 Semi-Annual Progress Report (12 months from VIRP Approval). Horizontal delineation was completed as of the 2nd Semi-Annual Progress Report Submission in April 2013 via the installation and sampling of four (4) additional horizontal groundwater delineation wells (OW-10 to OW-13) and the sampling and analysis of existing shallow monitoring wells (OW-9 and OW-7). The horizontal extent of impact was again assessed as part of the 3rd Semi-Annual Progress Report and, likewise, verified complete horizontal delineation with periphery plume monitoring locations with concentrations of Volatile Organic Compounds (VOCs) below the laboratory reporting limits. The data from the 2nd and 3rd semi-annual reporting events indicated that the plume was stable and isolated to the Site.

- **Complete Horizontal Delineation on all Impacted Properties** - Must be demonstrated in the April 12, 2014 Semi-Annual Progress Report (24 months from VIRP Approval). As indicated above, the horizontal extent of impact was delineated on the subject Site with no indications of off-site migration. Thus, the milestone of horizontal delineation on all impacted properties has been met.

- **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). As previously indicated, Mohawk has completed horizontal delineation actives. In addition, analytical testing data from the last sampling event in September 2013 indicated that the plume remains stable with concentrations below applicable Risk Reduction Standard (RRS) criteria and therefore a Remedial Plan does not appear to apply to the Site. Vertical delineation was achieved on August 7, 2014 via the installation and sampling of deep well DW-1.

The vertical delineation of the groundwater plume via the installation and sampling of deep monitoring well DW-1 completes the delineation of the groundwater plume. A Site Location Map and Site Layout Map depicting the location of DW-1 are included as **Figure 1** and **2** in **Attachment 1**. An updated analytical data table with a summary of analytical testing data for DW-1 and other well is included as **Attachment 2**. Laboratory analytical data reports are included as **Attachment 3**, and a well construction diagram for DW-1 is included as **Attachment 4.**

The following VIRP Milestone items remain to be addressed:

- **Submission of Compliance Status Report** - April 12, 2017.

In a meeting with Mohawk, RPS GaiaTech, and the Georgia EPD on September 16, 2014, GEPD agreed to the submission of an Environmental Covenant mechanism and a Compliance Status Report (CSR). Mohawk intends to complete these activities and submit the documents in lieu of the next semi-annual update in April 2015.

Please do not hesitate to contact either of the undersigned if you have any questions or require additional documentation.

Sincerely,
RPS GAIATECH

Michael H. Wilson
Sr. Project Manager, Site Investigation & Remediation
(404) 809-3884 – Direct Dial

Technical Review and Concurrence by:

William H. Lucas, III
Director, Site Investigation & Remediation
(404) 809-3875 – Direct Dial

cc: Denise Wood, Mohawk

Attachments

Attachment 1 - Maps
Figure 1 - Site Layout and Deep Well Location Map

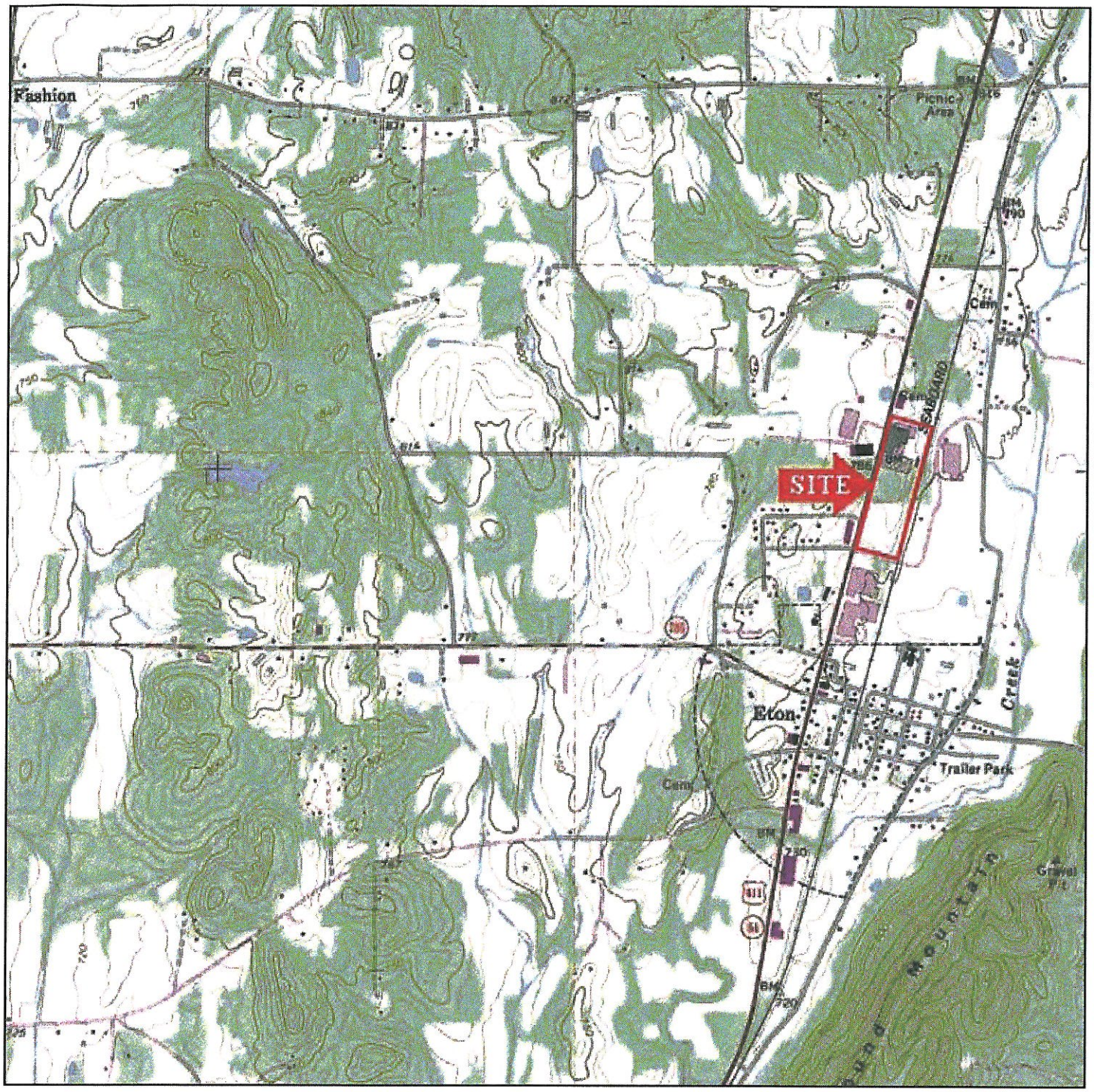
Attachment 2 - Tables
Table 1 - Groundwater Analytical Testing Data Summary Table

Attachment 3 - Deep Well Construction Diagram

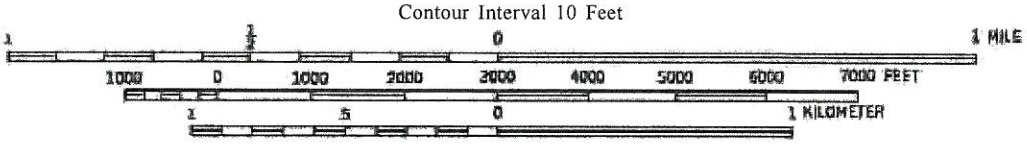
Attachment 4 - Laboratory Analytical Data Reports

ATTACHMENT 1

SITE LAYOUT AND DEEP WELL LOCATION MAP



Scale 1: 24 000
Contour Interval 10 Feet



Quadrangle Location

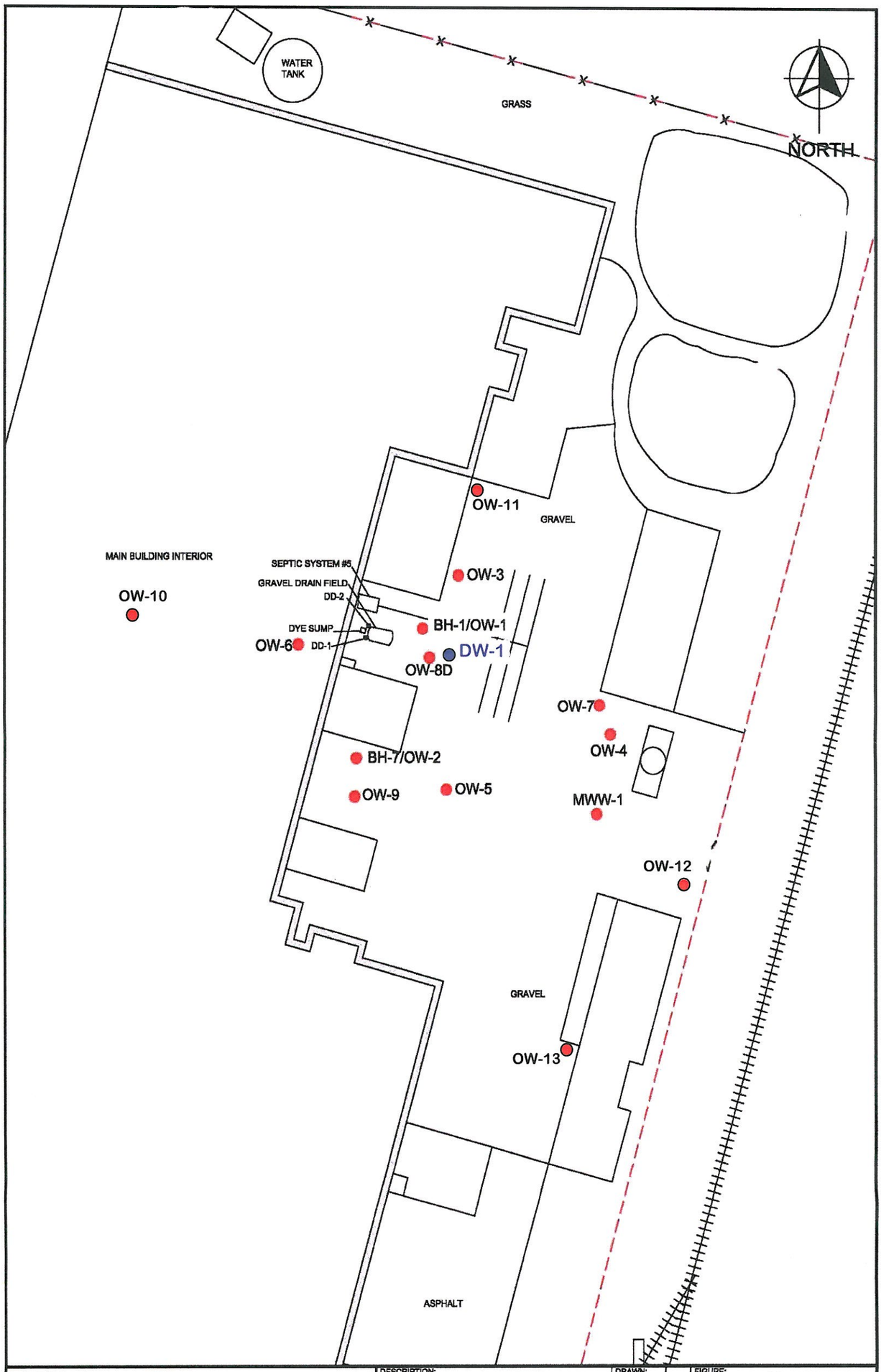
UNITED STATES GEOLOGICAL SURVEY
DEPARTMENT OF THE INTERIOR/USGS
CHATWORTH QUADRANGLE
GEORGIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
1972
PHOTOREVISED 1985

Mohawk Industries, Inc.
Eton, Georgia
Project No. 150314.300.00

Figure 1

Site Location and Topographic Map

RPS GaiaTech



LEGEND

● GROUNDWATER MONITORING WELL

DESCRIPTION:

SITE LAYOUT MAP

MOHAWK INDUSTRIES, INC.
ETON, MURRAY COUNTY, GEORGIA

DRAWN: MHW

SCALE: 1"=50' (APPROX)

DATE: 8/7/14

FILE:

FIGURE: 2

RPS GaiaTech

ATTACHMENT 2

ANALYTICAL TESTING DATA SUMMARY TABLE

TABLE
GROUNDWATER ANALYTICAL SUMMARY - VOLATILE ORGANIC COMPOUNDS

Mohawk Industries
Eton, Georgia

Sample Location	Date Collected	Concentration, ug/l						
		1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	PCE	TCE	Vinyl Chloride
OW-1	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
	11/21/2003	ND	ND	ND	5.4	6.3	ND	ND
	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.						
OW-2	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
	3/4/2004	ND	ND	ND	ND	ND	ND	ND
	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
OW-3	5/21/2002	ND	ND	ND	ND	ND	ND	ND
	8/25/2003	ND	ND	ND	ND	ND	ND	ND
	11/21/2003	ND	ND	ND	ND	ND	ND	ND
	3/4/2004	ND	ND	ND	ND	ND	ND	ND
	8/13/2004	ND	ND	ND	ND	ND	ND	ND
	9/7/2012	Well Destroyed						
OW-4	5/21/2002	ND	7.3	ND	ND	5.5	ND	ND
	2/4/2003	ND	5.2	ND	ND	6.7	ND	ND
	8/13/2004	ND	ND	ND	ND	ND	ND	ND
OW-5	5/21/2002	ND	ND	ND	ND	ND	ND	ND
	2/25/2013	ND	ND	ND	ND	11	ND	ND
	9/12/2013	ND	ND	ND	ND	ND	ND	ND
OW-6	8/13/2004	ND	22	ND	ND	ND	ND	ND
	12/2/2004	ND	40	ND	ND	ND	ND	ND
	3/16/2011	ND	17	6	ND	5	ND	ND
	9/7/2012	ND	34	5	ND	6.4	ND	ND
OW-7	8/13/2004	ND	ND	ND	ND	ND	ND	ND
	12/2/2004	ND	ND	ND	ND	ND	ND	ND
	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
GROUNDWATER ANALYTICAL SUMMARY - VOLATILE ORGANIC COMPOUNDS

Mohawk Industries
Eton, Georgia

Sample Location	Date Collected	Concentration, ug/l						
		1,1,1-TCA	1,1-DCA	1,1-DCE	cis-1,2-DCE	PCE	TCE	Vinyl Chloride
OW-8D	5/18/2005	ND	13	**8.5**	ND	6.5	ND	ND
	3/16/2011	ND	9	**11**	ND	**31**	ND	ND
	9/7/2012	ND	8.1	8.3	ND	17	ND	ND
	9/12/2013	ND	12.0	18.0	ND	**78**	ND	ND
OW-9	5/18/2005	ND	ND	ND	ND	ND	ND	ND
	3/16/2011	ND	ND	ND	ND	ND	ND	ND
	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
	9/12/2013	ND	ND	ND	ND	ND	ND	ND
OW-11	2/25/2013	ND	ND	ND	ND	ND	ND	ND
	9/12/2013	ND	ND	ND	ND	ND	ND	ND
OW-12	2/25/2013	ND	ND	ND	ND	ND	ND	ND
	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						
MWW-1	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
	3/4/2004	ND	ND	ND	ND	ND	ND	ND
	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
DW-1	8/7/2014	ND	16	ND	ND	ND	ND	ND

NOTES:
ND - Not detected above laboratory detection limits.

ATTACHMENT 3

WELL CONSTRUCTION DIAGRAM

RPS GaiaTech
Environmental Risk. Managed.

GAIATECH WELL LOG - DW-1

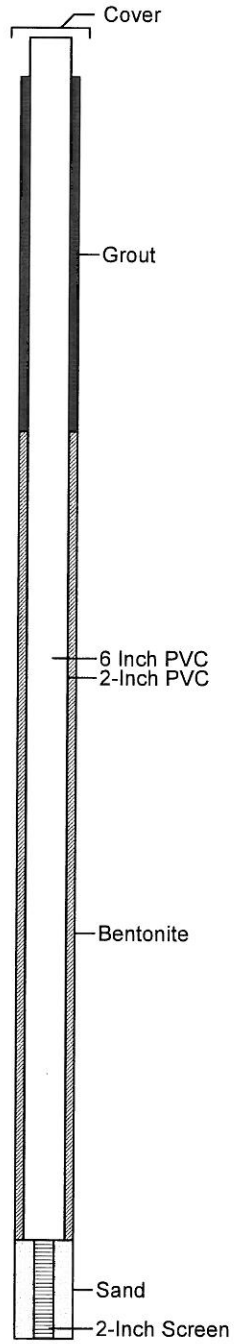
(PAGE 1 TO 1)

Mohawk Industries Facility
Eton, Murray County, Georgia

FUNCTION INFORMATION			
Date/Time Started	: 8/5/2014	Logged By	: William H. Lucas
Date/Time Completed	: 8/7/2014	Drilling Method	: Mud/Air Rotary
Total Depth of Boring	: 66 ft bgs	Hole Diameter	: 6 inch / 4 inch
Total Depth of Well	: 66 ft bgs	Drilling Company	: GeoLab
		Sampling Method	: Soil Cuttings

Depth In	Sample	Blow Count	% Recovery	PID (ppm)	USCS	GRAPHIC	Description
0–66					ML		Asphalt surface followed by reddish-orange CLAYEY SILT.
50							Competent bedrock encountered.
54							Grey, hard, competent rock from 49 to 54 ft. Void - loss of drilling fluids from 54 to 57 ft.
58							Competent rock from 57 to 61 ft. Water bearing fracture at 64 ft. Set outer casing at 61 ft. and grouted. After a minimum of 24 hrs, drilled to a total depth of 66 ft. Set inner 2 inch casing to 66 ft. with 5 ft. of screen.
66							Drilling utilizing mud rotary for 6 inch outer casing. Air rotary utilized for inner casing.

Well: DW-1
Elev.:



ATTACHMENT 4

LABORATORY ANALYTICAL DATA REPORTS

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 13, 2014

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

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

RE: Mohawk Industries

Dear Mike Wilson: Order No: 1408650

Analytical Environmental Services, Inc. received 2 samples on 8/8/2014 8:08:00 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 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, 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

3080 Presidential Drive • Atlanta, Georgia 30340 • Tel: 770.457.8177 • Fax: 770.457.8188 • Toll Free: 800.972.4889
www.aesatlanta.com

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1408650

Date: 8-8-14 Page 1 of 1

COMPANY: RPS-Gaia Tech
ADDRESS: 3525 Piedmont Rd NE Suite 520, Bld. 6 Atlanta, GA 30305
PHONE: 404/809-3884
FAX: 404/812-1992
SAMPLED BY: Michael Wilson
SIGNATURE:

ANALYSIS REQUESTED: VOCs; TCLP-VOCs

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOCs	TCLP-VOCs	No # of Containers	REMARKS
1	MI-0814-DW1	8-7	1830	✓		GW	✓		2	
2										
3	MI-0814-WC	8-7	1700		✓	O		✓	1	
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

PRESERVATION (See codes)

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	8-8-14 0808	1: Cataya R	8/8/14 8:08am
2:		2:	
3:		3:	

PROJECT INFORMATION
PROJECT NAME: Mohawk Industries
PROJECT #: 154742.421.00
SITE ADDRESS: Eton, GA
SEND REPORT TO: Michael Wilson
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#: 154742

RECEIPT
Total # of Containers: 3

Turnaround Time Request
- ○ Standard 5 Business Days
- ⊗ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other

STATE PROGRAM (if any):
E-mail? Y/N: Fax? Y/N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:
O= Drilling mud

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER

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.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 13-Aug-14

Client: GaiaTech, Inc.
Project: Mohawk Industries
Lab ID: 1408650

Case Narrative

Analysis TAT changed to 3 day for the GW sample. TCLP Volatiles is standard tat, per Mike Wilson via email on 8/8/14.

Analytical Environmental Services, Inc **Date:** 13-Aug-14

Client:	GaiaTech, Inc.	**Client Sample ID:**	MI-0814-DW1
Project Name:	Mohawk Industries	**Collection Date:**	8/7/2014 6:30:00 PM
Lab ID:	1408650-001	**Matrix:**	Groundwater

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	194727	1	08/09/2014 23:15	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,1-Dichloroethane	16	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,1-Dichloroethene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,2-Dibromoethane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,2-Dichloroethane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,2-Dichloropropane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
2-Butanone	BRL	50		ug/L	194727	1	08/09/2014 23:15	GK
2-Hexanone	BRL	10		ug/L	194727	1	08/09/2014 23:15	GK
4-Methyl-2-pentanone	BRL	10		ug/L	194727	1	08/09/2014 23:15	GK
Acetone	BRL	50		ug/L	194727	1	08/09/2014 23:15	GK
Benzene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Bromodichloromethane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Bromoform	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Bromomethane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Carbon disulfide	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Carbon tetrachloride	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Chlorobenzene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Chloroethane	BRL	10		ug/L	194727	1	08/09/2014 23:15	GK
Chloroform	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Chloromethane	BRL	10		ug/L	194727	1	08/09/2014 23:15	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Cyclohexane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Dibromochloromethane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Dichlorodifluoromethane	BRL	10		ug/L	194727	1	08/09/2014 23:15	GK
Ethylbenzene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Freon-113	BRL	10		ug/L	194727	1	08/09/2014 23:15	GK
Isopropylbenzene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
m,p-Xylene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Methyl acetate	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Methylcyclohexane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Methylene chloride	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
o-Xylene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Aug-14

Client:	GaiaTech, Inc.	**Client Sample ID:**	MI-0814-DW1
Project Name:	Mohawk Industries	**Collection Date:**	8/7/2014 6:30:00 PM
Lab ID:	1408650-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Tetrachloroethene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Toluene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Trichloroethene	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Trichlorofluoromethane	BRL	5.0		ug/L	194727	1	08/09/2014 23:15	GK
Vinyl chloride	BRL	2.0		ug/L	194727	1	08/09/2014 23:15	GK
Surr: 4-Bromofluorobenzene	90.6	66.2-120		%REC	194727	1	08/09/2014 23:15	GK
Surr: Dibromofluoromethane	102	79.5-121		%REC	194727	1	08/09/2014 23:15	GK
Surr: Toluene-d8	105	77-117		%REC	194727	1	08/09/2014 23:15	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Aug-14

Client:	GaiaTech, Inc.	**Client Sample ID:**	MI-0814-WC
Project Name:	Mohawk Industries	**Collection Date:**	8/7/2014 5:00:00 PM
Lab ID:	1408650-002	**Matrix:**	Solid

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILES, TCLP SW1311/8260B				**(SW1311)**				
1,1-Dichloroethene	BRL	0.10		mg/L	194839	20	08/13/2014 03:40	GK
1,2-Dichloroethane	BRL	0.10		mg/L	194839	20	08/13/2014 03:40	GK
2-Butanone	BRL	0.20		mg/L	194839	20	08/13/2014 03:40	GK
Benzene	BRL	0.10		mg/L	194839	20	08/13/2014 03:40	GK
Carbon tetrachloride	BRL	0.10		mg/L	194839	20	08/13/2014 03:40	GK
Chlorobenzene	BRL	0.10		mg/L	194839	20	08/13/2014 03:40	GK
Chloroform	BRL	0.10		mg/L	194839	20	08/13/2014 03:40	GK
Tetrachloroethene	BRL	0.10		mg/L	194839	20	08/13/2014 03:40	GK
Trichloroethene	BRL	0.10		mg/L	194839	20	08/13/2014 03:40	GK
Vinyl chloride	BRL	0.040		mg/L	194839	20	08/13/2014 03:40	GK
Surr: 4-Bromofluorobenzene	98.7	67.9-128		%REC	194839	20	08/13/2014 03:40	GK
Surr: Dibromofluoromethane	99.3	77.2-124		%REC	194839	20	08/13/2014 03:40	GK
Surr: Toluene-d8	100	71.6-127		%REC	194839	20	08/13/2014 03:40	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Gas Tech Work Order Number 1408650

Checklist completed by [signature] 8/8/14
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US 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 3.3 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 submitted __	Yes ✓	No __
Water - pH acceptable upon receipt?	Yes ✓	No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Analytical Environmental Services, Inc

Date: 13-Aug-14

Client: GaiaTech, Inc.
Project Name: Mohawk Industries
Workorder: 1408650

ANALYTICAL QC SUMMARY REPORT

BatchID: 194727

Sample ID: **MB-194727** Client ID: Units: **ug/L** Prep Date: **08/09/2014** Run No: **273393**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **194727** Analysis Date: **08/09/2014** Seq No: **5769157**

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 value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: GaiaTech, Inc.
Project Name: Mohawk Industries
Workorder: 1408650

ANALYTICAL QC SUMMARY REPORT

BatchID: 194727

Sample ID: **MB-194727** Client ID: Units: **ug/L** Prep Date: **08/09/2014** Run No: **273393**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **194727** Analysis Date: **08/09/2014** Seq No: **5769157**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	44.55	0	50.00		89.1	66.2	120				
Surr: Dibromofluoromethane	50.45	0	50.00		101	79.5	121				
Surr: Toluene-d8	51.92	0	50.00		104	77	117				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Aug-14

Client: GaiaTech, Inc.
Project Name: Mohawk Industries
Workorder: 1408650

ANALYTICAL QC SUMMARY REPORT

BatchID: 194727

Sample ID: **LCS-194727** Client ID: Units: **ug/L** Prep Date: **08/09/2014** Run No: **273393**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **194727** Analysis Date: **08/09/2014** Seq No: **5769155**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	57.38	5.0	50.00		115	63.1	140				
Benzene	52.32	5.0	50.00		105	74.2	129				
Chlorobenzene	53.36	5.0	50.00		107	70	129				
Toluene	55.42	5.0	50.00		111	74.2	129				
Trichloroethene	54.63	5.0	50.00		109	71.2	135				
Surr: 4-Bromofluorobenzene	46.03	0	50.00		92.1	66.2	120				
Surr: Dibromofluoromethane	50.12	0	50.00		100	79.5	121				
Surr: Toluene-d8	50.73	0	50.00		101	77	117				

Sample ID: **1408656-001AMS** Client ID: Units: **ug/L** Prep Date: **08/09/2014** Run No: **273393**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **194727** Analysis Date: **08/09/2014** Seq No: **5769180**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	56.80	5.0	50.00		114	60.2	159				
Benzene	53.15	5.0	50.00		106	70.2	138				
Chlorobenzene	53.58	5.0	50.00		107	70.1	133				
Toluene	56.39	5.0	50.00		113	70	139				
Trichloroethene	55.70	5.0	50.00		111	70.1	144				
Surr: 4-Bromofluorobenzene	46.19	0	50.00		92.4	66.2	120				
Surr: Dibromofluoromethane	49.19	0	50.00		98.4	79.5	121				
Surr: Toluene-d8	51.92	0	50.00		104	77	117				

Sample ID: **1408656-001AMSD** Client ID: Units: **ug/L** Prep Date: **08/09/2014** Run No: **273393**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **194727** Analysis Date: **08/09/2014** Seq No: **5769182**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	55.47	5.0	50.00		111	60.2	159	56.80	2.37	19.2	
Benzene	52.18	5.0	50.00		104	70.2	138	53.15	1.84	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: GaiaTech, Inc.
Project Name: Mohawk Industries
Workorder: 1408650

ANALYTICAL QC SUMMARY REPORT

BatchID: 194727

Sample ID: **1408656-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/L** BatchID: **194727**
Prep Date: **08/09/2014** Analysis Date: **08/09/2014**
Run No: **273393** Seq No: **5769182**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	52.04	5.0	50.00		104	70.1	133	53.58	2.92	20	
Toluene	55.28	5.0	50.00		111	70	139	56.39	1.99	20	
Trichloroethene	54.39	5.0	50.00		109	70.1	144	55.70	2.38	20	
Surr: 4-Bromofluorobenzene	44.59	0	50.00		89.2	66.2	120	46.19	0	0	
Surr: Dibromofluoromethane	48.72	0	50.00		97.4	79.5	121	49.19	0	0	
Surr: Toluene-d8	51.14	0	50.00		102	77	117	51.92	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Aug-14

Client: GaiaTech, Inc.
Project Name: Mohawk Industries
Workorder: 1408650

ANALYTICAL QC SUMMARY REPORT

BatchID: 194839

Sample ID: **MB-194839** Client ID: Units: **mg/L** Prep Date: **08/12/2014** Run No: **273579**
SampleType: **MBLK** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **194839** Analysis Date: **08/12/2014** Seq No: **5774092**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	0.9498	0	1.000		95.0	67.9	128				
Surr: Dibromofluoromethane	0.9450	0	1.000		94.5	77.2	124				
Surr: Toluene-d8	1.004	0	1.000		100	71.6	127				

Sample ID: **LCS-194839** Client ID: Units: **mg/L** Prep Date: **08/12/2014** Run No: **273579**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **194839** Analysis Date: **08/12/2014** Seq No: **5774089**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.8840	0.10	1.000		88.4	62.3	141				
1,2-Dichloroethane	1.022	0.10	1.000		102	74.1	127				
2-Butanone	2.613	0.20	2.000		131	45.5	137				
Benzene	0.9642	0.10	1.000		96.4	73.5	125				
Carbon tetrachloride	1.143	0.10	1.000		114	55.1	144				
Chlorobenzene	0.9972	0.10	1.000		99.7	75.4	122				
Chloroform	0.9972	0.10	1.000		99.7	68.2	127				
Tetrachloroethene	1.062	0.10	1.000		106	70.3	132				
Trichloroethene	1.074	0.10	1.000		107	70.5	128				
Vinyl chloride	0.7096	0.040	1.000		71.0	54.9	143				

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J 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

Client: GaiaTech, Inc.
Project Name: Mohawk Industries
Workorder: 1408650

ANALYTICAL QC SUMMARY REPORT

BatchID: 194839

Sample ID: **LCS-194839** Client ID: Units: **mg/L** Prep Date: **08/12/2014** Run No: **273579**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **194839** Analysis Date: **08/12/2014** Seq No: **5774089**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	1.009	0	1.000		101	67.9	128				
Surr: Dibromofluoromethane	0.9716	0	1.000		97.2	77.2	124				
Surr: Toluene-d8	1.020	0	1.000		102	71.6	127				

Sample ID: **1408650-002AMS** Client ID: **MI-0814-WC** Units: **mg/L** Prep Date: **08/12/2014** Run No: **273579**
SampleType: **MS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **194839** Analysis Date: **08/13/2014** Seq No: **5774110**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.8466	0.10	1.000		84.7	62.3	154				
1,2-Dichloroethane	0.9686	0.10	1.000		96.9	65.8	132				
2-Butanone	2.371	0.20	2.000		119	44.2	148				
Benzene	0.9266	0.10	1.000		92.7	72.6	133				
Carbon tetrachloride	1.196	0.10	1.000		120	53.7	151				
Chlorobenzene	0.9492	0.10	1.000		94.9	72	130				
Chloroform	0.9534	0.10	1.000		95.3	63.2	137				
Tetrachloroethene	0.9868	0.10	1.000		98.7	71.9	140				
Trichloroethene	1.017	0.10	1.000		102	68.3	146				
Vinyl chloride	0.8046	0.040	1.000		80.5	54.5	151				
Surr: 4-Bromofluorobenzene	0.9982	0	1.000		99.8	67.9	128				
Surr: Dibromofluoromethane	0.9948	0	1.000		99.5	77.2	124				
Surr: Toluene-d8	1.042	0	1.000		104	71.6	127				

Sample ID: **1408650-002ADUP** Client ID: **MI-0814-WC** Units: **mg/L** Prep Date: **08/12/2014** Run No: **273579**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **194839** Analysis Date: **08/13/2014** Seq No: **5774109**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10						0	0	30	
1,2-Dichloroethane	BRL	0.10						0	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: GaiaTech, Inc.
Project Name: Mohawk Industries
Workorder: 1408650

ANALYTICAL QC SUMMARY REPORT

BatchID: 194839

Sample ID: **1408650-002ADUP** Client ID: **MI-0814-WC** Units: **mg/L** Prep Date: **08/12/2014** Run No: **273579**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **194839** Analysis Date: **08/13/2014** Seq No: **5774109**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2-Butanone	BRL	0.20						0	0	30	
Benzene	BRL	0.10						0	0	30	
Carbon tetrachloride	BRL	0.10						0	0	30	
Chlorobenzene	BRL	0.10						0	0	30	
Chloroform	BRL	0.10						0	0	30	
Tetrachloroethene	BRL	0.10						0	0	30	
Trichloroethene	BRL	0.10						0	0	30	
Vinyl chloride	BRL	0.040						0	0	30	
Surr: 4-Bromofluorobenzene	0.8884	0	1.000		88.8	67.9	128	0.9866	0	0	
Surr: Dibromofluoromethane	0.9520	0	1.000		95.2	77.2	124	0.9930	0	0	
Surr: Toluene-d8	1.105	0	1.000		110	71.6	127	1.003	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		