

#### **ANALYTICAL REPORT**

Job Number: 180-59490-1

Job Description: Harley Davidson

For:

Groundwater Sciences Corporation 2601 Market Place Street, Suite 310 Harrisburg, PA 17110-9307

Attention: Allan Miller

Approved for release. Carrie L Gamber Senior Project Manager 10/17/2016 7:56 AM

Carrie L Gamber, Senior Project Manager 301 Alpha Drive, Pittsburgh, PA, 15238 (412)963-2428

Drw G. Samly

carrie.gamber@testamericainc.com 10/17/2016

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# **Definitions/Glossary**

Client: Groundwater Sciences Corporation Project/Site: Harley Davidson

#### Qualifiers

#### **GC/MS VOA**

Qualifier	Qualifier Description							
U	Indicates the analyte was analyzed for but not detected.							
^c	CCV Recovery is outside acceptance limits.							
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.							
*	LCS or LCSD is outside acceptance limits.							
E	Result exceeded calibration range.							
Metals								

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
В	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

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

TestAmerica Job ID: 180-59490-1

# **Client Sample Results**

Client: Groundwater Sciences Corporation Project/Site: Harley Davidson

TestAmerica Job ID: 180-59490-1

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

Client Sample ID: HD-MW-110- Date Collected: 10/05/16 15:50							_000 000	mple ID: 180-5 Matrix	
Date Received: 10/06/16 08:50	Dogult	Qualifier	DI	MDI	l lmi4		Dramarad	Analysed	Dil Fo
Analyte Chloromethane		U ^c	RL 1.0		Unit ug/L	D	Prepared	Analyzed 10/11/16 21:51	Dil Fac
		U ^c *	1.0		ug/L ug/L			10/11/16 21:51	
Vinyl chloride	1.0				ug/L ug/L				
Bromomethane			1.0					10/11/16 21:51	
Chloroethane		U ^c	1.0		ug/L			10/11/16 21:51	•
1,1-Dichloroethene	1.0		1.0		ug/L			10/11/16 21:51	•
Acetone		J ^c	5.0		ug/L			10/11/16 21:51	
Carbon disulfide	1.0		1.0		ug/L			10/11/16 21:51	•
Methylene Chloride	1.0		1.0		ug/L			10/11/16 21:51	•
trans-1,2-Dichloroethene	1.0		1.0		ug/L			10/11/16 21:51	
Methyl tert-butyl ether	1.0		1.0		ug/L			10/11/16 21:51	•
1,1-Dichloroethane	1.0		1.0		ug/L			10/11/16 21:51	•
cis-1,2-Dichloroethene	1.0		1.0		ug/L			10/11/16 21:51	
Bromochloromethane	1.0		1.0		ug/L			10/11/16 21:51	
2-Butanone (MEK)	5.0	U ^c	5.0		ug/L			10/11/16 21:51	,
Chloroform	0.59	J	1.0	0.27	ug/L			10/11/16 21:51	•
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/11/16 21:51	
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/11/16 21:51	
Benzene	1.0	U	1.0	0.26	ug/L			10/11/16 21:51	
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/11/16 21:51	
Trichloroethene	1.0		1.0	0.26	ug/L			10/11/16 21:51	
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/11/16 21:51	
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/11/16 21:51	
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/11/16 21:51	
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/11/16 21:51	
Toluene	1.0	U	1.0		ug/L			10/11/16 21:51	
trans-1,3-Dichloropropene	1.0	U ^c	1.0		ug/L			10/11/16 21:51	
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			10/11/16 21:51	
Tetrachloroethene	71	E	1.0		ug/L			10/11/16 21:51	,
2-Hexanone	5.0		5.0		ug/L			10/11/16 21:51	
Dibromochloromethane	1.0	U	1.0		ug/L			10/11/16 21:51	
1,2-Dibromoethane (EDB)	1.0		1.0		ug/L			10/11/16 21:51	
Chlorobenzene	1.0		1.0		ug/L			10/11/16 21:51	
1,1,1,2-Tetrachloroethane	1.0	-	1.0		ug/L			10/11/16 21:51	
Ethylbenzene	1.0		1.0		ug/L			10/11/16 21:51	
Xylenes, Total	2.0		2.0		ug/L			10/11/16 21:51	
Styrene	1.0		1.0		ug/L			10/11/16 21:51	
Bromoform	1.0		1.0					10/11/16 21:51	,
1,1,2,2-Tetrachloroethane	1.0		1.0		ug/L			10/11/16 21:51	
Acrylonitrile	20		20		ug/L ug/L			10/11/16 21:51	
1,4-Dioxane	200		200		ug/L ug/L			10/11/16 21:51	
Surrogate	%Recovery		Limits		-		Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	121		72 - 134			-		10/11/16 21:51	
Toluene-d8 (Surr)	103		80 - 120					10/11/16 21:51	
4-Bromofluorobenzene (Surr)	109		72 - 120					10/11/16 21:51	
Dibromofluoromethane (Surr)	110		77 - 127					10/11/16 21:51	

# **Client Sample Results**

Client: Groundwater Sciences Corporation Project/Site: Harley Davidson

TestAmerica Job ID: 180-59490-1

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

Client Sample ID: HD-MW-110-0/1-0  Date Collected: 10/05/16 15:50								Lab Sample ID: 180-59490-8 Matrix: Wate				
Date Received: 10/06/16 08:50 Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa			
Chloromethane	5.0	U ^c	5.0	1.1	ug/L			10/12/16 16:40				
Vinyl chloride	5.0	U ^c	5.0	1.6	ug/L			10/12/16 16:40	į			
Bromomethane	5.0	U	5.0	1.8	ug/L			10/12/16 16:40	į			
Chloroethane	5.0	U	5.0	1.3	ug/L			10/12/16 16:40				
1,1-Dichloroethene	5.0	U	5.0		ug/L			10/12/16 16:40	5			
Acetone	25	U ^c	25	13	ug/L			10/12/16 16:40	5			
Carbon disulfide	5.0	U	5.0	0.92	ug/L			10/12/16 16:40				
Methylene Chloride	8.5		5.0	1.8	ug/L			10/12/16 16:40	į			
trans-1,2-Dichloroethene	5.0	U	5.0		ug/L			10/12/16 16:40	5			
Methyl tert-butyl ether	5.0	U	5.0	1.2	ug/L			10/12/16 16:40				
1,1-Dichloroethane	5.0	U	5.0		ug/L			10/12/16 16:40	5			
cis-1,2-Dichloroethene	5.0	U	5.0		ug/L			10/12/16 16:40	5			
Bromochloromethane	5.0	U	5.0		ug/L			10/12/16 16:40				
2-Butanone (MEK)		U ^c	25		ug/L			10/12/16 16:40	5			
Chloroform	5.0	U	5.0		ug/L			10/12/16 16:40	5			
1,1,1-Trichloroethane	5.0	U	5.0		ug/L			10/12/16 16:40				
Carbon tetrachloride	5.0		5.0		ug/L			10/12/16 16:40	Ę			
Benzene	5.0		5.0		ug/L			10/12/16 16:40	Ę			
1,2-Dichloroethane	5.0		5.0		ug/L			10/12/16 16:40				
Trichloroethene	5.0		5.0		ug/L			10/12/16 16:40	Ę			
1,2-Dichloropropane	5.0		5.0		ug/L			10/12/16 16:40	5			
Bromodichloromethane	5.0		5.0		ug/L			10/12/16 16:40				
cis-1,3-Dichloropropene	5.0	U	5.0		ug/L			10/12/16 16:40	Ę			
4-Methyl-2-pentanone (MIBK)	25	U	25		ug/L			10/12/16 16:40	Ę			
Toluene	5.0		5.0		ug/L			10/12/16 16:40				
trans-1,3-Dichloropropene		U ^c	5.0		ug/L			10/12/16 16:40	5			
1.1.2-Trichloroethane	5.0	U	5.0		ug/L			10/12/16 16:40	5			
Tetrachloroethene	59		5.0		ug/L			10/12/16 16:40				
2-Hexanone	25	U	25		ug/L			10/12/16 16:40	5			
Dibromochloromethane	5.0	U	5.0		ug/L			10/12/16 16:40	5			
1,2-Dibromoethane (EDB)	5.0		5.0		ug/L			10/12/16 16:40				
Chlorobenzene	5.0		5.0		ug/L			10/12/16 16:40	5			
1,1,1,2-Tetrachloroethane	5.0		5.0	0.98	_			10/12/16 16:40	5			
Ethylbenzene	5.0		5.0		ug/L			10/12/16 16:40				
Xylenes, Total	10		10		ug/L			10/12/16 16:40	5			
Styrene	5.0		5.0		ug/L			10/12/16 16:40	5			
Bromoform	5.0		5.0		ug/L			10/12/16 16:40				
1,1,2,2-Tetrachloroethane	5.0		5.0		ug/L			10/12/16 16:40	5			
Acrylonitrile		U ^c	100		ug/L			10/12/16 16:40	5			
1,4-Dioxane	1000		1000		ug/L			10/12/16 16:40				
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac			
1,2-Dichloroethane-d4 (Surr)	119		72 - 134					10/12/16 16:40				
Toluene-d8 (Surr)	104		80 - 120					10/12/16 16:40				
4-Bromofluorobenzene (Surr)	106		72 - 120					10/12/16 16:40				
Dibromofluoromethane (Surr)	105		77 - 127					10/12/16 16:40				

TestAmerica Laboratories, Inc. COC No: TAP2016 10 US Notes: **TestAmerica** Job No. 10012.30 Container No. Jo Date/Time: SDC NI Months Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) 180-59490 Chain of Custody DateSubmitted: 10/5/16 FEDEX e For Company: Carrier: Disposal By Lab Site Contact: Jennifer S. Reese 56 COO Chain of Custody Record Lab Contact: Carrie Gamber Return To Client (JJ 00728 848W2) amaxoid-t, Received by: (VOLEL 9F8MS/0709 9F8MS) SW × Select List Dissolved Metals by ICP (SW846 6020/SW846 7470A) Select List Total Metals by ICP MS 7 Z Number of Containers 3 Field Filter N (0) slie (700 AOC2 (8700C) Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Unpreserved 7=Zinc Acetate & NaOH # of Cont 10 m 10 COS Date/Time: Sample Type Matrix 3 Unkamben TAL if different from Below. Standard 3 3 Project Manager: Christopher D. O'neil 3 3 3 3 Analysis Turnaround Time Tel/Fax: 717-901-8176 / (717) 657-1611 Calendar ( C ) or Work Days (W) tr. D Blank 39 30 2 weeks I week 5 days 1 day Special Instructions/QC Requirements & Comments: CLP Like Deliverables 10/5/14/630 1015/16 YO 32 10/5/16/1550 Sample 10/5/16/1435 10/5/16 1430 000/ 19115/01 1015/16 1330 10/5/16/1200 Time Company: GSC 000 ompany: Sample Skin Irritant 7.8K 2016 Comprehensive Event 0-1/0-(cole)-0/1-0 0-1 Sample Identification Harley-Davidson, York PA A-10-151-WM-0A D-1/0-899-MW-QH 40-MM-68-0/1-0 Phone 0-1/0-849-MW-0H HD-002-0/1-2 HO-WW-150-0/ phone 412,963,7058 fax 412,963,2470 Groundwater Sciences Corporation Client Contact **FestAmerica Pittsburgh** 2601 Market Place St. Suite 310 Relinquished by (Purbe and Sign): Possible Hazard Identification Harrisburg, PA 17110 Pittsburgh, PA 15238 Quote # 18000557 (717) 901-8180 Project Name: Relinquished by: (717) 657-1611 Relinquished by 301 Alpha Drive Site