December 7, 2017 Reference No. 017302

Mr. Rob Marshall
Indiana Department of Environmental Management
Office of Land Quality, Permits Branch
100 North Senate Avenue Room IGCN 1154
Indianapolis, IN 46204

Dear Mr. Marshall:

Re: Residential Well Sampling Report of Findings
2915 Dr. Martin Luther King Jr. Boulevard Facility
Anderson, Indiana

1. Introduction

GHD Services Inc. (GHD) has prepared this Residential Well Sampling Report of Findings to summarize the water well sampling conducted in the vicinity of Revitalizing Auto Communities Environmental Response (RACER) Trust's former Anderson Guide facility located at 2915 Dr. Martin Luther King Junior (MLK) Boulevard, Anderson, Indiana (Site).

1.1 Background

In October and November 2000, as part of the implementation of the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), cis-1,2-dichloroethene (cis-1,2-DCE), 1,1,1-trichloroethane (TCA), trichloroethene (TCE) and vinyl chloride were detected in groundwater samples collected at the Site, near the southern property boundary, at concentrations above the United States Environmental Protection Agency (EPA) maximum contaminant levels (MCLs). Based on the identification of these compounds in groundwater at the southern limit of the Site, a residential well sampling program was developed and implemented.

A potable water supply search in the down gradient direction south and east of the area of identified contamination was completed in 2000. The search area was limited to properties south and east of the Site given the locations of the exceeding concentrations, the direction of groundwater flow (i.e., easterly), and the concentrations beneath the northern portions of the Site (i.e., below criteria).

The search included obtaining maps of individual residences from the City of Anderson Engineering department, verification of the individual residences and verification of potable water being provided to the individual residences from the City of Anderson Water Department through the review of water department billing records. Addresses that may not have been connected to the City of Anderson municipal water supply system that were located in this area, and in close proximity to the Site, were contacted to determine if a drinking water well was in use.

Representatives of General Motors Corporation (GMC) contacted the owners of all of the properties that were identified as potentially having a drinking water supply well in the study area. Residents and business owners contacted were provided with information regarding potential groundwater issues in the area, and were asked to verify the presence of a drinking water well at their property. If no water supply well existed at the property and the property was supplied by a municipal water source, no further investigation was conducted at that property.

GMC identified 10 properties within the study area that contained a private drinking water well (Figure 1). Each well was sampled in 2000 and analyzed for volatile organic compounds (VOCs). No VOCs were detected in any of the wells sampled. Based on the neighborhood survey and analytical results, it was concluded that none of the ten potable wells had been impacted. Since the 2000 water well survey and sampling, two wells on Meadowbrook Golf Course were abandoned by GMC as an interim measure.

The objective of the 2017 residential well sampling is to confirm if potable wells are still in use within the 2000 study area and to assess those private water wells for the presence of VOCs.

The Residential Well Sampling Work Plan was submitted to IDEM on October 23, 2014 (Work Plan). On November 13, 2014, IDEM approved the Work Plan. GHD implemented the field portion of the Work Plan in June and July 2017. An overview of the field activities conducted and the analytical data generated therefrom is provided in the following sections.

2. Residential Well Sampling

Residential well sampling activities were completed between June 7 and July 21, 2017. A GHD field technician and a RACER Trust representative attended the eight properties that were sampled in 2000 to confirm the current status of each well (i.e., in use, out of use, abandoned). The owner/tenant of the property was asked to sign an access agreement to permit GHD to collect a water well sample. Signed access agreements are provided in Attachment A. A summary of the residential well sampling activities is provided below:

1. **1400 W 29th Street** – Access agreement signed and water well sampled.
2. **3232 MLK Boulevard** – On May 16, 2014 the property was transferred to a new parcel and is now part of 3246 MLK Boulevard. Current owner stated that they are on City water and have no knowledge of a water well. There was no evidence of a water well at the property.
3. **3503 MLK Boulevard** – Access for sampling denied by owner.
4. **3523 MLK Boulevard** – Access agreement signed and water well sampled.
5. **3535 MLK Boulevard** – Access agreement signed and water well sampled.
6. **3633 MLK Boulevard** – Owner stated that they are on City water, but the water well still exists. The water well is located in the basement of the house and is not currently used or connected to power. The water well was not sampled.

7. **3923 MLK Boulevard** – Owner stated that they are on City water and the well has been abandoned.

8. **4003 MLK Boulevard** – Access for sampling denied by owner.

Three water well samples were collected. Samples were collected through the tap located closest to the well, and upstream of any treatment systems (i.e., water softener, filtration unit, etc.), storage or pressure tanks. Any aerators, strainers and hose attachments, if present, were removed from the tap prior to purging and sampling. Once the tap was selected, a steady, smooth flowing water stream under moderate pressure was obtained to allow the well to purge prior to sampling. During well purging, values for pH, conductivity, and temperature were measured and recorded every five minutes to verify well stabilization. Well stabilization data is provided in Table 1. Once field parameters stabilized, samples were collected and placed directly into pre-cleaned bottles provided by the laboratory for chemical analysis of Target Compound List (TCL) VOCs. One field duplicate and one matrix spike/matrix spike duplicate (MS/MSD) sample were collected and submitted for quality assurance/quality control. Trip blank samples were also submitted for quality assurance/quality control. All VOC groundwater samples were packed on ice and submitted under chain-of-custody protocol to TestAmerica laboratories in North Canton, Ohio and analyzed in accordance with SW-846 8260B. A sample key is provided in Table 2.

3. Analytical Results

The laboratory analytical data and validation memorandum for the residential well sampling event are provided in Attachment B. Through data validation, GHD determined that the analytical data is suitable for its intended use without qualification.

The results of the residential well sampling event are summarized in Table 3 along with Indiana Department of Environmental Management's (IDEM's) 2017 Residential Tap Water Screening Levels and the EPA MCLs for comparative reference.

A review of Table 3 indicates that samples collected from 1400 West 29th Street, 3523 MLK Boulevard, and 3535 MLK Boulevard did not contain detectable concentrations of VOCs, with the exception of acetone and toluene. Acetone and toluene are not considered Site contaminants of concern (COCs) and where detected, were three orders of magnitude below IDEM's 2017 Residential Tap Water Screening Levels and the EPA MCLs.

The well at 3523 MLK Boulevard is the closest accessible private water well south of the Site. Given this well was free of detectable concentrations of Site COC's in 2000 and 2017 and that the South Court plume is stable (not expanding), the water wells further south and east (if any) of 3523 MLK Boulevard are unlikely to contain detectable concentrations of Site COCs.

4. Conclusions

In 2017, RACER Trust repeated the 2000 residential well sampling program to the extent possible. Samples were collected from accessible private water wells downgradient of the Site (i.e., 1400 West 29th Street, 3523 MLK Boulevard, and 3535 MLK Boulevard) the results of which indicate private water wells are free of detectable concentrations of Site COCs. The well at 3523 MLK Boulevard is the closest accessible private water well south of the Site. Given this well was free of detectable concentrations of Site COC's in 2000 and 2017 and that the South Court plume is stable (not expanding), the water wells further south and east (if any) of 3523 MLK Boulevard are unlikely to contain detectable concentrations of Site COCs.

Should you have questions regarding the above, please do not hesitate to contact the undersigned.

Sincerely,

GHD

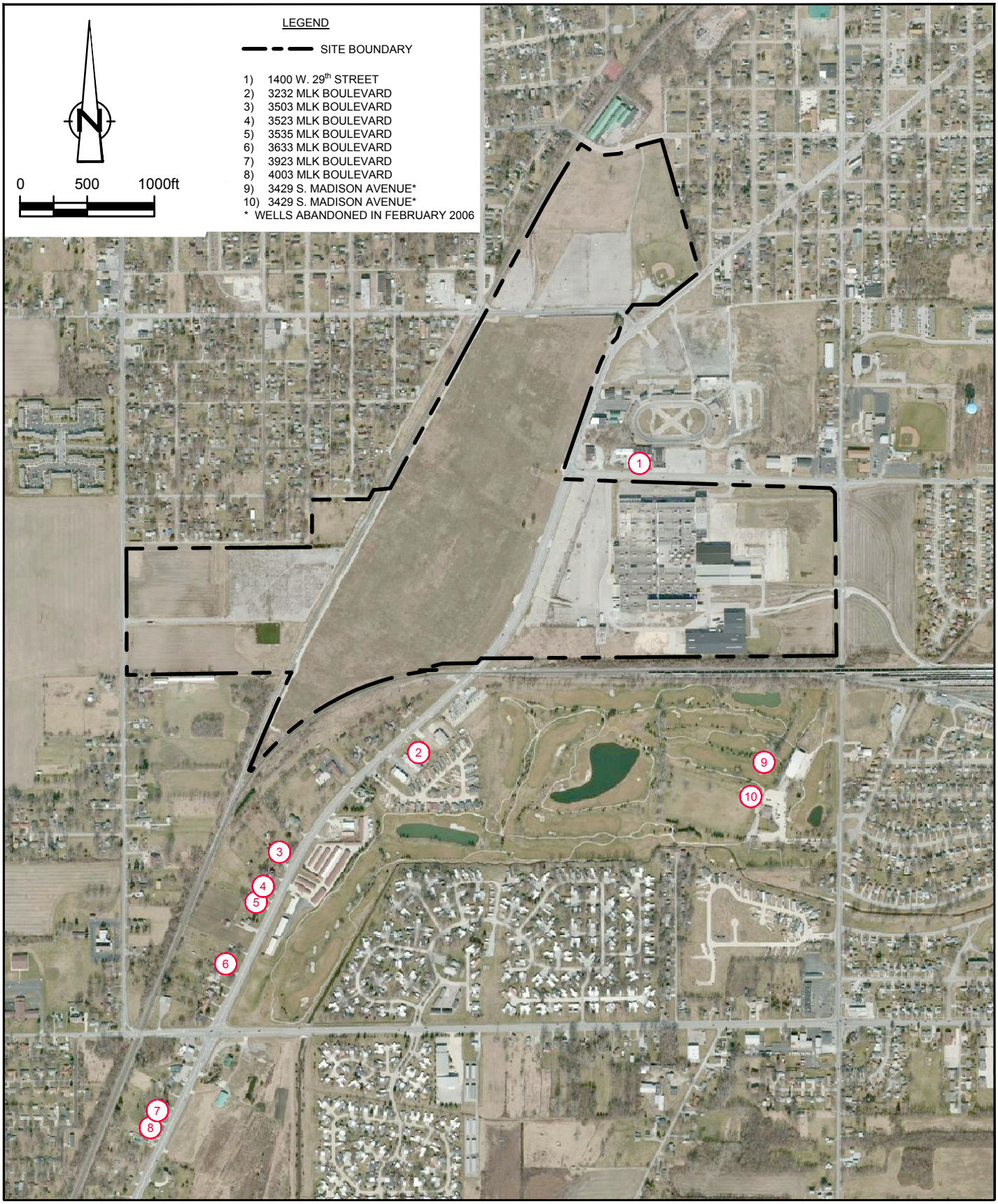
Robert Catallo, B.Sc.

Shannon Richardson, B.Sc.

TW/mma/47

Encl.

cc: Robert Hare (RACER Trust)



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REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST
2915 DR. MARTIN LUTHER KING JR. BLVD., ANDERSON, IN
RESIDENTIAL WELL SAMPLING REPORT OF FINDINGS

017302-00

Oct 4, 2017

WATER WELL LOCATIONS

FIGURE 1

CAD File: N:\CA\St Catharines\Projects\DRAWINGS\17000s\017302\017302-CORRES\017302-00(MARS047)\017302-00(MARS047)GN\017302-00(MARS047)GN-SC001.dwg

Table 1

Stabilization Parameters
Residential Well Sampling Report of Findings
2915 Dr. Martin Luther King Jr. Boulevard,
Anderson, Indiana

Location	*Date*	*Time (24 hr)*	*Temperature (^{O}C)*	*Conductivity (mS/cm)*	*DO mg/L*	*pH (s.u.)*
1400 West 29th Street	6/7/2017	12:13	--	--	--	--
		12:28	17.37	0.720	0.16	8.08
		12:33	17.35	0.710	0.18	8.08
		12:38	17.40	0.700	0.16	8.06
3523 MLK Blvd	6/7/2017	13:42	--	--	--	--
		13:57	14.75	0.680	0.11	7.26
		14:02	14.81	0.680	0.17	7.29
		14:07	14.83	0.670	0.13	7.30
3535 MLK Blvd	7/21/2017	9:05	--	--	--	--
		9:20	14.31	0.730	2.40	7.96
		9:25	14.30	0.730	2.40	7.92
		9:30	14.32	0.730	2.40	7.92

Notes:

mg/L	milligram per litre
mS/cm	millisiemens per centimetre
s.u.	Standard Units
^{o}C	degrees Celsius

Table 2

Sample Key
Residential Well Sampling Report of Findings
2915 Dr. Martin Luther King Jr. Boulevard,
Anderson, Indiana

Sample Location	*Sample Identification*	*Sample Date*	*Time*	*Matrix*	*Sample Type*	*Parent Sample*	*TCL VOCs*
1400 West 29th Street	W-060117-TP-001	06/07/17	12:40	GW	N	--	X
3523 MLK Blvd	W-060117-TP-002	06/07/17	14:09	GW	N	--	X
Trip Blank	TB-060117-TP-001	06/07/17	12:49	TB	TB	--	X
3535 MLK Blvd	W-072117-3535MLK-TP-003	07/21/17	9:32	GW	N	--	X
3535 MLK Blvd	W-072117-3535MLK-TP-004	07/21/17	9:34	GW	FD	W-072117-3535MLK-TP-003	X
Trip Blank	TB-072117-TP-002	07/21/17	9:40	TB	TB	--	X

Notes:

X - Sample collected and analyzed at the laboratory for the noted parameters
GW - Groundwater
TB - Trip Blank
N - Normal
FD - Field Duplicate
TCL VOCs - Target Compound List Volatile Organic Compounds

Table 3

Summary of Groundwater Analytical Data - VOCs
Residential Well Sampling Report of Findings
2915 Dr. Martin Luther King Jr. Boulevard,
Anderson, Indiana

Sample Location:				***1400 West 29th Street***	***3523 MLK Blvd***	***3535 MLK Blvd***	***3535 MLK Blvd***
Sample ID:				***W-060717-TP-001***	***W-060717-TP-002***	***W-072117-3535MLK-TP-003***	***W-072117-3535MLK-TP-004***
Sample Date:				***6/7/2017***	***6/7/2017***	***7/21/2017***	***7/21/2017 (Duplicate)***
Parameters	***Units***	***IDEM's 2017 Residential Tap Water Screening Levels***	***EPA Maximum Contaminant Levels***				
Volatile Organic Compounds							
Acetone	ug/L	14000	-	12	4.1 J	10 U	10 U
Benzene	ug/L	5	5	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	80	-	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	80	-	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	7.5	-	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	5600	-	10 U	10 U	10 U	10 U
Carbon disulfide	ug/L	810	-	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	ug/L	5	5	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	100	-	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	21000	-	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	80	-	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L	190	-	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	80	-	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	28	-	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	5	5	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	7	7	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	70	70	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	100	100	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	5	-	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L	-	-	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	-	-	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	700	700	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	ug/L	38	-	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	6300	-	10 U	10 U	10 U	10 U
Methylene chloride	ug/L	5	-	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	100	100	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	0.76	-	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	5	5	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1000	1000	3.4	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	ug/L	200	200	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	5	5	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	5	5	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	2	2	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	10000	10000	2.0 U	2.0 U	2.0 U	2.0 U

Notes:
ug/L - microgram per litre
J - Estimated concentration.
U - Not detected at the associated reporting limit.

Attachment A

Revitalizing Auto Communities Environmental Response Trust ("RACER Trust")

ACCESS AGREEMENT

Name of owner/tenant: Bob Withdrew

Address of property: 3535 MLK Boulevard

Owner's/tenant's phone number: 425-1211

Owner's/ tenant's email address: _____

I consent to employees, contractors, and authorized representatives of RACER Trust and the Indiana Department of Environmental Management ("IDEM") entering and having continued access to this property for the following purpose:

- **To take sample(s) of well water.**

I understand that RACER Trust will undertake this action: (1) at the direction of IDEM; (2) pursuant to appropriate environmental laws and regulations of the United States and the State of Indiana; and (3) as the successor to certain environmental responsibilities of the former General Motors Corporation.

I also understand that RACER Trust and IDEM will only share data obtained from the sampling of the well(s) located at the above-referenced property with the current owner(s)/tenant(s) of the above-referenced property.

My consent is given voluntarily and on behalf of myself and all tenants and other co-owners of this property (or if the property is owned by a company, then my consent is given on behalf of such company) with knowledge of the right to refuse and without threats or promises of any kind.

This access is granted for a period of time necessary to complete the sampling of residential water wells but not longer than through December 31, 2017.

Signature: _____ Date: 7/21/17

Or if the property is owned by a company:

Company name: _____

Signature of authorized representative: _____

Title of authorized representative: _____

Date: : _____

==========

I DO NOT authorize access to the above-referenced property by RACER Trust or IDEM.

_____

Print Name Signature Date

Revitalizing Auto Communities Environmental Response Trust ("RACER Trust")

ACCESS AGREEMENT

Name of owner/tenant: Tim Allred

Address of property: 1400 West 29th Street

Owner's/tenant's phone number: 765-644-8020

Owner's/ tenant's email address: allredcc@sbcglobal.net

I consent to employees, contractors, and authorized representatives of RACER Trust and the Indiana Department of Environmental Management ("IDEM") entering and having continued access to this property for the following purpose:

- **To take sample(s) of well water.**

I understand that RACER Trust will undertake this action: (1) at the direction of IDEM; (2) pursuant to appropriate environmental laws and regulations of the United States and the State of Indiana; and (3) as the successor to certain environmental responsibilities of the former General Motors Corporation.

I also understand that RACER Trust and IDEM will only share data obtained from the sampling of the well(s) located at the above-referenced property with the current owner(s)/tenant(s) of the above-referenced property.

My consent is given voluntarily and on behalf of myself and all tenants and other co-owners of this property (or if the property is owned by a company, then my consent is given on behalf of such company) with knowledge of the right to refuse and without threats or promises of any kind.

This access is granted for a period of time necessary to complete the sampling of residential water wells but not longer than through December 31, 2017.

Signature: _____ Date: 6-7-2017

Or if the property is owned by a company:

Company name: _____

Signature of authorized representative: _____

Title of authorized representative: _____

Date: : _____

==========

I DO NOT authorize access to the above-referenced property by RACER Trust or IDEM.

_____

Print Name Signature Date

Revitalizing Auto Communities Environmental Response Trust ("RACER Trust")

ACCESS AGREEMENT

Name of owner/tenant: Anthony, Alonzo (Alonzo Anthony)

Address of property: 3523 MLK Boulevard

Owner's/tenant's phone number: 765-215-7822

Owner's/ tenant's email address: ~~Alopanop~~ TLP Aloponop@gmail.com

I consent to employees, contractors, and authorized representatives of RACER Trust and the Indiana Department of Environmental Management ("IDEM") entering and having continued access to this property for the following purpose:

- **To take sample(s) of well water.**

I understand that RACER Trust will undertake this action: (1) at the direction of IDEM; (2) pursuant to appropriate environmental laws and regulations of the United States and the State of Indiana; and (3) as the successor to certain environmental responsibilities of the former General Motors Corporation.

I also understand that RACER Trust and IDEM will only share data obtained from the sampling of the well(s) located at the above-referenced property with the current owner(s)/tenant(s) of the above-referenced property.

My consent is given voluntarily and on behalf of myself and all tenants and other co-owners of this property (or if the property is owned by a company, then my consent is given on behalf of such company) with knowledge of the right to refuse and without threats or promises of any kind.

This access is granted for a period of time necessary to complete the sampling of residential water wells but not longer than through December 31, 2017.

Signature: Alonzo B Anthony Date: 6-7-17

Or if the property is owned by a company:

Company name: _____

Signature of authorized representative: _____

Title of authorized representative: _____

Date: : _____

==========

I DO NOT authorize access to the above-referenced property by RACER Trust or IDEM.

_____

Print Name Signature Date

Revitalizing Auto Communities Environmental Response Trust ("RACER Trust")

ACCESS AGREEMENT

Name of owner/tenant: Terry Shell

Address of property: 4003 MLK Boulevard

Owner's/tenant's phone number: 765-649-3616

Owner's/ tenant's email address: no address

I consent to employees, contractors, and authorized representatives of RACER Trust and the Indiana Department of Environmental Management ("IDEM") entering and having continued access to this property for the following purpose:

- **To take sample(s) of well water.**

I understand that RACER Trust will undertake this action: (1) at the direction of IDEM; (2) pursuant to appropriate environmental laws and regulations of the United States and the State of Indiana; and (3) as the successor to certain environmental responsibilities of the former General Motors Corporation.

I also understand that RACER Trust and IDEM will only share data obtained from the sampling of the well(s) located at the above-referenced property with the current owner(s)/tenant(s) of the above-referenced property.

My consent is given voluntarily and on behalf of myself and all tenants and other co-owners of this property (or if the property is owned by a company, then my consent is given on behalf of such company) with knowledge of the right to refuse and without threats or promises of any kind.

This access is granted for a period of time necessary to complete the sampling of residential water wells but not longer than through December 31, 2017.

Signature: _____ Date: _____

Or if the property is owned by a company:

Company name: _____

Signature of authorized representative: _____

Title of authorized representative: _____

Date: : _____

==========

I DO NOT authorize access to the above-referenced property by RACER Trust or IDEM.

Terry Shell	Terry L Shell	6/7/17
Print Name	Signature	Date

Attachment B

Memorandum

August 10, 2017

To:	Rob Catallo	Ref. No.:	017302-T06
From:	Deb Andrasko/cs/60	Tel:	716-297-6150
cc:	Tyler Wittmaier		

Subject: **Analytical Results and Reduced Validation**
Residential Well Sampling
RACER Trust – MLK Boulevard Facility
Anderson, Indiana
June - July 2017

1. Introduction

This document details a reduced validation of analytical results for groundwater samples collected in support of the Residential Well Sampling at the Anderson, Indiana Site during June - July 2017. Samples were submitted to TestAmerica Laboratory, located in North Canton, Ohio. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, recovery data from surrogate spikes/laboratory control samples (LCS)/matrix spikes (MS) and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical method referenced in Table 3 and applicable guidance from the documents entitled:

i) "Quality Assurance Project Plan (QAPP) for the Resource Conservation and Recovery Act (RCRA) Facility Investigation at GM Anderson, Indiana Facility", IND 980 700 801, Revision 2, October 14, 1997

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Method Data Review", USEPA 540-R-08-01, June 2008

Items i) and ii) will subsequently be referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criterion for the analyses is summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were analyzed within the required holding time.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect indicating laboratory contamination was not an issue for this parameter.

4. Surrogate Spike Recoveries

In accordance with the method employed, all samples, blanks, and QC samples analyzed for volatile organic compounds (VOCs) are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for VOC determinations were spiked with the appropriate number of surrogate compounds prior to sample analysis.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met criteria.

5. Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS contained all analytes of interest. All LCS recoveries were within laboratory control limits, with the exception of high recoveries for some compounds. The associated sample results were non-detect and would not have been impacted. No qualification of the data was deemed necessary.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with known concentrations of the analytes of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1.

The MS/MSD sample was spiked with the analytes of interest. All percent recoveries and RPD values were within the laboratory control limits, indicating acceptable analytical accuracy and precision.

7. Field QA/QC Samples

The field QA/QC consisted of two trip blank samples and one field duplicate sample set.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, trip blanks were submitted to the laboratory for VOC analysis. All results were non-detect for the compounds of interest with the exception of a low concentration of methylene chloride in one of the blanks. All associated sample results were non-detect and were not impacted.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, a field duplicate sample set was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with the duplicate sample must be less than 50 percent. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criterion is one times the RL value.

All field duplicate results were in agreement demonstrating acceptable sampling and analytical precision.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were reported as estimated (J) in Table 2. Non-detect results were presented as non-detect at the RL in Table 2.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Table 1

Sample Collection and Analysis Summary
Residential Well Sampling
RACER Trust - MLK Boulevard Facility
Anderson, Indiana
June - July 2017

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis: Volatiles	Comments
W-060117-TP-001	1400 West 29th Street	Water	06/07/17	12:40	X	
W-060117-TP-002	3523 MLK Blvd	Water	06/07/17	14:09	X	
TB-060117-TP-001	--	Water	06/07/17	12:49	X	Trip Blank
W-072117-3535MLK-TP-003	3535 MLK Blvd	Water	07/21/17	09:32	X	MS/MSD
W-072117-3535MLK-TP-004	3535 MLK Blvd	Water	07/21/17	09:34	X	FD (W-072117-3535MLK-TP-003)
TB-072117-TP-002	--	Water	07/21/17	--	X	Trip Blank

Notes:

MS/MSD - Matrix Spike/Matrix Spike Duplicate
-- - Not applicable
FD - Field duplicate of sample in parantheses

Table 2

Analytical Results Summary
Residential Well Sampling
RACER Trust - MLK Boulevard Facility
Anderson, Indiana
June - July 2017

Location ID:		1400 West 29th Street	3523 MLK Blvd	3535 MLK Blvd	3535 MLK Blvd
Sample Name:		W-060717-TP-001	W-060717-TP-002	W-072117-3535MLK-TP-003	W-072117-3535MLK-TP-004
Sample Date:		06/07/2017	06/07/2017	07/21/2017	07/21/2017 Duplicate
Parameters	**Unit**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U
Acetone	µg/L	12	4.1 J	10 U	10 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	3.4	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit

Table 3

Analytical Methods
Residential Well Sampling
RACER Trust - MLK Boulevard Facility
Anderson, Indiana
June - July 2017

Parameter	Method	Matrix	Holding Time Collection to Analysis (Days)
Volatiles	SW-846 8260B [1]	Water	14

Notes:

[1] - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-80851-1
Client Project/Site: 17302-T06, RACER Delphi Anderson
Revision: 1

For:
GHD Services Inc.
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, New York 14304

Attn: Ms. Deborah Andrasko

Denise D Heckler

Authorized for release by:
8/15/2017 7:51:51 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

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

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

Table of Contents

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

Job ID: 240-80851-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-80851-1

Comments
A revised report was provided on August 15, 2017. A unique report was provided for each sample.

Receipt
The samples were received on 6/13/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA
Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 283543 recovered above the upper control limit for Chloroform. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: W-060717-TP-001 (240-80851-1) and TB-060717-TP-001 (240-80851-3).

Method(s) 8260B: The laboratory control sample (LCS) for 283543 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: W-060717-TP-001 (240-80851-1), TB-060717-TP-001 (240-80851-3) and (LCS 240-283543/4).

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

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

Method Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

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

Protocol References:

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

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-80851-1	W-060717-TP-001	Water	06/07/17 12:40	06/13/17 09:30
240-80851-3	TB-060717-TP-001	Water	06/07/17 12:49	06/13/17 09:30

Detection Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

Client Sample ID: W-060717-TP-001 — Lab Sample ID: 240-80851-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12		10	1.8	ug/L	1		8260B	Total/NA
Toluene	3.4		1.0	0.23	ug/L	1		8260B	Total/NA

Client Sample ID: TB-060717-TP-001 — Lab Sample ID: 240-80851-3

No Detections.

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: W-060717-TP-001
Date Collected: 06/07/17 12:40
Date Received: 06/13/17 09:30

Lab Sample ID: 240-80851-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U *	1.0	0.23	ug/L			06/17/17 03:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			06/17/17 03:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			06/17/17 03:22	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/17/17 03:22	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			06/17/17 03:22	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/17/17 03:22	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			06/17/17 03:22	1
2-Hexanone	10	U	10	1.2	ug/L			06/17/17 03:22	1
Acetone	**12**		10	1.8	ug/L			06/17/17 03:22	1
Benzene	1.0	U	1.0	0.28	ug/L			06/17/17 03:22	1
Bromoform	1.0	U	1.0	0.43	ug/L			06/17/17 03:22	1
Bromomethane	1.0	U *	1.0	0.42	ug/L			06/17/17 03:22	1
Carbon disulfide	1.0	U	1.0	0.34	ug/L			06/17/17 03:22	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			06/17/17 03:22	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			06/17/17 03:22	1
Chloroethane	1.0	U	1.0	0.41	ug/L			06/17/17 03:22	1
Chloroform	1.0	U	1.0	0.31	ug/L			06/17/17 03:22	1
Chloromethane	1.0	U	1.0	0.43	ug/L			06/17/17 03:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/17/17 03:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			06/17/17 03:22	1
Dichlorobromomethane	1.0	U *	1.0	0.30	ug/L			06/17/17 03:22	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			06/17/17 03:22	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			06/17/17 03:22	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			06/17/17 03:22	1
Methylene Chloride	1.0	U	1.0	0.53	ug/L			06/17/17 03:22	1
Styrene	1.0	U	1.0	0.23	ug/L			06/17/17 03:22	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			06/17/17 03:22	1
Toluene	**3.4**		1.0	0.23	ug/L			06/17/17 03:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/17/17 03:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			06/17/17 03:22	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			06/17/17 03:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/17/17 03:22	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			06/17/17 03:22	1
Chlorodibromomethane	1.0	U	1.0	0.25	ug/L			06/17/17 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*61 - 138*		*06/17/17 03:22*	*1*
4-Bromofluorobenzene (Surr)	*88*		*69 - 120*		*06/17/17 03:22*	*1*
Toluene-d8 (Surr)	*97*		*73 - 120*		*06/17/17 03:22*	*1*
Dibromofluoromethane (Surr)	*116*		*69 - 124*		*06/17/17 03:22*	*1*

Client Sample ID: TB-060717-TP-001
Date Collected: 06/07/17 12:49
Date Received: 06/13/17 09:30

Lab Sample ID: 240-80851-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U *	1.0	0.23	ug/L			06/17/17 04:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			06/17/17 04:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			06/17/17 04:06	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/17/17 04:06	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			06/17/17 04:06	1

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

Client Sample ID: TB-060717-TP-001
Date Collected: 06/07/17 12:49
Date Received: 06/13/17 09:30

Lab Sample ID: 240-80851-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/17/17 04:06	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			06/17/17 04:06	1
2-Hexanone	10	U	10	1.2	ug/L			06/17/17 04:06	1
Acetone	10	U	10	1.8	ug/L			06/17/17 04:06	1
Benzene	1.0	U	1.0	0.28	ug/L			06/17/17 04:06	1
Bromoform	1.0	U	1.0	0.43	ug/L			06/17/17 04:06	1
Bromomethane	1.0	U *	1.0	0.42	ug/L			06/17/17 04:06	1
Carbon disulfide	1.0	U	1.0	0.34	ug/L			06/17/17 04:06	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			06/17/17 04:06	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			06/17/17 04:06	1
Chloroethane	1.0	U	1.0	0.41	ug/L			06/17/17 04:06	1
Chloroform	1.0	U	1.0	0.31	ug/L			06/17/17 04:06	1
Chloromethane	1.0	U	1.0	0.43	ug/L			06/17/17 04:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/17/17 04:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			06/17/17 04:06	1
Dichlorobromomethane	1.0	U *	1.0	0.30	ug/L			06/17/17 04:06	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			06/17/17 04:06	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			06/17/17 04:06	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			06/17/17 04:06	1
Methylene Chloride	1.0	U	1.0	0.53	ug/L			06/17/17 04:06	1
Styrene	1.0	U	1.0	0.23	ug/L			06/17/17 04:06	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			06/17/17 04:06	1
Toluene	1.0	U	1.0	0.23	ug/L			06/17/17 04:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/17/17 04:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			06/17/17 04:06	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			06/17/17 04:06	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/17/17 04:06	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			06/17/17 04:06	1
Chlorodibromomethane	1.0	U	1.0	0.25	ug/L			06/17/17 04:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*127*		*61 - 138*		*06/17/17 04:06*	*1*
4-Bromofluorobenzene (Surr)	*89*		*69 - 120*		*06/17/17 04:06*	*1*
Toluene-d8 (Surr)	*94*		*73 - 120*		*06/17/17 04:06*	*1*
Dibromofluoromethane (Surr)	*123*		*69 - 124*		*06/17/17 04:06*	*1*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(61-138)	(69-120)	(73-120)	(69-124)
240-80851-1	W-060717-TP-001	125	88	97	116
240-80851-3	TB-060717-TP-001	127	89	94	123

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 240-283543/6
Matrix: Water
Analysis Batch: 283543

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/17/17 02:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			06/17/17 02:40	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			06/17/17 02:40	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/17/17 02:40	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			06/17/17 02:40	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/17/17 02:40	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			06/17/17 02:40	1
2-Hexanone	10	U	10	1.2	ug/L			06/17/17 02:40	1
Acetone	10	U	10	1.8	ug/L			06/17/17 02:40	1
Benzene	1.0	U	1.0	0.28	ug/L			06/17/17 02:40	1
Bromoform	1.0	U	1.0	0.43	ug/L			06/17/17 02:40	1
Bromomethane	1.0	U	1.0	0.42	ug/L			06/17/17 02:40	1
Carbon disulfide	1.0	U	1.0	0.34	ug/L			06/17/17 02:40	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			06/17/17 02:40	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			06/17/17 02:40	1
Chloroethane	1.0	U	1.0	0.41	ug/L			06/17/17 02:40	1
Chloroform	1.0	U	1.0	0.31	ug/L			06/17/17 02:40	1
Chloromethane	1.0	U	1.0	0.43	ug/L			06/17/17 02:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/17/17 02:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			06/17/17 02:40	1
Dichlorobromomethane	1.0	U	1.0	0.30	ug/L			06/17/17 02:40	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			06/17/17 02:40	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			06/17/17 02:40	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			06/17/17 02:40	1
Methylene Chloride	1.0	U	1.0	0.53	ug/L			06/17/17 02:40	1
Styrene	1.0	U	1.0	0.23	ug/L			06/17/17 02:40	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			06/17/17 02:40	1
Toluene	1.0	U	1.0	0.23	ug/L			06/17/17 02:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/17/17 02:40	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			06/17/17 02:40	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			06/17/17 02:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/17/17 02:40	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			06/17/17 02:40	1
Chlorodibromomethane	1.0	U	1.0	0.25	ug/L			06/17/17 02:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*61 - 138*		*06/17/17 02:40*	*1*
4-Bromofluorobenzene (Surr)	*89*		*69 - 120*		*06/17/17 02:40*	*1*
Toluene-d8 (Surr)	*98*		*73 - 120*		*06/17/17 02:40*	*1*
Dibromofluoromethane (Surr)	*115*		*69 - 124*		*06/17/17 02:40*	*1*

Lab Sample ID: LCS 240-283543/4
Matrix: Water
Analysis Batch: 283543

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	15.2	*	ug/L		152	64 - 147
1,1,2,2-Tetrachloroethane	10.0	8.54		ug/L		85	58 - 122

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

Lab Sample ID: LCS 240-283543/4
Matrix: Water
Analysis Batch: 283543

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	10.0	11.1		ug/L		111	76 - 121
1,1-Dichloroethane	10.0	11.4		ug/L		114	74 - 120
1,1-Dichloroethene	10.0	11.0		ug/L		110	65 - 127
1,2-Dichloroethane	10.0	12.6		ug/L		126	68 - 133
1,2-Dichloropropane	10.0	11.4		ug/L		114	78 - 127
2-Hexanone	20.0	20.2		ug/L		101	28 - 169
Acetone	20.0	17.9		ug/L		89	35 - 131
Benzene	10.0	11.1		ug/L		111	79 - 120
Bromoform	10.0	10.0		ug/L		100	55 - 145
Bromomethane	10.0	18.6	*	ug/L		186	17 - 158
Carbon disulfide	10.0	11.6		ug/L		116	49 - 141
Carbon tetrachloride	10.0	15.1		ug/L		151	55 - 171
Chlorobenzene	10.0	10.3		ug/L		103	80 - 120
Chloroethane	10.0	13.1		ug/L		131	10 - 149
Chloroform	10.0	12.0		ug/L		120	80 - 120
Chloromethane	10.0	9.80		ug/L		98	59 - 124
cis-1,2-Dichloroethene	10.0	11.1		ug/L		111	77 - 120
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	75 - 120
Dichlorobromomethane	10.0	12.6	*	ug/L		126	79 - 125
Ethylbenzene	10.0	10.3		ug/L		103	80 - 120
m-Xylene & p-Xylene	10.0	10.0		ug/L		100	80 - 120
2-Butanone (MEK)	20.0	19.2		ug/L		96	43 - 149
4-Methyl-2-pentanone (MIBK)	20.0	23.4		ug/L		117	53 - 144
Methylene Chloride	10.0	11.8		ug/L		118	64 - 140
o-Xylene	10.0	10.3		ug/L		103	80 - 120
Styrene	10.0	10.4		ug/L		104	80 - 121
Tetrachloroethene	10.0	10.2		ug/L		102	80 - 122
Toluene	10.0	10.6		ug/L		106	78 - 120
trans-1,2-Dichloroethene	10.0	11.4		ug/L		114	74 - 124
trans-1,3-Dichloropropene	10.0	10.2		ug/L		102	67 - 120
Trichloroethene	10.0	10.7		ug/L		107	76 - 124
Vinyl chloride	10.0	11.0		ug/L		110	65 - 124
Xylenes, Total	20.0	20.3		ug/L		102	80 - 120
Chlorodibromomethane	10.0	11.7		ug/L		117	64 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*61 - 138*
4-Bromofluorobenzene (Surr)	*107*		*69 - 120*
Toluene-d8 (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*110*		*69 - 124*

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

GC/MS VOA

Analysis Batch: 283543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-80851-1	W-060717-TP-001	Total/NA	Water	8260B	
240-80851-3	TB-060717-TP-001	Total/NA	Water	8260B	

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

Client Sample ID: W-060717-TP-001

Lab Sample ID: 240-80851-1

Date Collected: 06/07/17 12:40

Matrix: Water

Date Received: 06/13/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	283543	06/17/17 03:22	LEE	TAL CAN

Client Sample ID: TB-060717-TP-001

Lab Sample ID: 240-80851-3

Date Collected: 06/07/17 12:49

Matrix: Water

Date Received: 06/13/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	283543	06/17/17 04:06	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc. TestAmerica Job ID: 240-80851-1
Project/Site: 17302-T06, RACER Delphi Anderson

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-18
Connecticut	State Program	1	PH-0590	12-31-17 *
Florida	NELAP	4	E87225	06-30-18
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-18 *
Kentucky (UST)	State Program	4	58	02-23-18
Kentucky (WW)	State Program	4	98016	12-31-17 *
Minnesota	NELAP	5	039-999-348	12-31-17 *
Minnesota (Petrofund)	State Program	1	3506	07-31-17 *
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18
New York	NELAP	2	10975	03-31-18
Ohio VAP	State Program	5	CL0024	09-14-17 *
Oregon	NELAP	10	4062	02-23-18
Pennsylvania	NELAP	3	68-00340	08-31-17 *
Texas	NELAP	6	T104704517-15-5	08-31-17 *
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-17 *
Washington	State Program	10	C971	01-12-18 *
West Virginia DEP	State Program	3	210	12-31-17 *
Wisconsin	State Program	5	999518190	08-31-17 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

COC NO.: IN- 14180

PAGE 1 OF 1

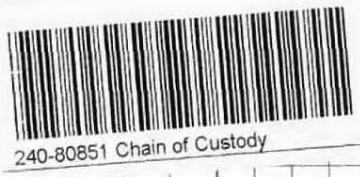
(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES
6520 Corporate Drive, Indianapolis, Indiana 46278
Phone: (317) 291-7007 Fax: (317) 328-2666

3.4/3.4

Project No/ Phase/Task Code: 17302 - T06	Laboratory Name: TestAmerica	Lab Location: N. Canton	SSOW ID: 17302 - T06
Project Name: MLK	Lab Contact: D. Heckler	Lab Quote No:	Cooler No:
Project Location: Anderson, IN			Carrier: FedEx
Chemistry Contact: ~~M. Richardson~~ D. Andrasko			Airbill No:
Sampler(s): T. Prange			Date Shipped: 6/12/17

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd//yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	MS/MSD Request	Comments/ Special Instructions:
1	W-060717-TP-001	6/7/17	1240	WG			3							3	X		Rush TAT
2	W-060717-TP-002	1	1409	WG			3							3	X		for all
3	TB-060717-TP-001	6/7/17	1249	TB			1							1	X		
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	



TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ Week ☐ 2 Week ☐ Other:

Total Number of Containers: 7

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	GND	6/12/17	1700	1.	TA	6.13.17	980
				2.			
				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

8/15/2017 (Rev. 1)

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 80851**
Canton Facility

Client GHD Site Name _____ Cooler unpacked by:

Cooler Received on 6-13-17 Opened on 6-13-17

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.4** °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   IR GUN #36 (CF **+0**°C) Observed Cooler Temp. 3.4 °C Corrected Cooler Temp. 3.4 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 11-15 have been checked at the originating laboratory.		
11. Were sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC?	Yes	No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
15. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-80851-1
Client Project/Site: 17302-T06, RACER Delphi Anderson
Revision: 1

For:
GHD Services Inc.
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, New York 14304

Attn: Ms. Deborah Andrasko

Denise D Heckler

Authorized for release by:
8/15/2017 7:56:08 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

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

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

Table of Contents

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

Job ID: 240-80851-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-80851-1

Comments
A revised report was provided on August 15, 2017. A unique report was provided for each sample.

Receipt
The samples were received on 6/13/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA
Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 283543 recovered above the upper control limit for Chloroform. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: W-060717-TP-002 (240-80851-2).

Method(s) 8260B: The laboratory control sample (LCS) for 283543 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: W-060717-TP-002 (240-80851-2) and (LCS 240-283543/4).

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

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

Method Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

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

Protocol References:

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

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-80851-2	W-060717-TP-002	Water	06/07/17 14:09	06/13/17 09:30

Detection Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

Client Sample ID: W-060717-TP-002

Lab Sample ID: 240-80851-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.1	J	10	1.8	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: W-060717-TP-002
Date Collected: 06/07/17 14:09
Date Received: 06/13/17 09:30

Lab Sample ID: 240-80851-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U *	1.0	0.23	ug/L			06/17/17 03:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			06/17/17 03:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			06/17/17 03:44	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/17/17 03:44	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			06/17/17 03:44	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/17/17 03:44	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			06/17/17 03:44	1
2-Hexanone	10	U	10	1.2	ug/L			06/17/17 03:44	1
Acetone	**4.1**	**J**	10	1.8	ug/L			06/17/17 03:44	1
Benzene	1.0	U	1.0	0.28	ug/L			06/17/17 03:44	1
Bromoform	1.0	U	1.0	0.43	ug/L			06/17/17 03:44	1
Bromomethane	1.0	U *	1.0	0.42	ug/L			06/17/17 03:44	1
Carbon disulfide	1.0	U	1.0	0.34	ug/L			06/17/17 03:44	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			06/17/17 03:44	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			06/17/17 03:44	1
Chloroethane	1.0	U	1.0	0.41	ug/L			06/17/17 03:44	1
Chloroform	1.0	U	1.0	0.31	ug/L			06/17/17 03:44	1
Chloromethane	1.0	U	1.0	0.43	ug/L			06/17/17 03:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/17/17 03:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			06/17/17 03:44	1
Dichlorobromomethane	1.0	U *	1.0	0.30	ug/L			06/17/17 03:44	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			06/17/17 03:44	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			06/17/17 03:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			06/17/17 03:44	1
Methylene Chloride	1.0	U	1.0	0.53	ug/L			06/17/17 03:44	1
Styrene	1.0	U	1.0	0.23	ug/L			06/17/17 03:44	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			06/17/17 03:44	1
Toluene	1.0	U	1.0	0.23	ug/L			06/17/17 03:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/17/17 03:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			06/17/17 03:44	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			06/17/17 03:44	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/17/17 03:44	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			06/17/17 03:44	1
Chlorodibromomethane	1.0	U	1.0	0.25	ug/L			06/17/17 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*61 - 138*		*06/17/17 03:44*	*1*
4-Bromofluorobenzene (Surr)	*91*		*69 - 120*		*06/17/17 03:44*	*1*
Toluene-d8 (Surr)	*98*		*73 - 120*		*06/17/17 03:44*	*1*
Dibromofluoromethane (Surr)	*115*		*69 - 124*		*06/17/17 03:44*	*1*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		12DCE	BFB	TOL	DBFM				
Lab Sample ID	Client Sample ID	(61-138)	(69-120)	(73-120)	(69-124)				
240-80851-2	W-060717-TP-002	125	91	98	115				

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 240-283543/6
Matrix: Water
Analysis Batch: 283543

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			06/17/17 02:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			06/17/17 02:40	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			06/17/17 02:40	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			06/17/17 02:40	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			06/17/17 02:40	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			06/17/17 02:40	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			06/17/17 02:40	1
2-Hexanone	10	U	10	1.2	ug/L			06/17/17 02:40	1
Acetone	10	U	10	1.8	ug/L			06/17/17 02:40	1
Benzene	1.0	U	1.0	0.28	ug/L			06/17/17 02:40	1
Bromoform	1.0	U	1.0	0.43	ug/L			06/17/17 02:40	1
Bromomethane	1.0	U	1.0	0.42	ug/L			06/17/17 02:40	1
Carbon disulfide	1.0	U	1.0	0.34	ug/L			06/17/17 02:40	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			06/17/17 02:40	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			06/17/17 02:40	1
Chloroethane	1.0	U	1.0	0.41	ug/L			06/17/17 02:40	1
Chloroform	1.0	U	1.0	0.31	ug/L			06/17/17 02:40	1
Chloromethane	1.0	U	1.0	0.43	ug/L			06/17/17 02:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			06/17/17 02:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			06/17/17 02:40	1
Dichlorobromomethane	1.0	U	1.0	0.30	ug/L			06/17/17 02:40	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			06/17/17 02:40	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			06/17/17 02:40	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			06/17/17 02:40	1
Methylene Chloride	1.0	U	1.0	0.53	ug/L			06/17/17 02:40	1
Styrene	1.0	U	1.0	0.23	ug/L			06/17/17 02:40	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			06/17/17 02:40	1
Toluene	1.0	U	1.0	0.23	ug/L			06/17/17 02:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			06/17/17 02:40	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			06/17/17 02:40	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			06/17/17 02:40	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/17/17 02:40	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			06/17/17 02:40	1
Chlorodibromomethane	1.0	U	1.0	0.25	ug/L			06/17/17 02:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*61 - 138*		*06/17/17 02:40*	*1*
4-Bromofluorobenzene (Surr)	*89*		*69 - 120*		*06/17/17 02:40*	*1*
Toluene-d8 (Surr)	*98*		*73 - 120*		*06/17/17 02:40*	*1*
Dibromofluoromethane (Surr)	*115*		*69 - 124*		*06/17/17 02:40*	*1*

Lab Sample ID: LCS 240-283543/4
Matrix: Water
Analysis Batch: 283543

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	15.2	*	ug/L		152	64 - 147
1,1,2,2-Tetrachloroethane	10.0	8.54		ug/L		85	58 - 122

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

Lab Sample ID: LCS 240-283543/4
Matrix: Water
Analysis Batch: 283543

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	10.0	11.1		ug/L		111	76 - 121
1,1-Dichloroethane	10.0	11.4		ug/L		114	74 - 120
1,1-Dichloroethene	10.0	11.0		ug/L		110	65 - 127
1,2-Dichloroethane	10.0	12.6		ug/L		126	68 - 133
1,2-Dichloropropane	10.0	11.4		ug/L		114	78 - 127
2-Hexanone	20.0	20.2		ug/L		101	28 - 169
Acetone	20.0	17.9		ug/L		89	35 - 131
Benzene	10.0	11.1		ug/L		111	79 - 120
Bromoform	10.0	10.0		ug/L		100	55 - 145
Bromomethane	10.0	18.6	*	ug/L		186	17 - 158
Carbon disulfide	10.0	11.6		ug/L		116	49 - 141
Carbon tetrachloride	10.0	15.1		ug/L		151	55 - 171
Chlorobenzene	10.0	10.3		ug/L		103	80 - 120
Chloroethane	10.0	13.1		ug/L		131	10 - 149
Chloroform	10.0	12.0		ug/L		120	80 - 120
Chloromethane	10.0	9.80		ug/L		98	59 - 124
cis-1,2-Dichloroethene	10.0	11.1		ug/L		111	77 - 120
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	75 - 120
Dichlorobromomethane	10.0	12.6	*	ug/L		126	79 - 125
Ethylbenzene	10.0	10.3		ug/L		103	80 - 120
m-Xylene & p-Xylene	10.0	10.0		ug/L		100	80 - 120
2-Butanone (MEK)	20.0	19.2		ug/L		96	43 - 149
4-Methyl-2-pentanone (MIBK)	20.0	23.4		ug/L		117	53 - 144
Methylene Chloride	10.0	11.8		ug/L		118	64 - 140
o-Xylene	10.0	10.3		ug/L		103	80 - 120
Styrene	10.0	10.4		ug/L		104	80 - 121
Tetrachloroethene	10.0	10.2		ug/L		102	80 - 122
Toluene	10.0	10.6		ug/L		106	78 - 120
trans-1,2-Dichloroethene	10.0	11.4		ug/L		114	74 - 124
trans-1,3-Dichloropropene	10.0	10.2		ug/L		102	67 - 120
Trichloroethene	10.0	10.7		ug/L		107	76 - 124
Vinyl chloride	10.0	11.0		ug/L		110	65 - 124
Xylenes, Total	20.0	20.3		ug/L		102	80 - 120
Chlorodibromomethane	10.0	11.7		ug/L		117	64 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*61 - 138*
4-Bromofluorobenzene (Surr)	*107*		*69 - 120*
Toluene-d8 (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*110*		*69 - 124*

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

GC/MS VOA

Analysis Batch: 283543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-80851-2	W-060717-TP-002	Total/NA	Water	8260B	

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-80851-1

Client Sample ID: W-060717-TP-002
Date Collected: 06/07/17 14:09
Date Received: 06/13/17 09:30

Lab Sample ID: 240-80851-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	283543	06/17/17 03:44	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc. TestAmerica Job ID: 240-80851-1
Project/Site: 17302-T06, RACER Delphi Anderson

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-18
Connecticut	State Program	1	PH-0590	12-31-17 *
Florida	NELAP	4	E87225	06-30-18
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-18 *
Kentucky (UST)	State Program	4	58	02-23-18
Kentucky (WW)	State Program	4	98016	12-31-17 *
Minnesota	NELAP	5	039-999-348	12-31-17 *
Minnesota (Petrofund)	State Program	1	3506	07-31-17 *
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18
New York	NELAP	2	10975	03-31-18
Ohio VAP	State Program	5	CL0024	09-14-17 *
Oregon	NELAP	10	4062	02-23-18
Pennsylvania	NELAP	3	68-00340	08-31-17 *
Texas	NELAP	6	T104704517-15-5	08-31-17 *
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-17 *
Washington	State Program	10	C971	01-12-18 *
West Virginia DEP	State Program	3	210	12-31-17 *
Wisconsin	State Program	5	999518190	08-31-17 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

COC NO.: IN- 14180

PAGE 1 OF 1

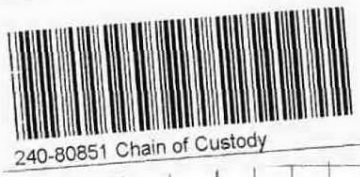
(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES
6520 Corporate Drive, Indianapolis, Indiana 46278
Phone: (317) 291-7007 Fax: (317) 328-2666

3.4/3.4

Project No/ Phase/Task Code: 17302 - T06	Laboratory Name: TestAmerica	Lab Location: N. Canton	SSOW ID: 17302 - T06
Project Name: MLK	Lab Contact: D. Heckler	Lab Quote No:	Cooler No:
Project Location: Anderson, IN			Carrier: FedEx
Chemistry Contact: ~~M. Richardson~~ D. Andrasko			Airbill No:
Sampler(s): T. Prange			Date Shipped: 6/12/17

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd//yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	MS/MSD Request	Comments/ Special Instructions:
1	W-060717-TP-001	6/7/17	1240	WG			3							3	X		Rush TAT
2	W-060717-TP-002	1	1409	WG			3							3	X		for all
3	TB-060717-TP-001	6/7/17	1249	TB			1							1	X		
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	



TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ Week ☐ 2 Week ☐ Other:

Total Number of Containers: 7

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	GND	6/12/17	1700	1.	TA	6.13.17	980
				2.			
				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

8/15/2017 (Rev. 1)

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 80851**
Canton Facility

Client GHD Site Name _____ Cooler unpacked by:

Cooler Received on 6-13-17 Opened on 6-13-17

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.4** °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   IR GUN #36 (CF **+0**°C) Observed Cooler Temp. 3.4 °C Corrected Cooler Temp. 3.4 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 11-15 have been checked at the originating laboratory.		
11. Were sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC?	Yes	No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
15. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-82750-1
Client Project/Site: 17302-T06, RACER Delphi Anderson

For:
GHD Services Inc.
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, New York 14304

Attn: Ms. Deborah Andrasko

Denise D Heckler

Authorized for release by:
8/3/2017 1:40:01 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

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

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

Table of Contents

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-82750-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD 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.

Glossary

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

Case Narrative

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-82750-1

Job ID: 240-82750-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-82750-1

Comments
No additional comments.

Receipt
The samples were received on 7/22/2017 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for 289457 recovered outside control limits for the following analytes: 1,1,2,2-Tetrachloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

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

Method Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-82750-1

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

Protocol References:

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

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-82750-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-82750-1	W-072117-3535MLK-TP-003	Water	07/21/17 09:32	07/22/17 09:45
240-82750-2	W-072117-3535MLK-TP-004	Water	07/21/17 09:34	07/22/17 09:45
240-82750-3	TB-072117-TP-002	Water	07/21/17 09:40	07/22/17 09:45

Detection Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-82750-1

Client Sample ID: W-072117-3535MLK-TP-003 — Lab Sample ID: 240-82750-1

No Detections.

Client Sample ID: W-072117-3535MLK-TP-004 — Lab Sample ID: 240-82750-2

No Detections.

Client Sample ID: TB-072117-TP-002 — Lab Sample ID: 240-82750-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.80	J	1.0	0.53	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: W-072117-3535MLK-TP-003
Date Collected: 07/21/17 09:32
Date Received: 07/22/17 09:45

Lab Sample ID: 240-82750-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			08/01/17 18:22	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.32	ug/L			08/01/17 18:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			08/01/17 18:22	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			08/01/17 18:22	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			08/01/17 18:22	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/01/17 18:22	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			08/01/17 18:22	1
2-Hexanone	10	U	10	1.2	ug/L			08/01/17 18:22	1
Acetone	10	U	10	1.8	ug/L			08/01/17 18:22	1
Benzene	1.0	U	1.0	0.28	ug/L			08/01/17 18:22	1
Bromoform	1.0	U	1.0	0.43	ug/L			08/01/17 18:22	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/01/17 18:22	1
Carbon disulfide	1.0	U	1.0	0.34	ug/L			08/01/17 18:22	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			08/01/17 18:22	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/01/17 18:22	1
Chloroethane	1.0	U	1.0	0.41	ug/L			08/01/17 18:22	1
Chloroform	1.0	U	1.0	0.31	ug/L			08/01/17 18:22	1
Chloromethane	1.0	U	1.0	0.43	ug/L			08/01/17 18:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/01/17 18:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			08/01/17 18:22	1
Dichlorobromomethane	1.0	U	1.0	0.30	ug/L			08/01/17 18:22	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			08/01/17 18:22	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			08/01/17 18:22	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			08/01/17 18:22	1
Methylene Chloride	1.0	U	1.0	0.53	ug/L			08/01/17 18:22	1
Styrene	1.0	U	1.0	0.23	ug/L			08/01/17 18:22	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			08/01/17 18:22	1
Toluene	1.0	U	1.0	0.23	ug/L			08/01/17 18:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			08/01/17 18:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			08/01/17 18:22	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			08/01/17 18:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/01/17 18:22	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			08/01/17 18:22	1
Chlorodibromomethane	1.0	U	1.0	0.25	ug/L			08/01/17 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*61 - 138*		*08/01/17 18:22*	*1*
4-Bromofluorobenzene (Surr)	*83*		*69 - 120*		*08/01/17 18:22*	*1*
Toluene-d8 (Surr)	*115*		*73 - 120*		*08/01/17 18:22*	*1*
Dibromofluoromethane (Surr)	*107*		*69 - 124*		*08/01/17 18:22*	*1*

Client Sample ID: W-072117-3535MLK-TP-004
Date Collected: 07/21/17 09:34
Date Received: 07/22/17 09:45

Lab Sample ID: 240-82750-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			08/01/17 18:45	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.32	ug/L			08/01/17 18:45	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			08/01/17 18:45	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			08/01/17 18:45	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			08/01/17 18:45	1

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

Client Sample ID: W-072117-3535MLK-TP-004
Date Collected: 07/21/17 09:34
Date Received: 07/22/17 09:45

Lab Sample ID: 240-82750-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/01/17 18:45	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			08/01/17 18:45	1
2-Hexanone	10	U	10	1.2	ug/L			08/01/17 18:45	1
Acetone	10	U	10	1.8	ug/L			08/01/17 18:45	1
Benzene	1.0	U	1.0	0.28	ug/L			08/01/17 18:45	1
Bromoform	1.0	U	1.0	0.43	ug/L			08/01/17 18:45	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/01/17 18:45	1
Carbon disulfide	1.0	U	1.0	0.34	ug/L			08/01/17 18:45	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			08/01/17 18:45	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/01/17 18:45	1
Chloroethane	1.0	U	1.0	0.41	ug/L			08/01/17 18:45	1
Chloroform	1.0	U	1.0	0.31	ug/L			08/01/17 18:45	1
Chloromethane	1.0	U	1.0	0.43	ug/L			08/01/17 18:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/01/17 18:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			08/01/17 18:45	1
Dichlorobromomethane	1.0	U	1.0	0.30	ug/L			08/01/17 18:45	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			08/01/17 18:45	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			08/01/17 18:45	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			08/01/17 18:45	1
Methylene Chloride	1.0	U	1.0	0.53	ug/L			08/01/17 18:45	1
Styrene	1.0	U	1.0	0.23	ug/L			08/01/17 18:45	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			08/01/17 18:45	1
Toluene	1.0	U	1.0	0.23	ug/L			08/01/17 18:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			08/01/17 18:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			08/01/17 18:45	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			08/01/17 18:45	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/01/17 18:45	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			08/01/17 18:45	1
Chlorodibromomethane	1.0	U	1.0	0.25	ug/L			08/01/17 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*61 - 138*		*08/01/17 18:45*	*1*
4-Bromofluorobenzene (Surr)	*77*		*69 - 120*		*08/01/17 18:45*	*1*
Toluene-d8 (Surr)	*108*		*73 - 120*		*08/01/17 18:45*	*1*
Dibromofluoromethane (Surr)	*104*		*69 - 124*		*08/01/17 18:45*	*1*

Client Sample ID: TB-072117-TP-002
Date Collected: 07/21/17 09:40
Date Received: 07/22/17 09:45

Lab Sample ID: 240-82750-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			08/01/17 19:08	1
1,1,2,2-Tetrachloroethane	1.0	U *	1.0	0.32	ug/L			08/01/17 19:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			08/01/17 19:08	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			08/01/17 19:08	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			08/01/17 19:08	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/01/17 19:08	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			08/01/17 19:08	1
2-Hexanone	10	U	10	1.2	ug/L			08/01/17 19:08	1
Acetone	10	U	10	1.8	ug/L			08/01/17 19:08	1
Benzene	1.0	U	1.0	0.28	ug/L			08/01/17 19:08	1

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

Client Sample ID: TB-072117-TP-002
Date Collected: 07/21/17 09:40
Date Received: 07/22/17 09:45

Lab Sample ID: 240-82750-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	1.0	U	1.0	0.43	ug/L			08/01/17 19:08	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/01/17 19:08	1
Carbon disulfide	1.0	U	1.0	0.34	ug/L			08/01/17 19:08	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			08/01/17 19:08	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/01/17 19:08	1
Chloroethane	1.0	U	1.0	0.41	ug/L			08/01/17 19:08	1
Chloroform	1.0	U	1.0	0.31	ug/L			08/01/17 19:08	1
Chloromethane	1.0	U	1.0	0.43	ug/L			08/01/17 19:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/01/17 19:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			08/01/17 19:08	1
Dichlorobromomethane	1.0	U	1.0	0.30	ug/L			08/01/17 19:08	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			08/01/17 19:08	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			08/01/17 19:08	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			08/01/17 19:08	1
Methylene Chloride	**0.80**	**J**	1.0	0.53	ug/L			08/01/17 19:08	1
Styrene	1.0	U	1.0	0.23	ug/L			08/01/17 19:08	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			08/01/17 19:08	1
Toluene	1.0	U	1.0	0.23	ug/L			08/01/17 19:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			08/01/17 19:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			08/01/17 19:08	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			08/01/17 19:08	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/01/17 19:08	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			08/01/17 19:08	1
Chlorodibromomethane	1.0	U	1.0	0.25	ug/L			08/01/17 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*61 - 138*		*08/01/17 19:08*	*1*
4-Bromofluorobenzene (Surr)	*82*		*69 - 120*		*08/01/17 19:08*	*1*
Toluene-d8 (Surr)	*111*		*73 - 120*		*08/01/17 19:08*	*1*
Dibromofluoromethane (Surr)	*103*		*69 - 124*		*08/01/17 19:08*	*1*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-82750-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (61-138)	BFB (69-120)	TOL (73-120)	DBFM (69-124)
240-82750-1	W-072117-3535MLK-TP-003	113	83	115	107
240-82750-1 MS	W-072117-3535MLK-TP-003	107	87	106	98
240-82750-1 MSD	W-072117-3535MLK-TP-003	109	90	110	104
240-82750-2	W-072117-3535MLK-TP-004	107	77	108	104
240-82750-3	TB-072117-TP-002	112	82	111	103
LCS 240-289457/4	Lab Control Sample	112	91	116	105
MB 240-289457/6	Method Blank	109	81	109	103

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 240-289457/6
Matrix: Water
Analysis Batch: 289457

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.23	ug/L			08/01/17 11:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32	ug/L			08/01/17 11:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.34	ug/L			08/01/17 11:33	1
1,1-Dichloroethane	1.0	U	1.0	0.25	ug/L			08/01/17 11:33	1
1,1-Dichloroethene	1.0	U	1.0	0.27	ug/L			08/01/17 11:33	1
1,2-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/01/17 11:33	1
1,2-Dichloropropane	1.0	U	1.0	0.30	ug/L			08/01/17 11:33	1
2-Hexanone	10	U	10	1.2	ug/L			08/01/17 11:33	1
Acetone	10	U	10	1.8	ug/L			08/01/17 11:33	1
Benzene	1.0	U	1.0	0.28	ug/L			08/01/17 11:33	1
Bromoform	1.0	U	1.0	0.43	ug/L			08/01/17 11:33	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/01/17 11:33	1
Carbon disulfide	1.0	U	1.0	0.34	ug/L			08/01/17 11:33	1
Carbon tetrachloride	1.0	U	1.0	0.35	ug/L			08/01/17 11:33	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/01/17 11:33	1
Chloroethane	1.0	U	1.0	0.41	ug/L			08/01/17 11:33	1
Chloroform	1.0	U	1.0	0.31	ug/L			08/01/17 11:33	1
Chloromethane	1.0	U	1.0	0.43	ug/L			08/01/17 11:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/01/17 11:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.26	ug/L			08/01/17 11:33	1
Dichlorobromomethane	1.0	U	1.0	0.30	ug/L			08/01/17 11:33	1
Ethylbenzene	1.0	U	1.0	0.26	ug/L			08/01/17 11:33	1
2-Butanone (MEK)	10	U	10	1.0	ug/L			08/01/17 11:33	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	ug/L			08/01/17 11:33	1
Methylene Chloride	1.0	U	1.0	0.53	ug/L			08/01/17 11:33	1
Styrene	1.0	U	1.0	0.23	ug/L			08/01/17 11:33	1
Tetrachloroethene	1.0	U	1.0	0.30	ug/L			08/01/17 11:33	1
Toluene	1.0	U	1.0	0.23	ug/L			08/01/17 11:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			08/01/17 11:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.31	ug/L			08/01/17 11:33	1
Trichloroethene	1.0	U	1.0	0.33	ug/L			08/01/17 11:33	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			08/01/17 11:33	1
Xylenes, Total	2.0	U	2.0	0.24	ug/L			08/01/17 11:33	1
Chlorodibromomethane	1.0	U	1.0	0.25	ug/L			08/01/17 11:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*61 - 138*		*08/01/17 11:33*	*1*
4-Bromofluorobenzene (Surr)	*81*		*69 - 120*		*08/01/17 11:33*	*1*
Toluene-d8 (Surr)	*109*		*73 - 120*		*08/01/17 11:33*	*1*
Dibromofluoromethane (Surr)	*103*		*69 - 124*		*08/01/17 11:33*	*1*

Lab Sample ID: LCS 240-289457/4
Matrix: Water
Analysis Batch: 289457

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	11.2		ug/L		112	64 - 147
1,1,2,2-Tetrachloroethane	10.0	12.9	*	ug/L		129	58 - 122

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

Lab Sample ID: LCS 240-289457/4
Matrix: Water
Analysis Batch: 289457

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	10.0	11.8		ug/L		118	76 - 121
1,1-Dichloroethane	10.0	11.0		ug/L		110	74 - 120
1,1-Dichloroethene	10.0	11.8		ug/L		118	65 - 127
1,2-Dichloroethane	10.0	11.2		ug/L		112	68 - 133
1,2-Dichloropropane	10.0	11.0		ug/L		110	78 - 127
2-Hexanone	20.0	19.5		ug/L		97	28 - 169
Acetone	20.0	15.4		ug/L		77	35 - 131
Benzene	10.0	10.6		ug/L		106	79 - 120
Bromoform	10.0	7.60		ug/L		76	55 - 145
Bromomethane	10.0	12.0		ug/L		120	17 - 158
Carbon disulfide	10.0	13.3		ug/L		133	49 - 141
Carbon tetrachloride	10.0	10.8		ug/L		108	55 - 171
Chlorobenzene	10.0	10.3		ug/L		103	80 - 120
Chloroethane	10.0	12.8		ug/L		128	10 - 149
Chloroform	10.0	10.7		ug/L		107	80 - 120
Chloromethane	10.0	9.76		ug/L		98	59 - 124
cis-1,2-Dichloroethene	10.0	10.6		ug/L		106	77 - 120
cis-1,3-Dichloropropene	10.0	9.57		ug/L		96	75 - 120
Dichlorobromomethane	10.0	10.1		ug/L		101	79 - 125
Ethylbenzene	10.0	10.0		ug/L		100	80 - 120
m-Xylene & p-Xylene	10.0	9.69		ug/L		97	80 - 120
2-Butanone (MEK)	20.0	17.8		ug/L		89	43 - 149
4-Methyl-2-pentanone (MIBK)	20.0	19.8		ug/L		99	53 - 144
Methylene Chloride	10.0	12.1		ug/L		121	64 - 140
o-Xylene	10.0	9.32		ug/L		93	80 - 120
Styrene	10.0	9.03		ug/L		90	80 - 121
Tetrachloroethene	10.0	10.6		ug/L		106	80 - 122
Toluene	10.0	11.3		ug/L		113	78 - 120
trans-1,2-Dichloroethene	10.0	10.5		ug/L		105	74 - 124
trans-1,3-Dichloropropene	10.0	9.99		ug/L		100	67 - 120
Trichloroethene	10.0	9.91		ug/L		99	76 - 124
Vinyl chloride	10.0	9.62		ug/L		96	65 - 124
Xylenes, Total	20.0	19.0		ug/L		95	80 - 120
Chlorodibromomethane	10.0	9.64		ug/L		96	64 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*61 - 138*
4-Bromofluorobenzene (Surr)	*91*		*69 - 120*
Toluene-d8 (Surr)	*116*		*73 - 120*
Dibromofluoromethane (Surr)	*105*		*69 - 124*

Lab Sample ID: 240-82750-1 MS
Matrix: Water
Analysis Batch: 289457

Client Sample ID: W-072117-3535MLK-TP-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	10.0	9.64		ug/L		96	57 - 156
1,1,2,2-Tetrachloroethane	1.0	U *	10.0	10.8		ug/L		108	51 - 123

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

Lab Sample ID: 240-82750-1 MS
Matrix: Water
Analysis Batch: 289457

Client Sample ID: W-072117-3535MLK-TP-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	1.0	U	10.0	10.8		ug/L		108	68 - 127
1,1-Dichloroethane	1.0	U	10.0	10.0		ug/L		100	69 - 122
1,1-Dichloroethene	1.0	U	10.0	9.91		ug/L		99	62 - 127
1,2-Dichloroethane	1.0	U	10.0	10.3		ug/L		103	64 - 138
1,2-Dichloropropane	1.0	U	10.0	10.0		ug/L		100	72 - 131
2-Hexanone	10	U	20.0	15.7		ug/L		78	21 - 184
Acetone	10	U	20.0	14.0		ug/L		70	19 - 133
Benzene	1.0	U	10.0	9.59		ug/L		96	69 - 127
Bromoform	1.0	U	10.0	6.11		ug/L		61	61 - 135
Bromomethane	1.0	U	10.0	11.2		ug/L		112	10 - 148
Carbon disulfide	1.0	U	10.0	11.8		ug/L		118	46 - 143
Carbon tetrachloride	1.0	U	10.0	8.87		ug/L		89	53 - 175
Chlorobenzene	1.0	U	10.0	9.06		ug/L		91	76 - 120
Chloroethane	1.0	U	10.0	12.7		ug/L		127	10 - 141
Chloroform	1.0	U	10.0	9.81		ug/L		98	74 - 125
Chloromethane	1.0	U	10.0	9.76		ug/L		98	34 - 127
cis-1,2-Dichloroethene	1.0	U	10.0	9.45		ug/L		94	69 - 127
cis-1,3-Dichloropropene	1.0	U	10.0	8.20		ug/L		82	68 - 120
Dichlorobromomethane	1.0	U	10.0	9.06		ug/L		91	75 - 128
Ethylbenzene	1.0	U	10.0	8.81		ug/L		88	72 - 121
m-Xylene & p-Xylene	2.0	U	10.0	8.46		ug/L		85	70 - 121
2-Butanone (MEK)	10	U	20.0	16.4		ug/L		82	34 - 153
4-Methyl-2-pentanone (MIBK)	10	U	20.0	16.3		ug/L		82	53 - 147
Methylene Chloride	1.0	U	10.0	10.6		ug/L		106	52 - 137
o-Xylene	1.0	U	10.0	8.37		ug/L		84	71 - 125
Styrene	1.0	U	10.0	8.00		ug/L		80	74 - 125
Tetrachloroethene	1.0	U	10.0	9.02		ug/L		90	69 - 126
Toluene	1.0	U	10.0	10.2		ug/L		102	69 - 125
trans-1,2-Dichloroethene	1.0	U	10.0	9.40		ug/L		94	66 - 131
trans-1,3-Dichloropropene	1.0	U	10.0	8.44		ug/L		84	59 - 120
Trichloroethene	1.0	U	10.0	8.85		ug/L		89	68 - 129
Vinyl chloride	1.0	U	10.0	10.1		ug/L		101	55 - 123
Xylenes, Total	2.0	U	20.0	16.8		ug/L		84	71 - 122
Chlorodibromomethane	1.0	U	10.0	8.12		ug/L		81	62 - 131

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*61 - 138*
4-Bromofluorobenzene (Surr)	*87*		*69 - 120*
Toluene-d8 (Surr)	*106*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*69 - 124*

Lab Sample ID: 240-82750-1 MSD
Matrix: Water
Analysis Batch: 289457

Client Sample ID: W-072117-3535MLK-TP-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	10.0	10.7		ug/L		107	57 - 156	11	13
1,1,2,2-Tetrachloroethane	1.0	U *	10.0	11.2		ug/L		112	51 - 123	3	17

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

Lab Sample ID: 240-82750-1 MSD
Matrix: Water
Analysis Batch: 289457

Client Sample ID: W-072117-3535MLK-TP-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloroethane	1.0	U	10.0	11.3		ug/L		113	68 - 127	5	11
1,1-Dichloroethane	1.0	U	10.0	10.9		ug/L		109	69 - 122	8	11
1,1-Dichloroethene	1.0	U	10.0	10.8		ug/L		108	62 - 127	9	14
1,2-Dichloroethane	1.0	U	10.0	11.0		ug/L		110	64 - 138	7	11
1,2-Dichloropropane	1.0	U	10.0	10.6		ug/L		106	72 - 131	5	12
2-Hexanone	10	U	20.0	17.1		ug/L		86	21 - 184	9	12
Acetone	10	U	20.0	12.6		ug/L		63	19 - 133	10	35
Benzene	1.0	U	10.0	10.5		ug/L		105	69 - 127	9	10
Bromoform	1.0	U	10.0	6.63		ug/L		66	61 - 135	8	13
Bromomethane	1.0	U	10.0	12.0		ug/L		120	10 - 148	7	35
Carbon disulfide	1.0	U	10.0	13.0		ug/L		130	46 - 143	10	18
Carbon tetrachloride	1.0	U	10.0	9.96		ug/L		100	53 - 175	12	17
Chlorobenzene	1.0	U	10.0	9.78		ug/L		98	76 - 120	8	12
Chloroethane	1.0	U	10.0	13.8		ug/L		138	10 - 141	8	35
Chloroform	1.0	U	10.0	10.7		ug/L		107	74 - 125	8	11
Chloromethane	1.0	U	10.0	10.7		ug/L		107	34 - 127	9	25
cis-1,2-Dichloroethene	1.0	U	10.0	10.3		ug/L		103	69 - 127	8	11
cis-1,3-Dichloropropene	1.0	U	10.0	8.95		ug/L		90	68 - 120	9	13
Dichlorobromomethane	1.0	U	10.0	9.87		ug/L		99	75 - 128	9	13
Ethylbenzene	1.0	U	10.0	9.38		ug/L		94	72 - 121	6	15
m-Xylene & p-Xylene	2.0	U	10.0	9.41		ug/L		94	70 - 121	11	15
2-Butanone (MEK)	10	U	20.0	17.3		ug/L		86	34 - 153	5	23
4-Methyl-2-pentanone (MIBK)	10	U	20.0	17.7		ug/L		88	53 - 147	8	16
Methylene Chloride	1.0	U	10.0	11.2		ug/L		112	52 - 137	6	12
o-Xylene	1.0	U	10.0	9.04		ug/L		90	71 - 125	8	15
Styrene	1.0	U	10.0	8.78		ug/L		88	74 - 125	9	14
Tetrachloroethene	1.0	U	10.0	9.79		ug/L		98	69 - 126	8	18
Toluene	1.0	U	10.0	10.9		ug/L		109	69 - 125	7	14
trans-1,2-Dichloroethene	1.0	U	10.0	10.4		ug/L		104	66 - 131	10	11
trans-1,3-Dichloropropene	1.0	U	10.0	9.36		ug/L		94	59 - 120	10	14
Trichloroethene	1.0	U	10.0	9.46		ug/L		95	68 - 129	7	12
Vinyl chloride	1.0	U	10.0	10.8		ug/L		108	55 - 123	6	12
Xylenes, Total	2.0	U	20.0	18.5		ug/L		92	71 - 122	9	14
Chlorodibromomethane	1.0	U	10.0	8.75		ug/L		88	62 - 131	7	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*61 - 138*
4-Bromofluorobenzene (Surr)	*90*		*69 - 120*
Toluene-d8 (Surr)	*110*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*69 - 124*

QC Association Summary

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-82750-1

GC/MS VOA

Analysis Batch: 289457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-82750-1	W-072117-3535MLK-TP-003	Total/NA	Water	8260B	
240-82750-2	W-072117-3535MLK-TP-004	Total/NA	Water	8260B	
240-82750-3	TB-072117-TP-002	Total/NA	Water	8260B	
MB 240-289457/6	Method Blank	Total/NA	Water	8260B	
LCS 240-289457/4	Lab Control Sample	Total/NA	Water	8260B	
240-82750-1 MS	W-072117-3535MLK-TP-003	Total/NA	Water	8260B	
240-82750-1 MSD	W-072117-3535MLK-TP-003	Total/NA	Water	8260B	

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 17302-T06, RACER Delphi Anderson

TestAmerica Job ID: 240-82750-1

Client Sample ID: W-072117-3535MLK-TP-003
Lab Sample ID: 240-82750-1
Date Collected: 07/21/17 09:32
Matrix: Water
Date Received: 07/22/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	289457	08/01/17 18:22	LEE	TAL CAN

Client Sample ID: W-072117-3535MLK-TP-004
Lab Sample ID: 240-82750-2
Date Collected: 07/21/17 09:34
Matrix: Water
Date Received: 07/22/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	289457	08/01/17 18:45	LEE	TAL CAN

Client Sample ID: TB-072117-TP-002
Lab Sample ID: 240-82750-3
Date Collected: 07/21/17 09:40
Matrix: Water
Date Received: 07/22/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	289457	08/01/17 19:08	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: GHD Services Inc. TestAmerica Job ID: 240-82750-1
Project/Site: 17302-T06, RACER Delphi Anderson

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-18
Connecticut	State Program	1	PH-0590	12-31-17 *
Florida	NELAP	4	E87225	06-30-18
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-18 *
Kentucky (UST)	State Program	4	58	02-23-18
Kentucky (WW)	State Program	4	98016	12-31-17 *
Minnesota	NELAP	5	039-999-348	12-31-17 *
Minnesota (Petrofund)	State Program	1	3506	07-31-17 *
Nevada	State Program	9	OH-000482008A	07-31-17 *
New Jersey	NELAP	2	OH001	06-30-18
New York	NELAP	2	10975	03-31-18
Ohio VAP	State Program	5	CL0024	09-14-17 *
Oregon	NELAP	10	4062	02-23-18
Pennsylvania	NELAP	3	68-00340	08-31-17 *
Texas	NELAP	6	T104704517-15-5	08-31-17 *
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-17 *
Washington	State Program	10	C971	01-12-18 *
West Virginia DEP	State Program	3	210	12-31-17 *
Wisconsin	State Program	5	999518190	08-31-17 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

CHAIN OF CUSTODY RECORD

COC NO.: IN-14163

PAGE ___ OF ___ (See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES
6520 Corporate Drive, Indianapolis, Indiana 46278
Phone: (317) 291-7007 Fax: (317) 328-2666

49164.9

Project No/ Phase/Task Code: 017302/T06	Laboratory Name: Test America	Lab Location: North Canton, OH	SSOW ID: 17302.T06
Project Name: MLK	Lab Contact: Denise Hackler	Lab Quote No:	Cooler No: 1 of 1
Project Location: Anderson, IN			Carrier: FedEx
Chemistry Contact: D. Andrasko			Airbill No: 8113 0955 2069
Sampler(s): Tim Pranger, Katie Hutes			Date Shipped: 7/21/17

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd//yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	VOCs	MS/MSD Request	Comments/ Special Instructions:
1	W-072117-3535MLK-TP-003	7/21/17	932	WG	G		9	9 HP						9	X	X	
2	W-072117-3535MLK-TP-004	"	934	WG	G		3	3 HP						3	X		
3	TB-072117-TP-002	7/21/17	940	TB	G		3							3	X		
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

240-82750 Chain of Custody

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 15

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	G+D	7/21/17	1030	1.	TA Can	7/22/17	0945
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 82750**
Canton Facility

Client GHD Site Name _____ Cooler unpacked by: Terry Burns

Cooler Received on 7/22/17 Opened on 7/22/17

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

☐ See Multiple Cooler Form

1. Cooler temperature upon receipt
   IR GUN# IR-8 (CF **-0.4** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #36 (CF **+0**°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

Ref: SOP NC-SC-0005, Sample Receiving
\\tacorp\corp\QA\QA_Facilities\Canton-QA\Document-Management\Work-Instruction\Word Version Work Instructions\WI-NC-099-052317 Cooler Receipt Form.doc djl