



June 6, 2018

Karl Knutson
Wisconsin Department of Natural Resources
South Central Region
3911 Fish Hatchery Rd.
Fitchburg, WI 53711

Subject: Discharge Monitoring Report - Groundwater Extraction and Treatment System,
Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin

Dear Mr. Knutson,

The Groundwater Extraction and Treatment System (GETS) ran for the month of May with the exception of maintenance activities. This letter summarizes the activities completed in May 2018 as part of the GETS at the Madison-Kipp Corporation (MKC) site under the Wisconsin Pollution Discharge Elimination System (WPDES) Permit WI-0046566-6.

The GETS flow rate was generally operated at 40 gallons per minute (gpm) between May 1 and May 31, 2018 to avoid water extraction into the vapor phase activated carbon vessels due to transfer pump issues. New transfer pumps have been ordered and will be installed as soon as possible. The GETS flow rate was adjusted between 35 gpm and 45 gpm at times during troubleshooting processes, but was unable to operate effectively at the higher flow rate due to pump issues.

Compliance samples were collected for volatile organic compounds, TSS after a pipe cleaning event, and visual monitoring for sodium permanganate on May 1, 2018. The compliance sample results for all parameters were below the WPDES discharge limits. The Discharge Monitoring Report for May 2018 is included as Attachment A and laboratory reports are included as Attachment B.

If you have any questions or need additional information, please contact me at msheppard@madison-kipp.com or (608) 242-5207.

Mark Sheppard

A handwritten signature in black ink, appearing to read "Mark Sheppard", is written over the printed name.

Madison-Kipp Corporation

Attachment A Discharge Monitoring Report Form
Attachment B Laboratory Reports

Copies:
Andrew Stehn - TRC (electronic)



Mike Schmoller - WDNR (electronic)

Wendy Weihemuller - WDNR (electronic)

George Parrino - Madison Department of Health (electronic)

Attachment A
Discharge Monitoring Report Form

FOOTNOTES:

- (1) Total BETX is the sum of the benzene, ethylbenzene, toluene and xylene concentrations. If all compounds were below their corresponding laboratory detection limits, then the highest detection limit of the BTEX compounds was noted.
- (2) PAH group of 10 (Polynuclear Aromatic Hydrocarbons) include the sum of the following individual compounds: benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene. If all compounds were below their corresponding laboratory detection limits, then the highest detection limit of the PAH group compounds was noted.
- (3) Madison-Kipp/TRC will conduct visual monitoring for this compound.
- (4) No effluent limit is established, refer to section 4 of the permit.
- (5) B = Compound was found in the blank and in the sample.
- (6) J = Estimated value. Analyte detected at a level less than the reporting limit and greater than or equal to the detection limit.
- (7) M = Matrix Spike and/or Matrix Spike Duplicate Recovery is outside acceptance limits.
- (8) The GETS generally operated at 40 gpm between May 1 and May 31, 2018, but was adjusted between 35-45 gpm during troubleshooting processes.

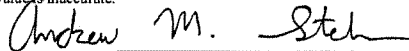
DIRECTIONS:


- ¹³⁰⁷ For "Outfall # and Description" enter the number of the outfall you are reporting (001 or 002, etc.) and the source of wastewater, (petroleum contact, tank bottom water, scrap and waste storage area oily water, or secondary containment). Copy and use a new form for each outfall.
- ¹³⁰⁸ Monitoring for a given parameter depends on if the discharge is to surface water or groundwater, and petroleum category.
- ¹³⁰⁹ The value entered must be the highest value of all samples analyzed for that day.
- ¹³¹⁰ For each quarter, indicate the month monitoring occurred next to "Month"
- ¹³¹¹ Include as separate attachments to this form the annual reports for (a) waste oil and solids removed, and (b) tank bottom water disposal.

RETURN REPORT BY: June 15, of the year following completion of monitoring

RETURN TO: **ATTN: Nicholas Bertolas**
Department of Natural Resources
3911 Fish Hatchery Rd.
Fitchburg, WI 53711

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment, (40 CFR 122.5). I also certify that the values being submitted are the actual values found in the samples; no values have been modified or changed in any manner. Wherever I believe a value being reported is inaccurate, I have added an explanation indicating the reasons why the value is inaccurate.


Signature of Person Completing Form 6-6-2018
Date


Signature of Principal Exec. or Authorized Agent ~~6-6-2018~~ 6-13-18
Date

Attachment B
Laboratory Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-144802-1

Client Project/Site: MadisonKipp - GETS 292257

For:

TRC Environmental Corporation.

708 Heartland Trail

Suite 3000

Madison, Wisconsin 53717

Attn: Andrew Stehn



Authorized for release by:

5/10/2018 3:54:16 PM

Sandie Fredrick, Project Manager II

(920)261-1660

sandie.fredrick@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	10
QC Association	11
Surrogate Summary	12
QC Sample Results	13
Chronicle	16
Certification Summary	17
Chain of Custody	18
Receipt Checklists	19

Case Narrative

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Job ID: 500-144802-1

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-144802-1**

Comments

No additional comments.

Receipt

The samples were received on 5/3/2018 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

GC/MS VOA

Method(s) 624: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (500-144802-1). Elevated reporting limits (RLs) are provided.

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

General Chemistry

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



Detection Summary

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Client Sample ID: Influent

Lab Sample ID: 500-144802-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	450		5.0	2.0	ug/L	5		624	Total/NA
trans-1,2-Dichloroethene	5.8		5.0	1.7	ug/L	5		624	Total/NA
Trichloroethene	370		2.5	0.82	ug/L	5		624	Total/NA
Vinyl chloride	3.6	J	5.0	1.0	ug/L	5		624	Total/NA
Tetrachloroethene - DL	1800		50	19	ug/L	50		624	Total/NA

Client Sample ID: Effluent

Lab Sample ID: 500-144802-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	25		1.0	0.41	ug/L	1		624	Total/NA
Tetrachloroethene	18		1.0	0.37	ug/L	1		624	Total/NA
Trichloroethene	7.3		0.50	0.16	ug/L	1		624	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 500-144802-3

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Method Summary

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

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

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144802-1	Influent	Water	05/01/18 17:35	05/03/18 09:10
500-144802-2	Effluent	Water	05/01/18 17:30	05/03/18 09:10
500-144802-3	Trip Blank	Water	05/01/18 00:00	05/03/18 09:10

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Client Sample ID: Influent

Date Collected: 05/01/18 17:35

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144802-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.73		2.5	0.73	ug/L			05/08/18 13:43	5
Bromoform	<2.2		5.0	2.2	ug/L			05/08/18 13:43	5
Carbon tetrachloride	<1.9		5.0	1.9	ug/L			05/08/18 13:43	5
Chloroform	<1.9		10	1.9	ug/L			05/08/18 13:43	5
cis-1,2-Dichloroethene	450		5.0	2.0	ug/L			05/08/18 13:43	5
Dichlorobromomethane	<1.9		5.0	1.9	ug/L			05/08/18 13:43	5
1,2-Dichloroethane	<2.0		5.0	2.0	ug/L			05/08/18 13:43	5
1,1-Dichloroethene	<2.0		5.0	2.0	ug/L			05/08/18 13:43	5
Ethylbenzene	<0.92		2.5	0.92	ug/L			05/08/18 13:43	5
Methyl bromide	<3.2		10	3.2	ug/L			05/08/18 13:43	5
Methyl chloride	<1.6		5.0	1.6	ug/L			05/08/18 13:43	5
Methyl tert-butyl ether	<2.0		5.0	2.0	ug/L			05/08/18 13:43	5
1,1,2,2-Tetrachloroethane	<2.0		5.0	2.0	ug/L			05/08/18 13:43	5
Toluene	<0.76		2.5	0.76	ug/L			05/08/18 13:43	5
trans-1,2-Dichloroethene	5.8		5.0	1.7	ug/L			05/08/18 13:43	5
1,1,1-Trichloroethane	<1.9		5.0	1.9	ug/L			05/08/18 13:43	5
1,1,2-Trichloroethane	<1.8		5.0	1.8	ug/L			05/08/18 13:43	5
Trichloroethene	370		2.5	0.82	ug/L			05/08/18 13:43	5
Vinyl chloride	3.6 J		5.0	1.0	ug/L			05/08/18 13:43	5
Xylenes, Total	<2.0		5.0	2.0	ug/L			05/08/18 13:43	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		71 - 120					05/08/18 13:43	5
1,2-Dichloroethane-d4 (Surr)	109		71 - 127					05/08/18 13:43	5
Toluene-d8 (Surr)	104		75 - 120					05/08/18 13:43	5

Method: 624 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1800		50	19	ug/L			05/08/18 14:11	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		71 - 120					05/08/18 14:11	50
1,2-Dichloroethane-d4 (Surr)	110		71 - 127					05/08/18 14:11	50
Toluene-d8 (Surr)	104		75 - 120					05/08/18 14:11	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			05/04/18 12:44	1

Client Sample ID: Effluent

Date Collected: 05/01/18 17:30

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144802-2

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/08/18 14:39	1
Bromoform	<0.45		1.0	0.45	ug/L			05/08/18 14:39	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/08/18 14:39	1
Chloroform	<0.37		2.0	0.37	ug/L			05/08/18 14:39	1
cis-1,2-Dichloroethene	25		1.0	0.41	ug/L			05/08/18 14:39	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Client Sample ID: Effluent

Lab Sample ID: 500-144802-2

Date Collected: 05/01/18 17:30

Matrix: Water

Date Received: 05/03/18 09:10

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			05/08/18 14:39	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/08/18 14:39	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/08/18 14:39	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/08/18 14:39	1
Methyl bromide	<0.65		2.0	0.65	ug/L			05/08/18 14:39	1
Methyl chloride	<0.32		1.0	0.32	ug/L			05/08/18 14:39	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/08/18 14:39	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/08/18 14:39	1
Tetrachloroethene	18		1.0	0.37	ug/L			05/08/18 14:39	1
Toluene	<0.15		0.50	0.15	ug/L			05/08/18 14:39	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/08/18 14:39	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/08/18 14:39	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/08/18 14:39	1
Trichloroethene	7.3		0.50	0.16	ug/L			05/08/18 14:39	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			05/08/18 14:39	1
Xylenes, Total	<0.40		1.0	0.40	ug/L			05/08/18 14:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		71 - 120					05/08/18 14:39	1
1,2-Dichloroethane-d4 (Surr)	112		71 - 127					05/08/18 14:39	1
Toluene-d8 (Surr)	103		75 - 120					05/08/18 14:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			05/04/18 12:45	1

Client Sample ID: Trip Blank

Lab Sample ID: 500-144802-3

Date Collected: 05/01/18 00:00

Matrix: Water

Date Received: 05/03/18 09:10

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/08/18 15:07	1
Bromoform	<0.45		1.0	0.45	ug/L			05/08/18 15:07	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/08/18 15:07	1
Chloroform	<0.37		2.0	0.37	ug/L			05/08/18 15:07	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/08/18 15:07	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			05/08/18 15:07	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/08/18 15:07	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/08/18 15:07	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/08/18 15:07	1
Methyl bromide	<0.65		2.0	0.65	ug/L			05/08/18 15:07	1
Methyl chloride	<0.32		1.0	0.32	ug/L			05/08/18 15:07	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/08/18 15:07	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/08/18 15:07	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/08/18 15:07	1
Toluene	<0.15		0.50	0.15	ug/L			05/08/18 15:07	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/08/18 15:07	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/08/18 15:07	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/08/18 15:07	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-144802-3

Date Collected: 05/01/18 00:00

Matrix: Water

Date Received: 05/03/18 09:10

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<0.16		0.50	0.16	ug/L			05/08/18 15:07	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			05/08/18 15:07	1
Xylenes, Total	<0.40		1.0	0.40	ug/L			05/08/18 15:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		71 - 120		05/08/18 15:07	1
1,2-Dichloroethane-d4 (Surr)	112		71 - 127		05/08/18 15:07	1
Toluene-d8 (Surr)	102		75 - 120		05/08/18 15:07	1

Definitions/Glossary

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

QC Association Summary

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

GC/MS VOA

Analysis Batch: 431100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144802-1	Influent	Total/NA	Water	624	
500-144802-1 - DL	Influent	Total/NA	Water	624	
500-144802-2	Effluent	Total/NA	Water	624	
500-144802-3	Trip Blank	Total/NA	Water	624	
MB 500-431100/7	Method Blank	Total/NA	Water	624	
LCS 500-431100/5	Lab Control Sample	Total/NA	Water	624	
500-144802-2 MS	Effluent	Total/NA	Water	624	
500-144802-2 MSD	Effluent	Total/NA	Water	624	

General Chemistry

Analysis Batch: 430722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144802-1	Influent	Total/NA	Water	SM 2540D	
500-144802-2	Effluent	Total/NA	Water	SM 2540D	
MB 500-430722/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-430722/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Surrogate Summary

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DCA	TOL
		(71-120)	(71-127)	(75-120)
500-144802-1	Influent	98	109	104
500-144802-1 - DL	Influent	99	110	104
500-144802-2	Effluent	100	112	103
500-144802-2 MS	Effluent	95	108	103
500-144802-2 MSD	Effluent	98	110	103
500-144802-3	Trip Blank	99	112	102
LCS 500-431100/5	Lab Control Sample	94	105	105
MB 500-431100/7	Method Blank	100	110	105

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-431100/7

Matrix: Water

Analysis Batch: 431100

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/08/18 10:58	1
Bromoform	<0.45		1.0	0.45	ug/L			05/08/18 10:58	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/08/18 10:58	1
Chloroform	<0.37		2.0	0.37	ug/L			05/08/18 10:58	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/08/18 10:58	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			05/08/18 10:58	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/08/18 10:58	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/08/18 10:58	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/08/18 10:58	1
Methyl bromide	<0.65		2.0	0.65	ug/L			05/08/18 10:58	1
Methyl chloride	<0.32		1.0	0.32	ug/L			05/08/18 10:58	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/08/18 10:58	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/08/18 10:58	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/08/18 10:58	1
Toluene	<0.15		0.50	0.15	ug/L			05/08/18 10:58	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/08/18 10:58	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/08/18 10:58	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/08/18 10:58	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/08/18 10:58	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			05/08/18 10:58	1
Xylenes, Total	<0.40		1.0	0.40	ug/L			05/08/18 10:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		71 - 120		05/08/18 10:58	1
1,2-Dichloroethane-d4 (Surr)	110		71 - 127		05/08/18 10:58	1
Toluene-d8 (Surr)	105		75 - 120		05/08/18 10:58	1

Lab Sample ID: LCS 500-431100/5

Matrix: Water

Analysis Batch: 431100

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	43.7		ug/L		87	37 - 151
Bromoform	50.0	53.9		ug/L		108	45 - 169
Carbon tetrachloride	50.0	42.1		ug/L		84	70 - 140
Chloroform	50.0	42.7		ug/L		85	51 - 138
cis-1,2-Dichloroethene	50.0	42.2		ug/L		84	70 - 130
Dichlorobromomethane	50.0	46.4		ug/L		93	35 - 155
1,2-Dichloroethane	50.0	50.8		ug/L		102	49 - 155
1,1-Dichloroethene	50.0	40.4		ug/L		81	10 - 234
Ethylbenzene	50.0	46.1		ug/L		92	37 - 162
Methyl bromide	50.0	48.1		ug/L		96	10 - 242
Methyl chloride	50.0	58.2		ug/L		116	10 - 273
m&p-Xylene	50.0	48.8		ug/L		98	
o-Xylene	50.0	48.4		ug/L		97	
1,1,2,2-Tetrachloroethane	50.0	49.1		ug/L		98	46 - 157
Tetrachloroethene	50.0	47.9		ug/L		96	64 - 148
Toluene	50.0	48.7		ug/L		97	47 - 150

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-431100/5

Matrix: Water

Analysis Batch: 431100

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	50.0	42.2		ug/L		84	54 - 156
1,1,1-Trichloroethane	50.0	42.3		ug/L		85	52 - 162
1,1,2-Trichloroethane	50.0	50.3		ug/L		101	52 - 150
Trichloroethene	50.0	42.4		ug/L		85	71 - 157
Vinyl chloride	50.0	46.5		ug/L		93	10 - 251

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		71 - 120
1,2-Dichloroethane-d4 (Surr)	105		71 - 127
Toluene-d8 (Surr)	105		75 - 120

Lab Sample ID: 500-144802-2 MS

Matrix: Water

Analysis Batch: 431100

Client Sample ID: Effluent

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.15		50.0	45.7		ug/L		91	37 - 151
Bromoform	<0.45		50.0	55.9		ug/L		112	45 - 169
Carbon tetrachloride	<0.38		50.0	45.2		ug/L		90	70 - 140
Chloroform	<0.37		50.0	46.4		ug/L		93	51 - 138
cis-1,2-Dichloroethene	25		50.0	69.7		ug/L		90	70 - 130
Dichlorobromomethane	<0.37		50.0	50.1		ug/L		100	35 - 155
1,2-Dichloroethane	<0.39		50.0	54.0		ug/L		108	49 - 155
1,1-Dichloroethene	<0.39		50.0	42.3		ug/L		85	10 - 234
Ethylbenzene	<0.18		50.0	48.2		ug/L		96	37 - 162
Methyl bromide	<0.65		50.0	49.9		ug/L		100	10 - 242
Methyl chloride	<0.32		50.0	61.1		ug/L		122	10 - 273
m&p-Xylene	<0.40		50.0	49.5		ug/L		99	
o-Xylene	<0.22		50.0	50.7		ug/L		101	
1,1,1,2-Tetrachloroethane	<0.40		50.0	54.4		ug/L		109	46 - 157
Tetrachloroethene	18		50.0	65.2		ug/L		94	64 - 148
Toluene	<0.15		50.0	49.3		ug/L		99	47 - 150
trans-1,2-Dichloroethene	<0.35		50.0	45.1		ug/L		90	54 - 156
1,1,1-Trichloroethane	<0.38		50.0	44.0		ug/L		88	52 - 162
1,1,2-Trichloroethane	<0.35		50.0	54.3		ug/L		109	52 - 150
Trichloroethene	7.3		50.0	52.3		ug/L		90	71 - 157
Vinyl chloride	<0.20		50.0	47.3		ug/L		95	10 - 251

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		71 - 120
1,2-Dichloroethane-d4 (Surr)	108		71 - 127
Toluene-d8 (Surr)	103		75 - 120

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-144802-2 MSD

Matrix: Water

Analysis Batch: 431100

Client Sample ID: Effluent

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.15		50.0	45.3		ug/L		91	37 - 151	1	20
Bromoform	<0.45		50.0	54.5		ug/L		109	45 - 169	3	20
Carbon tetrachloride	<0.38		50.0	44.3		ug/L		89	70 - 140	2	20
Chloroform	<0.37		50.0	45.0		ug/L		90	51 - 138	3	20
cis-1,2-Dichloroethene	25		50.0	68.1		ug/L		87	70 - 130	2	20
Dichlorobromomethane	<0.37		50.0	50.4		ug/L		101	35 - 155	1	20
1,2-Dichloroethane	<0.39		50.0	53.9		ug/L		108	49 - 155	0	20
1,1-Dichloroethene	<0.39		50.0	41.8		ug/L		84	10 - 234	1	20
Ethylbenzene	<0.18		50.0	46.4		ug/L		93	37 - 162	4	20
Methyl bromide	<0.65		50.0	49.8		ug/L		100	10 - 242	0	20
Methyl chloride	<0.32		50.0	61.5		ug/L		123	10 - 273	1	20
m&p-Xylene	<0.40		50.0	48.3		ug/L		97		2	
o-Xylene	<0.22		50.0	48.3		ug/L		97		5	
1,1,2,2-Tetrachloroethane	<0.40		50.0	53.4		ug/L		107	46 - 157	2	20
Tetrachloroethene	18		50.0	63.9		ug/L		92	64 - 148	2	20
Toluene	<0.15		50.0	48.4		ug/L		97	47 - 150	2	20
trans-1,2-Dichloroethene	<0.35		50.0	44.5		ug/L		89	54 - 156	1	20
1,1,1-Trichloroethane	<0.38		50.0	44.1		ug/L		88	52 - 162	0	20
1,1,2-Trichloroethane	<0.35		50.0	53.3		ug/L		107	52 - 150	2	20
Trichloroethene	7.3		50.0	51.0		ug/L		87	71 - 157	2	20
Vinyl chloride	<0.20		50.0	48.2		ug/L		96	10 - 251	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		71 - 120
1,2-Dichloroethane-d4 (Surr)	110		71 - 127
Toluene-d8 (Surr)	103		75 - 120

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-430722/1

Matrix: Water

Analysis Batch: 430722

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			05/04/18 12:15	1

Lab Sample ID: LCS 500-430722/2

Matrix: Water

Analysis Batch: 430722

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	200	188		mg/L		94	80 - 120

TestAmerica Chicago

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Client Sample ID: Influent

Date Collected: 05/01/18 17:35

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144802-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		5	431100	05/08/18 13:43	JDD	TAL CHI
Total/NA	Analysis	624	DL	50	431100	05/08/18 14:11	JDD	TAL CHI
Total/NA	Analysis	SM 2540D		1	430722		SMO	TAL CHI
					(Start)	05/04/18 12:44		
					(End)	05/04/18 12:45		

Client Sample ID: Effluent

Date Collected: 05/01/18 17:30

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144802-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	431100	05/08/18 14:39	JDD	TAL CHI
Total/NA	Analysis	SM 2540D		1	430722		SMO	TAL CHI
					(Start)	05/04/18 12:45		
					(End)	05/04/18 12:47		

Client Sample ID: Trip Blank

Date Collected: 05/01/18 00:00

Date Received: 05/03/18 09:10

Lab Sample ID: 500-144802-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	431100	05/08/18 15:07	JDD	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: TRC Environmental Corporation.
Project/Site: MadisonKipp - GETS 292257

TestAmerica Job ID: 500-144802-1

Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)
Contact: Andy Stehn
Company: TRC
Address: 708 Heartland Trail Suite 3000
Address: Madison, WI 53717
Phone: (608) 826-3665
Fax:
E-Mail: astehn@trcsolutions.com

Bill To (optional)
Contact:
Company: Same as reporting
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-144802
Chain of Custody Number:
Page 1 of 1
Temperature °C of Cooler: -0.3-7/12

Client		Client Project #		Preservative		Parameter		Matrix		Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
MKC		292257		1 8		VOCs		TSS		
Project Name GETS		Project Location/State Madison, WI		Lab Project #		Sampler Ben Wachholz		Lab PM Sandie Fedrick		
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix			Comments	
1		Influent	5/1/18	17:35	4	W	X	X		
2		Effluent	5/1/18	17:30	4	W	X	X		
3		Trip Blank	5/1/18	-	1	W	X			



Turnaround Time Required (Business Days)
 ___ 1 Day ___ 2 Days 5 Days ___ 7 Days ___ 10 Days ___ 15 Days ___ Other
 Requested Due Date _____

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>Ben Wachholz</u> Company: <u>TRC</u>	Date <u>5/2/18</u>	Time <u>17:10</u>	Received By <u>Sandie Fedrick</u> Company: <u>TRC</u>	Date <u>05/03/18</u>	Time <u>0910</u>	Lab Courier
Relinquished By	Date	Time	Received By	Date	Time	Shipped <input checked="" type="checkbox"/>
Relinquished By	Date	Time	Received By	Date	Time	Hand Delivered

- Matrix Key
- WW - Wastewater
 - W - Water
 - S - Soil
 - SL - Sludge
 - MS - Miscellaneous
 - OL - Oil
 - A - Air
 - SE - Sediment
 - SO - Soil
 - L - Leachate
 - WI - Wipe
 - DW - Drinking Water
 - O - Other

Client Comments

Lab Comments:

Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-144802-1

Login Number: 144802

List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

