Post Office Box 8043 Madison, WI 53708-8043

201 Waubesa Street Madison, WI 53704-5728

November 3, 2016

James Brodzeller
Wastewater Specialist
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. Brodzeller,

The Groundwater Extraction and Treatment System (GETS) ran for the month of October, with the exception of maintenance activities. This letter summarizes the activities completed in October 2016 as part of the GETS at the Madison Kipp Corporation (MKC) site under the Wisconsin Pollution Discharge Elimination System (WPDES) Permit WI-0046566-6. Compliance samples were collected on October 10, 2016 per the WPDES permit, including visual monitoring for sodium permanganate neutralization. The compliance sample results were below the WPDES discharge limits. The Discharge Monitoring Report is included as Attachment A and laboratory reports are included as Attachment B.

During the month of October, the GETS shut down for less than 24 hours due to an air bubble in the hydrogen peroxide line. If you have any questions or need additional information, please contact me at asatkoski@madison-kipp.com or (608) 242-5200.

Alina Satkoski

alinalattesk:

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)

DISCHARGE MONITORING REPORT FORM

Year:___2016_ Contaminated Groundwater from Remedial Action Operations - Surface Water Discharge
Permit No. WI-0046566-6 Rev. December 16, 2013

Facility Name and Location

Madison Kipp Corporation 201 Waubesa St Madison, WI 53704

Consultant Managing Project: TRC

FIN#:

Outfall :	# and Description	Flow (gal/day)	Oil & Grease (mg/L)	BOD ₅ (mg/L)	Total BETX (μg/L)	PAHs group of 10 (µg/L)	Benzo(a) pyrene (μg/L)	Naphthalene (μg/L)	Potassium Permanganate (mg/L)	Benzene (µg/L)	TSS (mg/L)
See Footnote Effluent Lide of the personal sample Front treatment Sample Try Impaired of waters Outfall # Effluent Lide of the personal sample Ty Impaired of waters Outfall # Effluent Lide of the personal sample Front Sample Front Sample Front Treatment Sample Front Treatment Sample Front Sample Front Treatment Sample Front	Month: October 10, 2016	64,800	<1.4	<2.0	<0.40	<0.050	<0.025	<0.050	Absent	<0.15	15
	Month:										
	Month:										
	Month:										
See Footn	otes	(4)			(1)	(2)			(3)		
	imits (refer to sec.		10 mg/l	20 mg/L	750 [g/L	0.1 μg/l	0.1 μg/l	70 μg/l		50 μg/l	40 mg/L
	equency: Pre-	Daily	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
•	equency: Post-	Daily	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
Sample Ty	/pe	Estimate	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
•	or TMDL surface	Does th	nis facility discha	rge a pollutant of c	oncern to an impair	red surface water or to	a surface water wi	th a TMDL allocation	n? O No & Y	/es	
Outfall :	# and Description	VOCs (µg/L)	Vinyl Chloride (µg/L)	trans-1,2- Dichloroethene (µg/L)	1,1- Dichloroethene (µg/L)	Tetrachloroethene (μg/L)	Chloride (mg/L)	cis-1,2- Dichloroethene (µg/L)	Trichloroethene (μg/L)		
Effluent	Month: October 10, 2016	54.8	<0.20	<0.35	<0.39	32	110	17	5.8		
	Month:										
	Month:										
	Month:										
See Footn	otes	(4)		(4)			(5)	(4)			
	imits (refer to sec.		10 ug/L		50 μg/L	50 μg/L	395 mg/L		50 [g/L		
•	equency: Pre-	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly		_
Sample Fr treatment	equency: Post-	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly		
Sample Ty	/pe	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab		

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/Arcadis/TRC will conduct visual monitoring for this compound.
- (4) No effluent limit is established, refer to section 4 of the permit.
- (5) Compound was found in the blank and in the sample.
- (6) Estimated value. Analyte detected at a level less than the reporting limit and greater than or equal to the detection limit.
- (7) Matrix Spike and/or Matrix Spike Duplicate Recovery is outside acceptance limits.

<u>DIRECTIONS</u> :
For "Outfall # and Description" enter the number of the outfall you are reporting (001 or
002, etc.)
☐ Monitoring for a given parameter depends on if the discharge is to surface water or groundwater.
☐ The value entered must be the highest value of all samples analyzed for that day.
Print additional DMRs as necessary for monthly reporting.

RETURN REPORT BY: February 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.

alinaSotkesk:	11-3-2016
Signature of Person Completing Form	Date
alinaSattesk:	11-3-2016
Signature of Principal Exec. or Authorized Agent	Date



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: 500-118382-1

Client Project/Site: MadisonKipp - GETS/SVE

For:

Madison-Kipp Corporation 201 Waubesa Street Madison, Wisconsin 53704

Attn: Alina Satkoski

Sanda Jrednik

Authorized for release by: 10/12/2016 10:15:33 PM

Sandie Fredrick, Project Manager II (920)261-1660

sandie.fredrick@testamericainc.com

.....LINKS

Review your project results through

Total Access

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.

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Case Narrative

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-1

Job ID: 500-118382-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-118382-1

Comments

No additional comments.

Receipt

The samples were received on 10/11/2016 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

Receipt Exceptions

One or more containers for the following sample(s) was received broken or leaking: Trip Blank client sent in was broken in transit, no volume remains.

Client lists on COC that there is an "Attached analyte list for VOC and PAH" but there is not, verified by PM.

GC/MS VOA

Method(s) 624: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (500-118382-1). 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.

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Detection Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-1

Lab Sample ID: 500-118382-1

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Client Samp	le ID:	Influent
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Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Tetrachloroethene - DL	1600	50	19	ug/L	50	624	Total/NA
Chloride	110 B	4.0	1.5	mg/L	20	300.0	Total/NA
Total Suspended Solids	2.5 J	5.0	2.5	ma/L	1	SM 2540D	Total/NA

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Client Sample ID: Effluent

Lab Sample ID:	500-118382-2
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Γ							_		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	17		1.0	0.41	ug/L		_	624	Total/NA
Tetrachloroethene	32		1.0	0.37	ug/L	1		624	Total/NA
Trichloroethene	5.8		0.50	0.16	ug/L	1		624	Total/NA
Chloride	110	В	4.0	1.5	mg/L	20		300.0	Total/NA
Total Suspended Solids	15		5.0	2.5	mg/L	1		SM 2540D	Total/NA

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Method Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CHI
1664B	HEM and SGT-HEM	1664B	TAL CHI
300.0	Anions, Ion Chromatography	MCAWW	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI

Protocol References:

1664B = 1664B

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

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 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

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Sample Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE

TestAmerica Job ID: 500-118382-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-118382-1	Influent	Water	10/10/16 08:00	10/11/16 10:20
500-118382-2	Effluent	Water	10/10/16 08:10	10/11/16 10:20

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Client Sample Results

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE

Client Sample ID: Influent

Date Collected: 10/10/16 08:00

Date Received: 10/11/16 10:20

4-Bromofluorobenzene (Surr)

1,2-Dichloroethane-d4 (Surr)

General Chemistry

Total Suspended Solids

HEM (Oil & Grease)

Toluene-d8 (Surr)

Analyte

Chloride

TestAmerica Job ID: 500-118382-1

Lab Sample ID: 500-118382-1

Matrix: Water

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Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.73		2.5	0.73	ug/L			10/12/16 11:39	5
Bromoform	<2.2		5.0	2.2	ug/L			10/12/16 11:39	5
Carbon tetrachloride	<1.9		5.0	1.9	ug/L			10/12/16 11:39	5
Chloroform	<1.9		5.0	1.9	ug/L			10/12/16 11:39	5
cis-1,2-Dichloroethene	<2.0		5.0	2.0	ug/L			10/12/16 11:39	5
Dichlorobromomethane	<1.9		5.0	1.9	ug/L			10/12/16 11:39	5
1,2-Dichloroethane	<2.0		5.0	2.0	ug/L			10/12/16 11:39	5
1,1-Dichloroethene	<2.0		5.0	2.0	ug/L			10/12/16 11:39	5
Ethylbenzene	<0.92		2.5	0.92	ug/L			10/12/16 11:39	5
Methyl bromide	<3.2		10	3.2	ug/L			10/12/16 11:39	5
Methyl chloride	<1.6		5.0	1.6	ug/L			10/12/16 11:39	5
Methyl tert-butyl ether	<2.0		5.0	2.0	ug/L			10/12/16 11:39	5
1,1,2,2-Tetrachloroethane	<2.0		5.0	2.0	ug/L			10/12/16 11:39	5
Toluene	<0.76		2.5	0.76	ug/L			10/12/16 11:39	5
trans-1,2-Dichloroethene	<1.7		5.0	1.7	ug/L			10/12/16 11:39	5
1,1,1-Trichloroethane	<1.9		5.0	1.9	ug/L			10/12/16 11:39	5
1,1,2-Trichloroethane	<1.8		5.0	1.8	ug/L			10/12/16 11:39	5
Trichloroethene	<0.82		2.5	0.82	ug/L			10/12/16 11:39	5
Vinyl chloride	<1.0		2.5	1.0	ug/L			10/12/16 11:39	5
Xylenes, Total	<2.0		5.0	2.0	ug/L			10/12/16 11:39	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		71 - 120			-		10/12/16 11:39	5
1,2-Dichloroethane-d4 (Surr)	104		71 - 127					10/12/16 11:39	5
Toluene-d8 (Surr)	96		75 - 120					10/12/16 11:39	5
Method: 624 - Volatile Organi	c Compoun	ds (GC/MS)	- DL						
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Allalyte									
Tetrachloroethene	1600		50	19	ug/L			10/12/16 12:04	50

71 - 120

71 - 127

75 - 120

RL

5.3

4.0

5.0

MDL Unit

1.4 mg/L

1.5 mg/L

2.5 mg/L

112

104

94

<1.4

110 B

2.5 J

Result Qualifier

10/12/16 12:04

10/12/16 12:04

10/12/16 12:04

Analyzed

10/11/16 14:34

10/11/16 12:20

<u>10/11/16 16:05</u> <u>10/11/16 19:41</u>

Prepared

Client Sample Results

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-1

Lab Sample ID: 500-118382-2

Matrix: Water

Client Sample ID: Effluent Date Collected: 10/10/16 08:10 Date Received: 10/11/16 10:20

Chloride

Total Suspended Solids

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			10/12/16 12:29	1
Bromoform	<0.45		1.0	0.45	ug/L			10/12/16 12:29	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/12/16 12:29	1
Chloroform	<0.37		1.0	0.37	ug/L			10/12/16 12:29	1
cis-1,2-Dichloroethene	17		1.0	0.41	ug/L			10/12/16 12:29	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/12/16 12:29	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/12/16 12:29	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/12/16 12:29	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/12/16 12:29	1
Methyl bromide	<0.65		2.0	0.65	ug/L			10/12/16 12:29	1
Methyl chloride	<0.32		1.0	0.32	ug/L			10/12/16 12:29	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/12/16 12:29	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/12/16 12:29	1
Tetrachloroethene	32		1.0	0.37	ug/L			10/12/16 12:29	1
Toluene	<0.15		0.50	0.15	ug/L			10/12/16 12:29	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/12/16 12:29	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/12/16 12:29	1
1,1,2-Trichloroethane	< 0.35		1.0	0.35	ug/L			10/12/16 12:29	1
Trichloroethene	5.8		0.50	0.16	ug/L			10/12/16 12:29	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			10/12/16 12:29	1
Xylenes, Total	<0.40		1.0	0.40	ug/L			10/12/16 12:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		71 - 120					10/12/16 12:29	1
1,2-Dichloroethane-d4 (Surr)	103		71 - 127					10/12/16 12:29	1
Toluene-d8 (Surr)	96		75 - 120					10/12/16 12:29	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	<1.4		5.3	1.4	mg/L		10/11/16 16:11	10/11/16 19:45	1

4.0

5.0

1.5 mg/L

2.5 mg/L

110 B

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TestAmerica	Chicago

10/11/16 14:46

10/11/16 12:22

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Definitions/Glossary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-1

Qualifiers

General Chemistry

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.
В	Compound was found in the blank and sample

Glossary

TEQ

Toxicity Equivalent Quotient (Dioxin)

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

QC Association Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-1

GC/MS VOA

Analysis Batch: 355693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-118382-1	Influent	Total/NA	Water	624	
500-118382-1 - DL	Influent	Total/NA	Water	624	
500-118382-2	Effluent	Total/NA	Water	624	
MB 500-355693/8	Method Blank	Total/NA	Water	624	
LCS 500-355693/6	Lab Control Sample	Total/NA	Water	624	

General Chemistry

Analysis Batch: 355571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-118382-1	Influent	Total/NA	Water	SM 2540D	
500-118382-2	Effluent	Total/NA	Water	SM 2540D	
MB 500-355571/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-355571/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Prep Batch: 355603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-118382-1	Influent	Total/NA	Water	1664B	
500-118382-2	Effluent	Total/NA	Water	1664B	
MB 500-355603/1-A	Method Blank	Total/NA	Water	1664B	
LCS 500-355603/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 355605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-118382-1	Influent	Total/NA	Water	1664B	355603
500-118382-2	Effluent	Total/NA	Water	1664B	355603
MB 500-355603/1-A	Method Blank	Total/NA	Water	1664B	355603
LCS 500-355603/2-A	Lab Control Sample	Total/NA	Water	1664B	355603

Analysis Batch: 355740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-118382-1	Influent	Total/NA	Water	300.0	
500-118382-2	Effluent	Total/NA	Water	300.0	
MB 500-355740/23	Method Blank	Total/NA	Water	300.0	
LCS 500-355740/32	Lab Control Sample	Total/NA	Water	300.0	

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Surrogate Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-1

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

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surro	ate Recovery (Acceptance Limits)
		BFB	12DCE	TOL	
Lab Sample ID	Client Sample ID	(71-120)	(71-127)	(75-120)	
500-118382-1 - DL	Influent	112	104	94	
500-118382-1	Influent	111	104	96	
500-118382-2	Effluent	111	103	96	
LCS 500-355693/6	Lab Control Sample	102	94	99	
MB 500-355693/8	Method Blank	114	103	93	

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

TestAmerica Job ID: 500-118382-1

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE

restAmenta 300 fb. 500-1 16362-

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

Lab Sample ID: MB 500-355693/8

Matrix: Water

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

Analysis Batch: 355693

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			10/12/16 11:03	1
Bromoform	<0.45		1.0	0.45	ug/L			10/12/16 11:03	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/12/16 11:03	1
Chloroform	<0.37		1.0	0.37	ug/L			10/12/16 11:03	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/12/16 11:03	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/12/16 11:03	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/12/16 11:03	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/12/16 11:03	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/12/16 11:03	1
Methyl bromide	<0.65		2.0	0.65	ug/L			10/12/16 11:03	1
Methyl chloride	<0.32		1.0	0.32	ug/L			10/12/16 11:03	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/12/16 11:03	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/12/16 11:03	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/12/16 11:03	1
Toluene	<0.15		0.50	0.15	ug/L			10/12/16 11:03	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/12/16 11:03	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/12/16 11:03	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/12/16 11:03	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/12/16 11:03	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			10/12/16 11:03	1
Xylenes, Total	<0.40		1.0	0.40	ug/L			10/12/16 11:03	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 71 - 120 10/12/16 11:03 114 1,2-Dichloroethane-d4 (Surr) 103 71 - 127 10/12/16 11:03 Toluene-d8 (Surr) 75 - 120 10/12/16 11:03 93

Lab Sample ID: LCS 500-355693/6 Client Sample ID: Lab Control Sample

Matrix: Water
Analysis Batch: 355693

Analysis Batch: 355693	Spike	1.09	LCS				%Rec.
Analyte	Added		Qualifier	Unit	D	%Rec	Limits
Benzene	50.0	49.0		ug/L		98	37 - 151
Bromoform	50.0	51.3		ug/L		103	45 - 169
Carbon tetrachloride	50.0	46.5		ug/L		93	70 - 140
Chloroform	50.0	51.4		ug/L		103	51 - 138
cis-1,2-Dichloroethene	50.0	46.4		ug/L		93	70 - 130
Dichlorobromomethane	50.0	50.9		ug/L		102	35 - 155
1,2-Dichloroethane	50.0	52.0		ug/L		104	49 - 155
1,1-Dichloroethene	50.0	45.3		ug/L		91	10 - 234
Ethylbenzene	50.0	50.5		ug/L		101	37 - 162
Methyl bromide	50.0	35.2		ug/L		70	10 - 242
Methyl chloride	50.0	58.4		ug/L		117	10 - 273
m&p-Xylene	50.0	54.0		ug/L		108	
o-Xylene	50.0	54.0		ug/L		108	
1,1,2,2-Tetrachloroethane	50.0	50.9		ug/L		102	46 - 157
Tetrachloroethene	50.0	52.9		ug/L		106	64 - 148
Toluene	50.0	53.6		ug/L		107	47 - 150

TestAmerica Chicago

Prep Type: Total/NA

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10/12/2016

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TestAmerica Job ID: 500-118382-1

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE

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

Lab Sample ID: LCS 500-355693/6

Matrix: Water

Analysis Batch: 355693

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
trans-1,2-Dichloroethene	50.0	45.9		ug/L		92	54 - 156	 	-
1,1,1-Trichloroethane	50.0	50.1		ug/L		100	52 - 162		
1,1,2-Trichloroethane	50.0	50.6		ug/L		101	52 - 150		
Trichloroethene	50.0	44.7		ug/L		89	71 - 157		
Vinyl chloride	50.0	47.7		ug/L		95	10 - 251		

LCS LCS %Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 102 71 - 120 1,2-Dichloroethane-d4 (Surr) 94 71 - 127 Toluene-d8 (Surr) 99 75 - 120

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 500-355603/1-A **Client Sample ID: Method Blank Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 355605

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	<1.3		5.0	1.3	mg/L		10/11/16 15:47	10/11/16 19:31	1

Lab Sample ID: LCS 500-355603/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Prep Batch: 355603**

Analysis Batch: 355605

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits HEM (Oil & Grease) 40.0 35.40 mg/L 78 - 114

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-355740/23 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 355740

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	0.124	J	0.20	0.076	mg/L			10/11/16 13:05	1	

Lab Sample ID: LCS 500-355740/32 **Client Sample ID: Lab Control Sample**

Matrix: Water

Analysis Batch: 355740

-		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 	3.00	2.77		mg/L		92	90 - 110	

TestAmerica Chicago

Prep Type: Total/NA

Prep Batch: 355603

QC Sample Results

RL

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Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-1

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Type: Total/NA

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

Lab Sample ID: MB 500-355571/1

Matrix: Water

Analysis Batch: 355571

MB MB

Analyte Total Suspended Solids

Result Qualifier <2.5

MDL Unit 2.5 mg/L

D Prepared

Analyzed 10/11/16 11:55

Client Sample ID: Lab Control Sample

Dil Fac

Lab Sample ID: LCS 500-355571/2

Matrix: Water

Analysis Batch: 355571

Analyte

Total Suspended Solids

Spike Added 200

LCS LCS Result Qualifier 190

Unit mg/L

D %Rec 95

%Rec. Limits 80 - 120

Lab Chronicle

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-1

Lab Sample ID: 500-118382-1

Matrix: Water

Client Sample ID: Influent
Date Collected: 10/10/16 08:00
Date Received: 10/11/16 10:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	624			355693	10/12/16 11:39	PMF	TAL CHI
Total/NA	Analysis	624	DL	50	355693	10/12/16 12:04	PMF	TAL CHI
Total/NA	Prep	1664B			355603	10/11/16 16:05	ADK	TAL CHI
Total/NA	Analysis	1664B		1	355605	10/11/16 19:41	ADK	TAL CHI
Total/NA	Analysis	300.0		20	355740	10/11/16 14:34	EAT	TAL CHI
Total/NA	Analysis	SM 2540D		1	355571		SMO	TAL CHI
					(Start) 1	0/11/16 12:20		
					(End) 1	0/11/16 12:22		

Client Sample ID: Effluent Lab Sample ID: 500-118382-2

Matrix: Water

Date Collected: 10/10/16 08:10 Date Received: 10/11/16 10:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	624			355693	10/12/16 12:29	PMF	TAL CHI
Total/NA	Prep	1664B			355603	10/11/16 16:11	ADK	TAL CH
Total/NA	Analysis	1664B		1	355605	10/11/16 19:45	ADK	TAL CH
Total/NA	Analysis	300.0		20	355740	10/11/16 14:46	EAT	TAL CH
Total/NA	Analysis	SM 2540D		1	355571		SMO	TAL CH
					(Start) 1	0/11/16 12:22		
					(End) 1	0/11/16 12:23		

Laboratory References:

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

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TestAmerica Chicago

Certification Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-1

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17

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TestA	mer	ica	Rep	ort To tact:	•	ptional		<u>ci/</u>	Bill To	ACCO1	(optional)	Paux	ble			Custody Record
	NVIRONMENTA , University Park, IL 200 Fax: 708.5	60484		ne:	An	ŻΨ	Stel	hn'	Company: _ Address: _ Address: _ Phone: Fax:	m	VĆ				Lab Job #: Chain of Custo Page	500-118382 ody Number:
		P	E-M	ail:					PO#/Refere	nce#	1069	85			Temperature °	
Client WCC		Client Project #			Preserva	tive					•					Preservative Key
Project Location/State MAGISON, Sampler, Aling Sat	Lett	Lab Project #	1	ÚCK.	Parame		70C	744	BOD/TS/ Chloride	Oil + Grosse						4° 4° 4° 1 to 4° 500-118382 COC
Cap ID Sample ID			Date	Time	# of Containers	Matrix	-	72	区の	Q						Comments
1 Influ	ant		IUIIAIP	800		رر	X	X	X	X						For VOC +
2 EFFLU	0V4		10/10/10			N)	Χ	χ	X	χ						PAH SEL
	Blank		10/10/10		1 1	U	Χ								`	attached
	• •						•								1	analyte
							-									1.15+
																transit As
Turnaround Time Required (Bus1 Day2 Days Requested Due Date	5 Days 7 Days	s 10 Days	15 Days	Other		eturn to	Client	VV	posal by Lab	Archiv		_ Months			•	tained longer than 1 month)
Relinquished By Relinquished By	Company	myc	Date Date		ime HO ime		Received By Received By	No	Mah Co	mpany	CHE	Date Date	HHO	Time Time	20	-Lab Gourier
Relinquished By	Company		Date	T	ime	F	Received By		Co	mpany		Date		Time		Shipped
WWater	Key SE – Sediment SO – Soil— L – Leachate	Client Comr	ments							La	ab Comments:	MO	at	ache		and Delivered SCN+
SL – Sludge MS – Miscellaneous	WI – Wipe DW – Drinking Wate O – Other	r									T	OK (N 1041	71W.	AS	

TAL-4124522/2016

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500-118382 Waybill

Login Sample Receipt Checklist

Client: Madison-Kipp Corporation Job Number: 500-118382-1

Login Number: 118382 List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Greator. Sanchez, Ariel W		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	3.8
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.	False	TB received broken.
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	

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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: 500-118382-2

Client Project/Site: MadisonKipp - GETS/SVE

For:

Madison-Kipp Corporation 201 Waubesa Street Madison, Wisconsin 53704

Attn: Alina Satkoski

Sanda Jreduik

Authorized for release by: 10/17/2016 3:30:46 PM

Sandie Fredrick, Project Manager II (920)261-1660

sandie.fredrick@testamericainc.com

----- LINKS -----

Review your project results through

Total Access

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.

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Case Narrative

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-2

Job ID: 500-118382-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-118382-2

Comments

No additional comments.

Receipt

The samples were received on 10/11/2016 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

Receipt Exceptions

One or more containers for the following sample(s) was received broken or leaking: Trip Blank client sent in was broke in transit, no volume remains

GC/MS Semi VOA

Method(s) 625 SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-377520 and analytical batch 490-377471.

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.

Organic Prep

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

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Detection Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE

Client Sample ID: Influent

TestAmerica Job ID: 500-118382-2

Lab Sample ID: 500-118382-1

No Detections.

Client Sample ID: Effluent Lab Sample ID: 500-118382-2

No Detections.

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Method Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-2

Method	Method Description	Protocol	Laboratory
625 SIM	Semivolatile Organic Compounds GC/MS (SIM)	40CFR136A	TAL NSH
SM 5210B	BOD, 5-Day	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 TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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Sample Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE

TestAmerica Job ID: 500-118382-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-118382-1	Influent	Water	10/10/16 08:00	10/11/16 10:20
500-118382-2	Effluent	Water	10/10/16 08:10	10/11/16 10:20

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Client Sample Results

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-2

Lab Sample ID: 500-118382-1

Matrix: Water

Client Sample ID: Influent Date Collected: 10/10/16 08:00 Date Received: 10/11/16 10:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 21:24	1
Benzo[a]pyrene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 21:24	1
Benzo[b]fluoranthene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 21:24	1
Benzo[g,h,i]perylene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:24	1
Benzo[k]fluoranthene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:24	1
Chrysene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:24	1
Dibenz(a,h)anthracene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 21:24	1
Fluoranthene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:24	1
Indeno[1,2,3-cd]pyrene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 21:24	1
Naphthalene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:24	1
Phenanthrene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:24	1
Pyrene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	44		27 - 120				10/12/16 12:10	10/12/16 21:24	1
Terphenyl-d14	59		13 - 120				10/12/16 12:10	10/12/16 21:24	1
2-Fluorobiphenyl (Surr)	56		10 - 120				10/12/16 12:10	10/12/16 21:24	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<2.0		2.0	2.0	mg/L			10/11/16 18:53	1

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Client Sample Results

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-2

Lab Sample ID: 500-118382-2

Matrix: Water

Client Sample ID: Effluent Date Collected: 10/10/16 08:10 Date Received: 10/11/16 10:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 21:43	1
Benzo[a]pyrene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 21:43	1
Benzo[b]fluoranthene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 21:43	1
Benzo[g,h,i]perylene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:43	1
Benzo[k]fluoranthene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:43	1
Chrysene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:43	1
Dibenz(a,h)anthracene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 21:43	1
Fluoranthene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:43	1
Indeno[1,2,3-cd]pyrene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 21:43	1
Naphthalene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:43	1
Phenanthrene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:43	1
Pyrene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 21:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	42		27 - 120				10/12/16 12:10	10/12/16 21:43	1
Terphenyl-d14	60		13 - 120				10/12/16 12:10	10/12/16 21:43	1
2-Fluorobiphenyl (Surr)	49		10 - 120				10/12/16 12:10	10/12/16 21:43	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<2.0		2.0	2.0	mg/L			10/11/16 18:57	1

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Definitions/Glossary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE

Toxicity Equivalent Quotient (Dioxin)

TestAmerica Job ID: 500-118382-2

Glossary

TEQ

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

10/17/2016

QC Association Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-2

GC/MS Semi VOA

Analysis Batch: 377471

L	ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
5	500-118382-1	Influent	Total/NA	Water	625 SIM	377520
5	500-118382-2	Effluent	Total/NA	Water	625 SIM	377520
N	ИВ 490-377520/1-A	Method Blank	Total/NA	Water	625 SIM	377520
L	CS 490-377520/2-A	Lab Control Sample	Total/NA	Water	625 SIM	377520

Prep Batch: 377520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-118382-1	Influent	Total/NA	Water	625	
500-118382-2	Effluent	Total/NA	Water	625	
MB 490-377520/1-A	Method Blank	Total/NA	Water	625	
LCS 490-377520/2-A	Lab Control Sample	Total/NA	Water	625	

General Chemistry

Analysis Batch: 355654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-118382-1	Influent	Total/NA	Water	SM 5210B	
500-118382-2	Effluent	Total/NA	Water	SM 5210B	
USB 500-355654/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 500-355654/2	Lab Control Sample	Total/NA	Water	SM 5210B	

L. L. ID. 500 440000 0

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Surrogate Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-2

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surrog	ate Recovery (Acceptance Limits)
		NBZ	TPH	FBP	
Lab Sample ID	Client Sample ID	(27-120)	(13-120)	(10-120)	
500-118382-1	Influent	44	59	56	
500-118382-2	Effluent	42	60	49	
LCS 490-377520/2-A	Lab Control Sample	55	67	64	
MB 490-377520/1-A	Method Blank	39	50	43	

Surrogate Legend

NBZ = Nitrobenzene-d5

TPH = Terphenyl-d14

FBP = 2-Fluorobiphenyl (Surr)

TestAmerica Job ID: 500-118382-2

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE

Method: 625 SIM - Semivolatile Organic Compounds GC/MS (SIM)

MD MD

Lab Sample ID: MB 490-377520/1-A

Matrix: Water

Analysis Batch: 377471

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

Prep Batch: 377520

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 20:46	1
Benzo[a]pyrene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 20:46	1
Benzo[b]fluoranthene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 20:46	1
Benzo[g,h,i]perylene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 20:46	1
Benzo[k]fluoranthene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 20:46	1
Chrysene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 20:46	1
Dibenz(a,h)anthracene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 20:46	1
Fluoranthene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 20:46	1
Indeno[1,2,3-cd]pyrene	<0.025		0.050	0.025	ug/L		10/12/16 12:10	10/12/16 20:46	1
Naphthalene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 20:46	1
Phenanthrene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 20:46	1
Pyrene	<0.050		0.10	0.050	ug/L		10/12/16 12:10	10/12/16 20:46	1
I and the second se									

MB MB

Surrogate	%Recovery (Qualifier Li	imits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	39	27	7 - 120	10/12/16 12:10	10/12/16 20:46	1
Terphenyl-d14	50	13	3 - 120	10/12/16 12:10	10/12/16 20:46	1
2-Fluorobiphenyl (Surr)	43	10	0 - 120	10/12/16 12:10	10/12/16 20:46	1
	Nitrobenzene-d5 Terphenyl-d14	Nitrobenzene-d5 39 Terphenyl-d14 50	Nitrobenzene-d5 39 21 Terphenyl-d14 50 13	Nitrobenzene-d5 39 27 - 120 Terphenyl-d14 50 13 - 120	Nitrobenzene-d5 39 27 - 120 10/12/16 12:10 Terphenyl-d14 50 13 - 120 10/12/16 12:10	Nitrobenzene-d5 39 27 - 120 10/12/16 12:10 10/12/16 20:46 Terphenyl-d14 50 13 - 120 10/12/16 12:10 10/12/16 20:46

Lab Sample ID: LCS 490-377520/2-A

Matrix: Water

Analysis Batch: 377471

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

Prep Batch: 377520

ı		Spike	LCS	LCS				%Rec.	
l	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
l	Benzo[a]anthracene	4.00	2.60		ug/L		65	33 - 143	
l	Benzo[a]pyrene	4.00	2.48		ug/L		62	17 - 163	
١	Benzo[b]fluoranthene	4.00	2.61		ug/L		65	24 - 159	
l	Benzo[g,h,i]perylene	4.00	2.71		ug/L		68	10 - 219	
l	Benzo[k]fluoranthene	4.00	2.80		ug/L		70	11 - 162	
l	Chrysene	4.00	2.72		ug/L		68	17 - 168	
l	Dibenz(a,h)anthracene	4.00	2.59		ug/L		65	10 - 227	
١	Fluoranthene	4.00	2.52		ug/L		63	26 - 137	
l	Indeno[1,2,3-cd]pyrene	4.00	2.55		ug/L		64	10 - 171	
١	Naphthalene	4.00	2.36		ug/L		59	21 - 133	
١	Phenanthrene	4.00	2.65		ug/L		66	54 - 120	
١	Pyrene	4.00	2.58		ug/L		65	52 - 115	

LCS LCS

Surrogate	%Recovery Qualific	er Limits
Nitrobenzene-d5	55	27 - 120
Terphenyl-d14	67	13 - 120
2-Fluorobiphenyl (Surr)	64	10 - 120

QC Sample Results

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE

Method: SM 5210B - BOD, 5-Day

Biochemical Oxygen Demand

TestAmerica Job ID: 500-118382-2

100

85 - 115

Lab Sample ID: USB 500-355654/1 Matrix: Water Analysis Batch: 355654									C	Client Sam	ple ID: Method Prep Type: To	
,	USB	USB										
Analyte	Result	Qualifier		RL	I	MDL	Unit		D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<2.0			2.0		2.0	mg/L				10/11/16 18:22	1
Lab Sample ID: LCS 500-355654/2								Cli	ent S	Sample ID	: Lab Control S	Sample
Matrix: Water											Prep Type: To	otal/NA
Analysis Batch: 355654												
•			Spike		LCS	LCS	3				%Rec.	
Analyto			Addad		Pocult	Ous	lifior	Unit		D %Poc	Limite	

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mg/L

Lab Chronicle

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-118382-2

Lab Sample ID: 500-118382-1

Matrix: Water

Client Sample ID: Influent Date Collected: 10/10/16 08:00 Date Received: 10/11/16 10:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	625			377520	10/12/16 12:10	SAT	TAL NSH
Total/NA	Analysis	625 SIM		1	377471	10/12/16 21:24	T1C	TAL NSH
Total/NA	Analysis	SM 5210B		1	355654		MAN	TAL CHI
					(Start) 1	0/11/16 18:53		
					(End) 1	0/11/16 18:57		
_					(End) 1	0/11/16 18:57		

Client Sample ID: Effluent Lab Sample ID: 500-118382-2

Matrix: Water

Date Collected: 10/10/16 08:10 Date Received: 10/11/16 10:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	625			377520	10/12/16 12:10	SAT	TAL NSH
Total/NA	Analysis	625 SIM		1	377471	10/12/16 21:43	T1C	TAL NSH
Total/NA	Analysis	SM 5210B		1	355654		MAN	TAL CHI
					(Start) 1	0/11/16 18:57		
					(End) 1	0/11/16 19:00		

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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Certification Summary

EPA Region

EPA Region

Certification ID

Certification ID

998020430

999580010

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE

Authority

Wisconsin

Authority

Wisconsin

Laboratory: TestAmerica Chicago The certifications listed below are applicable to this report.

Laboratory: TestAmerica Nashville The certifications listed below are applicable to this report.

Program

Program

State Program

State Program

TestAmerica Job ID: 500-118382-2

Expiration Date

Expiration Date

08-31-17

08-31-17

TestAmerica Chicago

<u>TestAmeri</u>	Ca	Report To	optio Ni Sa	•	<u>41</u>	Bill To	AV (0)	(optional)	ayoble	1	of Custody	
THE LEADER IN ENVIRONMENTA 2417 Bond Street, University Park, IL 6	L TESTING	Company:	And	y Ste	hn'	Company: _	m	VC.			Job#: 300-11	8382
Phone: 708.534.5200 Fax: 708.53		Address:				Address:				Chail	n of Custody Number:	
		Phone:				Phone:				Page	of	26
		Fax:				Fax:	,	10604	365	Temp	perature °C of Cooler:	38 50
Client MCC	Client Project #	E-Mail:	Preservative			PO#/Refere	nce#	001				Preservative Key
GETS/SVE			Parameter			~ 0	~)					17 4° (0)/// 4° 4°
magisonius	Lab Project #	-1000			,	B E	DSSC			ļ !	500-11838	1 to 4°
	samile Frac	rence	ρ	8	#	20	+ 5				v	
Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	Date	Sampling Time	# of Containers Matrix	>	基	200	S C				Com	ments
1 Influent	1011	Y16 800	90	X	X	X	X				for V	DC +
2 Effluent	10/10/	116 310	9 W	X	Χ	X	Χ				PAH S	sei .
trip Blank	10/10/	10 -	1 W	X							attact	Rd
											larah	pte
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											broke	110
											transi	+ AR
											7100	<i>y</i> , 0
Turnaround Time Required (Business Days) 1 Day 2 Days 5 Days 7 Days Requested Due Date	10 Days 15 Days	Other	Sample Dispo	osal n to Client	Disp	osal by Lab	Archiv	ve for N	∕lonths (A fee m	ay be assessed if sampl	es are retained longer than 1 m	onth)
Relinquished By Company	Date	aluo I	me	Received By	- Da	LAAM	ompany	PUE D	Date 10 14 14	Time 7.0	Lab Courier	
Relinquished By Company	Date		me	Received By			ompany			Time	Shipped 7	×
Relinquished By Company	Date	Ti	me	Received By		Co	ompany	D	ate	Time	Hand Delivered	
Matrix Key	Client Comments			·			Le	ab Comments:	no a	Hached	list sen	<u> </u>
S - Soil L - Leachate SL - Sludge WI - Wipe MS - Miscellaneous DW - Drinking Water OL - Oil O - Other A - Air O - Other								to	ir ano	yytes.	AS	

TA1-07159/20016

Page 17 of 21

500-118382 Waybill

TestAmerica Chicago 2417 Bond Street University Park, IL 60484

Chain of Custody Record

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Ŏ 10/17/2016

Phone (708) 534-5200 Fax (708) 534-5211													THE LEADER IN	THE LEADER IN ENVIRONMENTAL TESTING
Client Information (Sub Contract Lab)	Sampler:			Lab PM: Fredric	Lab PM: Fredrick, Sandie J	٢			Carrier Tracking No(s):	cking No(s	π	SI C	COC No: 500-79088.1	
	Phone:			E-Mail: sandi	E-Mail: sandie.fredrick@testamerica	testameri	cainc.com		State of Origin: Wisconsin	igin:		77 0	_{Page:} Page 1 of 1	
Company: TestAmerica Laboratories, Inc				10 1	Accreditations Required (See State Program - Wiscon	Required (S	ee note): :onsin					ທ <u>⊱</u>	Job# 500-118382-2	
Address: 2960 Foster Creighton Drive,	Due Date Requested: 10/14/2016	*					Analysis	sis Req	Requested				Preservation Codes:	des:
City: Nashville	TAT Requested (days):	/s):						-					B - NaOH C - Zn Acetate	M - Hexane N - None O - AsNaO2
State, Zip: TN, 37204					pound								D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO#:				į							: [g]	G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahydrate
Email:	WO#				Vo)							4	l - Ice J - DI Water	U - Acetone V - MCAA
Project Name: MadisonKipp - GETS/SVE	Project #: 50009145				es or						-		K-EDTA L-EDA	W - pH 4-5 Z - other (specify)
Site:	SSOW#:				SD (Y								Other:	
			Sample	Matrix (w=water,	n MS/N							lumber		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample ((C=comp, G=grab) вт	\sim	Field F Perfori 625_SIN							Total N	Special I	Special Instructions/Note:
I h TOO MADOO A		_/	Preservation Code:	n Code:	X		7					<u> </u>		
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Note: Since laboratory accordinations are subject to change. TestAmedica Laboratory	ine Inc places the page	pership of method	200 A	Tradition Community			lebont.							
currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.	matrix being analyzed, o date, return the signe	the samples mused Chain of Cust	at be shipped body attesting to	ack to the Test said complicar	America labo ice to TestAn	ratory or othe nerica Labora	er instruction stories, Inc.	ıs will be pr	ovided. Any	changes t	o accredita	tion status	ıs should be brougi	ht to TestAmerica
Possible Hazard Identification Unconfirmed					Sample	Sample Disposal (A fee	(A fee n	may be as	be assessed if samples are retained longer	if sample	s are re ∏	tained Ion	longer than 1	month)
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	ble Rank: 2		•	Special	Special Instructions/	ıs/QC Re	ΩC Requirements:	<u> </u>	ŀ				
Empty Kit Relinquished by:		Date:			Time:				Meth	Method of Shipment:	nent:			
Relinquished by August 1997	Date/Time:	•	1245	Company 7		Received by:	7,			Dat	Date/Time:	0	oqupo	Company
reinquined by	Date/ firme:		2	Company	Rece	lived by:				Dat	Date/Time:			Company
Relinquished by:	Date/Time:		S	Company	Rece	Received by:				Dat	Date/Time;			Company
Custody Seal No.:					Cool	Cooler Temperature(s)	ıre(s) °C an	°C and Other Remarks:	marks:	as				



500-118382

COOLER RECEIPT FORM

Cooler Received/Opened On 10/12/2016 @ 0940	
Time Samples Removed From Cooler ///ð Time Samples Placed In Storage //23	(2 Hour Windov
1. Tracking #(last 4 digits, FedEx) Courier: _FedEx_	
IR Gun ID 97310166 pH Strip Lot w/A Chlorine Strip Lot 040515C	<u>. </u>
2. Temperature of rep. sample or temp blank when opened:Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO
4. Were custody seals on outside of cooler?	ESNONA
If yes, how many and where: (2) From Buke	
5. Were the seals intact, signed, and dated correctly?	YESNONA
6. Were custody papers inside cooler?	YES)NONA
I certify that I opened the cooler and answered questions 1-6 (intial)	MSM
7. Were custody seals on containers: YES and Intact	YESNO.
Were these signed and dated correctly?	YESNO.:(NA)
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper	Other None
9. Cooling process: Ice-pack Ice (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	ÆŠ)NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	ESNONA
12. Did all container labels and tags agree with custody papers?	ES)NONA
13a. Were VOA vials received?	YES
b. Was there any observable headspace present in any VOA vial?	YESNO, NA
14. Was there a Trip Blank in this cooler? YESNO(A) If multiple coolers, sequence	ce #
I certify that I unloaded the cooler and answered questions 7-14 (intial)	Mon
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO.
b. Did the bottle labels indicate that the correct preservatives were used	YESNONA
16. Was residual chlorine present?	YES(O)NA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	Mon
17. Were custody papers properly filled out (ink, signed, etc)?	YESNONA
18. Did you sign the custody papers in the appropriate place?	ÆSNONA
19. Were correct containers used for the analysis requested?	XES)NONA
20. Was sufficient amount of sample sent in each container?	ES)NONA
I certify that I entered this project into LIMS and answered questions 17-20 (intial)	mon
I certify that I attached a label with the unique LIMS number to each container (intial)	mynj
21. Were there Non-Conformance issues at login? YES. NO Was a NCM generated? YES(1 0.#

Login Sample Receipt Checklist

Client: Madison-Kipp Corporation Job Number: 500-118382-2

Login Number: 118382 List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Creator. Sanchez, Ariel W		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	3.8
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.	False	TB received broken.
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	

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Client: Madison-Kipp Corporation Job Number: 500-118382-2

List Source: TestAmerica Nashville

List Creation: 10/12/16 11:22 AM

Login Number: 118382 List Number: 2

Creator: McBride, Mike

Creator: McBride, Mike		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	
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.	N/A	
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.	True	