

May 11, 2017

Emily James
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 Ms. James,

The Groundwater Extraction and Treatment System (GETS) ran for the month of April with the exception of maintenance activities. This letter summarizes the activities completed in April 2017 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 April 6, 2017 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.

If you have any questions or need additional information, please contact me at asatkoski@madison-kipp.com or (608) 242-5200.

Alina Satkoski

AlinaSatherki

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

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 # a	and Description	Flow (gal/day)	Oil & Greas (mg/L)	e BOD ₅ (mg/L)	Total BET: (μg/L)	X PAHs group of 10 (μg/L)	Benzo(a) pyrene (μg/L)	Naphthalene (μg/L)	Potassium Permanganate (mg/L)	Benzene (µg/L)	TSS (mg/L)
Effluent	Month:	64,800	3.4	<2.0	0.18	< 0.050	< 0.025	< 0.050	Absent	< 0.15	3.0
	April 6, 2017										
	Month:										
	Month:										
	Month:										
See Footn	otes	(4)(8)	(6) (5)		(6)(1)	(2)			(3)		(6)
Effluent L sec. 4 of th	imits (refer to ne permit)		10 mg/l	20 mg/I	Z 750 μg/L	0.1 μg/l	0.1 μg/l	70 μg/l		50 μg/l	40 mg/L
Sample Fr Pre-treatm		Daily	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
Sample Fr Post-treatr		Daily	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
Sample Ty	/pe	Estimate	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Impaired of surface wa		Does th	nis facility disch	narge a pollutant	of concern to an in	npaired surface water or to	a surface water w	th a TMDL allocat	on? □ No • Y	es	
Outfall # a	and Description	VOCs (μg/L)	Vinyl Chloride (µg/L)	trans-1,2-Dich loroethene (µg/L)	1,1-Dichloroe thene (µg/L)	Tetrachloroethene (μg/L)	Chloride (mg/L)	cis-1,2-Dichl oroethene (µg/L)	Trichloroethene (μg/L)		
Effluent	Month: April 6, 2017	51.68	<0.20	<0.35	<0.39	26	130	18	7.5		
	Month:										
	Month:										
Can Englis	Month:	(4)		(4)				(4)			
See Footn		(4)	10 /7	(4)	50 /	50 /F	205 /	(4)	50 /F		
sec. 4 of the	imits (refer to ne permit)		10 ug/L		50 μg/L	50 μg/L	395 mg/L		50 μg/L		
Sample Fr Pre-treatm		Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly		
Sample Fr Post-treatr		Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly		
Sample Ty	/pe	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab		

Year:

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) 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.

DIRECTIONS:

- 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.

alina Sattest:	5-11-2017
Signature of Person Completing Form	Date
alina Sattesk:	5-11-2017
Signature of Principal Evec 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: 500-126216-1

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: 4/11/2017 4:59:03 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: 500-126216-1

Job ID: 500-126216-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-126216-1

Comments

No additional comments.

Receipt

The samples were received on 4/7/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described 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: 500-126216-1

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Client Sample ID: Influent Lab Sam

Lab Sample ID: 500-126216-1

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.5	2.5	0.82	ug/L	5	_	624	Total/NA
Tetrachloroethene - DL	1600	50	19	ug/L	50		624	Total/NA
Chloride	130	4.0	3.4	mg/L	20		300.0	Total/NA
Total Suspended Solids	20	5.0	1.9	mg/L	1		SM 2540D	Total/NA

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Client Sample ID: Effluent Lab Sample ID: 500-126216-2

Analyte	Result Qualifie	er RL	MDL	Unit	Dil Fac [Method	Prep Type
cis-1,2-Dichloroethene	18	1.0	0.41	ug/L		624	Total/NA
Tetrachloroethene	26	1.0	0.37	ug/L	1	624	Total/NA
Toluene	0.18 J	0.50	0.15	ug/L	1	624	Total/NA
Trichloroethene	7.5	0.50	0.16	ug/L	1	624	Total/NA
HEM (Oil & Grease)	3.4 JB	5.3	1.4	mg/L	1	1664B	Total/NA
Chloride	130	4.0	3.4	mg/L	20	300.0	Total/NA
Total Suspended Solids	3.0 J	5.0	1.9	mg/L	1	SM 2540D	Total/NA

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Client Sample ID: Trip Blank

Lab Sample ID: 500-126216-3

No Detections.

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Method Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-1

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: 500-126216-1

Lab Sample ID	Client Sample ID	Matrix	Collected Received
500-126216-1	Influent	Water	04/06/17 07:10 04/07/17 09:30
500-126216-2	Effluent	Water	04/06/17 07:30 04/07/17 09:30
500-126216-3	Trip Blank	Water	04/06/17 00:00 04/07/17 09:30

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Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-1

Lab Sample ID: 500-126216-1

Matrix: Water

Client Sample ID: Influent Date Collected: 04/06/17 07:10 Date Received: 04/07/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.73		2.5	0.73	ug/L			04/11/17 02:05	5
Bromoform	<2.2		5.0	2.2	ug/L			04/11/17 02:05	5
Carbon tetrachloride	<1.9		5.0	1.9	ug/L			04/11/17 02:05	5
Chloroform	<1.9		10	1.9	ug/L			04/11/17 02:05	5
cis-1,2-Dichloroethene	<2.0		5.0	2.0	ug/L			04/11/17 02:05	5
Dichlorobromomethane	<1.9		5.0	1.9	ug/L			04/11/17 02:05	5
1,2-Dichloroethane	<2.0		5.0	2.0	ug/L			04/11/17 02:05	5
1,1-Dichloroethene	<2.0		5.0	2.0	ug/L			04/11/17 02:05	5
Ethylbenzene	< 0.92		2.5	0.92	ug/L			04/11/17 02:05	5
Methyl bromide	<3.2		10	3.2	ug/L			04/11/17 02:05	5
Methyl chloride	<1.6		5.0	1.6	ug/L			04/11/17 02:05	5
Methyl tert-butyl ether	<2.0		5.0	2.0	ug/L			04/11/17 02:05	5
1,1,2,2-Tetrachloroethane	<2.0		5.0	2.0	ug/L			04/11/17 02:05	5
Toluene	<0.76		2.5	0.76	ug/L			04/11/17 02:05	5
trans-1,2-Dichloroethene	<1.7		5.0	1.7	ug/L			04/11/17 02:05	5
1,1,1-Trichloroethane	<1.9		5.0	1.9	ug/L			04/11/17 02:05	5
1,1,2-Trichloroethane	<1.8		5.0	1.8	ug/L			04/11/17 02:05	5
Trichloroethene	2.5		2.5	0.82	ug/L			04/11/17 02:05	5
Vinyl chloride	<1.0		2.5	1.0	ug/L			04/11/17 02:05	5
Xylenes, Total	<2.0		5.0	2.0	ug/L			04/11/17 02:05	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		71 - 120			-		04/11/17 02:05	5
1,2-Dichloroethane-d4 (Surr)	100		71 - 127					04/11/17 02:05	5
Toluene-d8 (Surr)	96		75 - 120					04/11/17 02:05	5
Dibromofluoromethane	95		70 - 120					04/11/17 02:05	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1600		50	19	ug/L			04/11/17 02:30	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		71 - 120					04/11/17 02:30	50
1,2-Dichloroethane-d4 (Surr)	100		71 - 127					04/11/17 02:30	50
Toluene-d8 (Surr)	95		75 - 120					04/11/17 02:30	50
Dibromofluoromethane	95		70 - 120					04/11/17 02:30	50

General Chemistry								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	<1.5	5.8	1.5	mg/L		04/07/17 16:18	04/07/17 19:24	1
Chloride	130	4.0	3.4	mg/L			04/10/17 14:42	20
Total Suspended Solids	20	5.0	1.9	mg/L			04/07/17 14:14	1

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-1

Lab Sample ID: 500-126216-2

Matrix: Water

Client Sample ID: Effluent Date Collected: 04/06/17 07:30 Date Received: 04/07/17 09:30

Analyte

Chloride

HEM (Oil & Grease)

Total Suspended Solids

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			04/11/17 01:39	1
Bromoform	<0.45		1.0	0.45	ug/L			04/11/17 01:39	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/11/17 01:39	1
Chloroform	<0.37		2.0	0.37	ug/L			04/11/17 01:39	1
cis-1,2-Dichloroethene	18		1.0	0.41	ug/L			04/11/17 01:39	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			04/11/17 01:39	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/11/17 01:39	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			04/11/17 01:39	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/11/17 01:39	1
Methyl bromide	<0.65		2.0	0.65	ug/L			04/11/17 01:39	1
Methyl chloride	< 0.32		1.0	0.32	ug/L			04/11/17 01:39	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/11/17 01:39	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/11/17 01:39	1
Tetrachloroethene	26		1.0	0.37	ug/L			04/11/17 01:39	1
Toluene	0.18	J	0.50	0.15	ug/L			04/11/17 01:39	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/11/17 01:39	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/11/17 01:39	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			04/11/17 01:39	1
Trichloroethene	7.5		0.50	0.16	ug/L			04/11/17 01:39	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			04/11/17 01:39	1
Xylenes, Total	<0.40		1.0	0.40	ug/L			04/11/17 01:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		71 - 120			-		04/11/17 01:39	1
1,2-Dichloroethane-d4 (Surr)	100		71 - 127					04/11/17 01:39	1
Toluene-d8 (Surr)	96		75 - 120					04/11/17 01:39	1
Dibromofluoromethane	95		70 - 120					04/11/17 01:39	1

RL

5.3

4.0

5.0

MDL Unit

1.4 mg/L

3.4 mg/L

1.9 mg/L

Prepared

04/08/17 10:57 04/08/17 13:55

Analyzed

04/10/17 14:54

04/07/17 14:15

Dil Fac

20

Result Qualifier

3.4 JB

130

3.0 J

TestAmerica Chicago

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-1

Lab Sample ID: 500-126216-3

Matrix: Water

Client Sample ID: Trip Blank Date Collected: 04/06/17 00:00

Date Received: 04/07/17 09:30

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15	0.50	0.15	ug/L			04/11/17 01:14	1
Bromoform	<0.45	1.0	0.45	ug/L			04/11/17 01:14	1
Carbon tetrachloride	<0.38	1.0	0.38	ug/L			04/11/17 01:14	1
Chloroform	<0.37	2.0	0.37	ug/L			04/11/17 01:14	1
cis-1,2-Dichloroethene	<0.41	1.0	0.41	ug/L			04/11/17 01:14	1
Dichlorobromomethane	<0.37	1.0	0.37	ug/L			04/11/17 01:14	1
1,2-Dichloroethane	<0.39	1.0	0.39	ug/L			04/11/17 01:14	1
1,1-Dichloroethene	<0.39	1.0	0.39	ug/L			04/11/17 01:14	1
Ethylbenzene	<0.18	0.50	0.18	ug/L			04/11/17 01:14	1
Methyl bromide	<0.65	2.0	0.65	ug/L			04/11/17 01:14	1
Methyl chloride	<0.32	1.0	0.32	ug/L			04/11/17 01:14	1
Methyl tert-butyl ether	<0.39	1.0	0.39	ug/L			04/11/17 01:14	1
1,1,2,2-Tetrachloroethane	<0.40	1.0	0.40	ug/L			04/11/17 01:14	1
Tetrachloroethene	<0.37	1.0	0.37	ug/L			04/11/17 01:14	1
Toluene	<0.15	0.50	0.15	ug/L			04/11/17 01:14	1
trans-1,2-Dichloroethene	<0.35	1.0	0.35	ug/L			04/11/17 01:14	1
1,1,1-Trichloroethane	<0.38	1.0	0.38	ug/L			04/11/17 01:14	1
1,1,2-Trichloroethane	<0.35	1.0	0.35	ug/L			04/11/17 01:14	1
Trichloroethene	<0.16	0.50	0.16	ug/L			04/11/17 01:14	1
Vinyl chloride	<0.20	0.50	0.20	ug/L			04/11/17 01:14	1
Xylenes, Total	<0.40	1.0	0.40	ug/L			04/11/17 01:14	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95	71 - 120					04/11/17 01:14	1
1,2-Dichloroethane-d4 (Surr)	98	71 - 127					04/11/17 01:14	1
Toluene-d8 (Surr)	97	75 - 120					04/11/17 01:14	1
Dibromofluoromethane	94	70 - 120					04/11/17 01:14	1

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Definitions/Glossary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-1

Qualifiers

GC/MS VOA

Practical Quantitation Limit

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Quality Control

Relative error ratio

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

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.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Glossary

PQL

QC

RER

RPD TEF

TEQ

RL

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)

TestAmerica Chicago

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QC Association Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-1

GC/MS VOA

Analysis Batch: 379577

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Influent	Total/NA	Water	624	
Influent	Total/NA	Water	624	
Effluent	Total/NA	Water	624	
Trip Blank	Total/NA	Water	624	
Method Blank	Total/NA	Water	624	
Lab Control Sample	Total/NA	Water	624	
Effluent	Total/NA	Water	624	
Effluent	Total/NA	Water	624	
-	Influent Influent Effluent Trip Blank Method Blank Lab Control Sample Effluent	Influent Total/NA Influent Total/NA Effluent Total/NA Trip Blank Total/NA Method Blank Total/NA Lab Control Sample Total/NA Effluent Total/NA	Influent Total/NA Water Influent Total/NA Water Effluent Total/NA Water Trip Blank Total/NA Water Method Blank Total/NA Water Lab Control Sample Total/NA Water Effluent Total/NA Water	Influent Total/NA Water 624 Influent Total/NA Water 624 Effluent Total/NA Water 624 Trip Blank Total/NA Water 624 Method Blank Total/NA Water 624 Lab Control Sample Total/NA Water 624 Effluent Total/NA Water 624

General Chemistry

Prep Batch: 379359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126216-1	Influent	Total/NA	Water	1664B	
MB 500-379359/1-A	Method Blank	Total/NA	Water	1664B	
LCS 500-379359/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 379360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126216-1	Influent	Total/NA	Water	1664B	379359
MB 500-379359/1-A	Method Blank	Total/NA	Water	1664B	379359
LCS 500-379359/2-A	Lab Control Sample	Total/NA	Water	1664B	379359

Analysis Batch: 379376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126216-1	Influent	Total/NA	Water	SM 2540D	
500-126216-2	Effluent	Total/NA	Water	SM 2540D	
MB 500-379376/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 500-379376/2	Lab Control Sample	Total/NA	Water	SM 2540D	
500-126216-2 MS	Effluent	Total/NA	Water	SM 2540D	
500-126216-2 DU	Effluent	Total/NA	Water	SM 2540D	

Prep Batch: 379459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126216-2	Effluent	Total/NA	Water	1664B	<u> </u>
MB 500-379459/1-A	Method Blank	Total/NA	Water	1664B	
LCS 500-379459/2-A	Lab Control Sample	Total/NA	Water	1664B	
500-126216-2 MS	Effluent	Total/NA	Water	1664B	

Analysis Batch: 379462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126216-2	Effluent	Total/NA	Water	1664B	379459
MB 500-379459/1-A	Method Blank	Total/NA	Water	1664B	379459
LCS 500-379459/2-A	Lab Control Sample	Total/NA	Water	1664B	379459
500-126216-2 MS	Effluent	Total/NA	Water	1664B	379459

Analysis Batch: 379822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126216-1	Influent	Total/NA	Water	300.0	<u> </u>
500-126216-2	Effluent	Total/NA	Water	300.0	

TestAmerica Chicago

4/11/2017

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QC Association Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-1

General Chemistry (Continued)

Analysis Batch: 379822 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-379822/23	Method Blank	Total/NA	Water	300.0	
LCS 500-379822/29	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: 500-126216-1

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

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surre	ogate Reco
		BFB	12DCE	TOL	DBFM
Lab Sample ID	Client Sample ID	(71-120)	(71-127)	(75-120)	(70-120)
500-126216-1	Influent	93	100	96	95
500-126216-1 - DL	Influent	94	100	95	95
500-126216-2	Effluent	95	100	96	95
500-126216-2 MS	Effluent	90	98	95	98
500-126216-2 MSD	Effluent	88	100	98	98
500-126216-3	Trip Blank	95	98	97	94
LCS 500-379577/28	Lab Control Sample	90	97	96	98
MB 500-379577/30	Method Blank	94	100	94	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane

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TestAmerica Job ID: 500-126216-1

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

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

Lab Sample ID: MB 500-379577/30

Matrix: Water

Analysis Batch: 379577

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

	МВ	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			04/11/17 00:49	1
Bromoform	<0.45		1.0	0.45	ug/L			04/11/17 00:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			04/11/17 00:49	1
Chloroform	<0.37		2.0	0.37	ug/L			04/11/17 00:49	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			04/11/17 00:49	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			04/11/17 00:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			04/11/17 00:49	1
1,1-Dichloroethene	< 0.39		1.0	0.39	ug/L			04/11/17 00:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			04/11/17 00:49	1
Methyl bromide	<0.65		2.0	0.65	ug/L			04/11/17 00:49	1
Methyl chloride	<0.32		1.0	0.32	ug/L			04/11/17 00:49	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			04/11/17 00:49	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			04/11/17 00:49	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/11/17 00:49	1
Toluene	<0.15		0.50	0.15	ug/L			04/11/17 00:49	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			04/11/17 00:49	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			04/11/17 00:49	1
1,1,2-Trichloroethane	< 0.35		1.0	0.35	ug/L			04/11/17 00:49	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/11/17 00:49	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			04/11/17 00:49	1
Xylenes, Total	<0.40		1.0	0.40	ug/L			04/11/17 00:49	1

MB MB

Surrogate	%Recovery Q	Qualifier Lin	nits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94	71 .	120		04/11/17 00:49	1
1,2-Dichloroethane-d4 (Surr)	100	71 -	. 127		04/11/17 00:49	1
Toluene-d8 (Surr)	94	75 -	- 120		04/11/17 00:49	1
Dibromofluoromethane	96	70.	. 120		04/11/17 00:49	1

Lab Sample ID: LCS 500-379577/28

Matrix: Water

Analysis Batch: 379577

Spike	LCS	LCS				%Rec.	
Added	Result	Qualifier	Unit	D	%Rec	Limits	
50.0	42.7		ug/L		85	37 - 151	
50.0	39.6		ug/L		79	45 - 169	
50.0	37.4		ug/L		75	70 - 140	
50.0	40.4		ug/L		81	51 - 138	
50.0	41.6		ug/L		83	70 - 130	
50.0	37.3		ug/L		75	35 - 155	
50.0	46.9		ug/L		94	49 - 155	
50.0	40.1		ug/L		80	10 - 234	
50.0	42.6		ug/L		85	37 - 162	
50.0	32.9		ug/L		66	10 - 242	
50.0	64.1		ug/L		128	10 - 273	
50.0	40.7		ug/L		81		
50.0	42.0		ug/L		84		
50.0	40.1		ug/L		80	46 - 157	
50.0	43.0		ug/L		86	64 - 148	
	Added 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.	Added Result 50.0 42.7 50.0 39.6 50.0 37.4 50.0 40.4 50.0 41.6 50.0 37.3 50.0 46.9 50.0 42.6 50.0 32.9 50.0 64.1 50.0 40.7 50.0 42.0 50.0 40.1	Added Result 42.7 50.0 39.6 50.0 37.4 50.0 40.4 50.0 41.6 50.0 37.3 50.0 46.9 50.0 40.1 50.0 42.6 50.0 32.9 50.0 64.1 50.0 40.7 50.0 42.0 50.0 40.1	Added Result Qualifier Unit 50.0 42.7 ug/L 50.0 39.6 ug/L 50.0 37.4 ug/L 50.0 40.4 ug/L 50.0 41.6 ug/L 50.0 37.3 ug/L 50.0 46.9 ug/L 50.0 40.1 ug/L 50.0 42.6 ug/L 50.0 64.1 ug/L 50.0 40.7 ug/L 50.0 42.0 ug/L 50.0 40.1 ug/L	Added Result Qualifier Unit D 50.0 42.7 ug/L ug/L 50.0 39.6 ug/L ug/L 50.0 37.4 ug/L ug/L 50.0 40.4 ug/L ug/L 50.0 41.6 ug/L ug/L 50.0 46.9 ug/L ug/L 50.0 40.1 ug/L ug/L 50.0 32.9 ug/L ug/L 50.0 40.7 ug/L ug/L 50.0 42.0 ug/L ug/L 50.0 42.0 ug/L ug/L 50.0 40.1 ug/L ug/L	Added Result Qualifier Unit D %Rec 50.0 42.7 ug/L 85 50.0 39.6 ug/L 79 50.0 37.4 ug/L 81 50.0 40.4 ug/L 83 50.0 41.6 ug/L 83 50.0 37.3 ug/L 75 50.0 46.9 ug/L 94 50.0 40.1 ug/L 80 50.0 42.6 ug/L 85 50.0 32.9 ug/L 66 50.0 64.1 ug/L 81 50.0 40.7 ug/L 81 50.0 42.0 ug/L 84 50.0 40.1 ug/L 84 50.0 40.1 ug/L 80	Added Result Qualifier Unit D %Rec Limits 50.0 42.7 ug/L 85 37 - 151 50.0 39.6 ug/L 79 45 - 169 50.0 37.4 ug/L 81 51 - 138 50.0 40.4 ug/L 83 70 - 130 50.0 41.6 ug/L 83 70 - 130 50.0 37.3 ug/L 75 35 - 155 50.0 46.9 ug/L 94 49 - 155 50.0 40.1 ug/L 80 10 - 234 50.0 42.6 ug/L 85 37 - 162 50.0 32.9 ug/L 66 10 - 242 50.0 64.1 ug/L 81 50.0 40.7 ug/L 81 50.0 42.0 ug/L 84 50.0 40.1 ug/L 84 50.0 40.1 ug/L 84 50.0

TestAmerica Chicago

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

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

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

Lab Sample ID: LCS 500-379577/28

Matrix: Water

Analysis Batch: 379577

Client Sample I	D: Lab Control Sample
	Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Toluene	50.0	44.1	-	ug/L		88	47 - 150	
trans-1,2-Dichloroethene	50.0	40.3		ug/L		81	54 ₋ 156	
1,1,1-Trichloroethane	50.0	37.1		ug/L		74	52 - 162	
1,1,2-Trichloroethane	50.0	44.7		ug/L		89	52 - 150	
Trichloroethene	50.0	45.7		ug/L		91	71 - 157	
Vinyl chloride	50.0	60.9		ug/L		122	10 - 251	

LCS LCS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 90 71 - 120 1,2-Dichloroethane-d4 (Surr) 97 71 - 127 Toluene-d8 (Surr) 75 - 120 96 Dibromofluoromethane 98 70 - 120

Lab Sample ID: 500-126216-2 MS

Matrix: Water

Client Sample ID: Effluent Prep Type: Total/NA

Analysis Batch: 379577

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.15		50.0	44.4		ug/L		89	37 - 151	
Bromoform	<0.45		50.0	42.9		ug/L		86	45 - 169	
Carbon tetrachloride	<0.38		50.0	39.4		ug/L		79	70 - 140	
Chloroform	<0.37		50.0	41.8		ug/L		84	51 - 138	
cis-1,2-Dichloroethene	18		50.0	59.8		ug/L		84	70 - 130	
Dichlorobromomethane	<0.37		50.0	38.7		ug/L		77	35 - 155	
1,2-Dichloroethane	<0.39		50.0	47.8		ug/L		96	49 - 155	
1,1-Dichloroethene	<0.39		50.0	42.5		ug/L		85	10 - 234	
Ethylbenzene	<0.18		50.0	44.5		ug/L		89	37 - 162	
Methyl bromide	<0.65		50.0	37.5		ug/L		75	10 - 242	
Methyl chloride	<0.32		50.0	69.2		ug/L		138	10 - 273	
m&p-Xylene	<0.40		50.0	41.9		ug/L		84		
o-Xylene	<0.22		50.0	43.4		ug/L		87		
1,1,2,2-Tetrachloroethane	<0.40		50.0	42.2		ug/L		84	46 - 157	
Tetrachloroethene	26		50.0	68.2		ug/L		84	64 - 148	
Toluene	0.18	J	50.0	44.8		ug/L		89	47 - 150	
trans-1,2-Dichloroethene	<0.35		50.0	43.0		ug/L		86	54 ₋ 156	
1,1,1-Trichloroethane	<0.38		50.0	39.8		ug/L		80	52 - 162	
1,1,2-Trichloroethane	<0.35		50.0	45.9		ug/L		92	52 - 150	
Trichloroethene	7.5		50.0	54.3		ug/L		93	71 - 157	
Vinyl chloride	<0.20		50.0	68.9		ug/L		138	10 - 251	

	MS	MS		
Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	90		71 - 120	
1,2-Dichloroethane-d4 (Surr)	98		71 - 127	
Toluene-d8 (Surr)	95		75 - 120	
Dibromofluoromethane	98		70 - 120	

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TestAmerica Job ID: 500-126216-1

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

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

Lab Sample ID: 500-126216-2 MSD

Matrix: Water

Analysis Batch: 379577

Client Sample ID: Effluent Prep Type: Total/NA

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit <0.15 50.0 42.3 ug/L 5 20 Benzene 85 37 - 151 50.0 40.7 45 - 169 20 Bromoform < 0.45 ug/L 81 5 74 Carbon tetrachloride < 0.38 50.0 37.0 ug/L 70 - 140 6 20 < 0.37 50.0 80 51 - 138 20 Chloroform 40.2 ug/L cis-1,2-Dichloroethene 18 50.0 59.2 ug/L 83 70 - 130 20 Dichlorobromomethane <0.37 50.0 37.7 ug/L 75 35 - 155 20 50.0 46.4 93 49 - 155 3 20 1,2-Dichloroethane < 0.39 ug/L 1,1-Dichloroethene 50.0 40.2 80 10 - 234 20 < 0.39 ug/L Ethylbenzene 50.0 43.3 87 37 - 162 20 < 0.18 ug/L 3 Methyl bromide < 0.65 50.0 33.6 ug/L 67 10 - 242 11 20 Methyl chloride 50.0 66.5 133 4 20 < 0.32 ug/L 10 - 273m&p-Xylene < 0.40 50.0 40.8 ug/L 82 3 o-Xylene < 0.22 50.0 42.0 ug/L 84 3 50.0 81 1,1,2,2-Tetrachloroethane < 0.40 40.7 ug/L 46 - 157 20 Tetrachloroethene 26 50.0 68.9 ug/L 85 64 - 148 20 47 - 150 20 Toluene 50.0 44.5 ug/L 89 0.18 50.0 40.7 54 - 156 20 trans-1,2-Dichloroethene < 0.35 ug/L 81 37.4 75 20 1,1,1-Trichloroethane < 0.38 50.0 ug/L 52 - 162 6 1,1,2-Trichloroethane < 0.35 50.0 43.9 ug/L 88 52 - 150 20 Trichloroethene 7.5 50.0 51.8 ug/L 89 71 - 157 5 20

50.0

65.1

MSD MSD

<0.20

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		71 - 120
1,2-Dichloroethane-d4 (Surr)	100		71 - 127
Toluene-d8 (Surr)	98		75 - 120
Dibromofluoromethane	98		70 - 120

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 500-379359/1-A

Matrix: Water

Vinyl chloride

Analysis Batch: 379360

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

10 - 251

130

Prep Batch: 379359

20

MB MB **Analyte** Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac HEM (Oil & Grease) 5.0 04/07/17 14:20 04/07/17 17:25 1.90 J 1.3 mg/L

40.0

Lab Sample ID: LCS 500-379359/2-A

Matrix: Water

Analyte

Analysis Batch: 379360

Client Sample ID: Lab Control Sample Prep Type: Total/NA **Prep Batch: 379359** LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec Limits

HEM (Oil & Grease)

36.00 mg/L 90 78 - 114

ug/L

TestAmerica Chicago

TestAmerica Job ID: 500-126216-1

04/08/17 10:47 04/08/17 13:50

78 - 114

78

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

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: MB 500-379459/1-A Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 379462 Prep Batch: 379459**

5.0

1.3 mg/L

mg/L

MB MB Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared

1.90 J

Lab Sample ID: LCS 500-379459/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Analysis Batch: 379462 Prep Batch: 379459** Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit D %Rec

Lab Sample ID: 500-126216-2 MS Client Sample ID: Effluent Prep Type: Total/NA

31.10

40.0

Matrix: Water

Analysis Batch: 379462

Prep Batch: 379459 Sample Sample Spike MS MS %Rec. Result Qualifier Result Qualifier Added Limits Analyte Unit D %Rec HEM (Oil & Grease) 3.4 J B 44.1 37.71 mg/L 78 78₋114

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-379822/23 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

HEM (Oil & Grease)

HEM (Oil & Grease)

Analysis Batch: 379822

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride <0.17 0.20 0.17 mg/L 04/10/17 13:38

Lab Sample ID: LCS 500-379822/29 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 379822

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits D Chloride 3.00 2.98 99 mg/L 90 - 110

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

Lab Sample ID: MB 500-379376/1 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 379376

MB MB RL Analyte Result Qualifier **MDL** Unit Prepared Analyzed **Total Suspended Solids** 5.0 <1.9 1.9 mg/L 04/07/17 14:00

Lab Sample ID: LCS 500-379376/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 379376

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits **Total Suspended Solids** 200 187 mg/L 80 - 120

TestAmerica Chicago

4/11/2017

Dil Fac

QC Sample Results

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-1

Client Sample ID: Effluent

Prep Type: Total/NA

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

Lab Sample ID: 500-126216-2 MS **Client Sample ID: Effluent Matrix: Water** Prep Type: Total/NA

Analysis Batch: 379376

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Total Suspended Solids 100 88.0 85 75 - 125 3.0 J mg/L

Lab Sample ID: 500-126216-2 DU

Matrix: Water

Analysis Batch: 379376

Sample Sample DU DU RPD Result Qualifier RPD Limit Analyte Result Qualifier Unit D Total Suspended Solids 3.0 J 5 2.00 J F5 mg/L 40

TestAmerica Job ID: 500-126216-1

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

Lab Sample ID: 500-126216-1

Matrix: Water

Client Sample ID: Influent
Date Collected: 04/06/17 07:10
Date Received: 04/07/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	624			379577	04/11/17 02:05	JMP	TAL CHI
Total/NA	Analysis	624	DL	50	379577	04/11/17 02:30	JMP	TAL CHI
Total/NA	Prep	1664B			379359	04/07/17 16:18	ADK	TAL CHI
Total/NA	Analysis	1664B		1	379360	04/07/17 19:24	ADK	TAL CHI
Total/NA	Analysis	300.0		20	379822	04/10/17 14:42	PMF	TAL CHI
Total/NA	Analysis	SM 2540D		1	379376		SMO	TAL CHI
					(Start) 0)4/07/17 14:14		
					(End) C	04/07/17 14:15		

Client Sample ID: Effluent Lab Sample ID: 500-126216-2

Date Collected: 04/06/17 07:30 Matrix: Water

Date Received: 04/07/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1 -	379577	04/11/17 01:39	JMP	TAL CHI
Total/NA	Prep	1664B			379459	04/08/17 10:57	ADK	TAL CHI
Total/NA	Analysis	1664B		1	379462	04/08/17 13:55	ADK	TAL CHI
Total/NA	Analysis	300.0		20	379822	04/10/17 14:54	PMF	TAL CHI
Total/NA	Analysis	SM 2540D		1	379376		SMO	TAL CHI
					(Start) 0	04/07/17 14:15		
					(End) (04/07/17 14:16		

Client Sample ID: Trip Blank

Date Collected: 04/06/17 00:00

Lab Sample ID: 500-126216-3

Matrix: Water

Date Collected: 04/06/17 00:00 Date Received: 04/07/17 09:30

Batch **Batch** Dilution Batch **Prepared** Method or Analyzed Analyst **Prep Type** Туре Run **Factor** Number Lab TAL CHI Total/NA Analysis 379577 04/11/17 01:14 JMP 624

Laboratory References:

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

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Accreditation/Certification Summary

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

TestAmerica Job ID: 500-126216-1

Laboratory: TestAmerica Chicago

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

	Authority	Program	EPA Region	Identification Number	Expiration Date
١	Wisconsin	State Program	5	999580010	08-31-17

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Chain of Custody Record

Temperature °C of Cooler: ___

Lab Job #: 500-126216

5.4756

Preservative Key

⁵⁰⁰⁻¹²⁶²¹⁶ COC

For VCCs +

attachecl

PAH See

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		ne Required (Business Days) 2 Days 5 Days 7 Days 1 Date	0 Days 15 Days	Sample Dispo	sal n to Client	Disposal by Lab	Archi	ive for	Months	(A fee may b	e assessed if s	amples are ret	ained longer tha	an 1 month)
Relinqui Relinqui	shed By Shed By	Set LGSU: Company CC Company	H Date	7 Time Time	Received By	u Saudy	mpany mpany	Uti	Date O 410 Date	7/17	Time 593 Time	D	Lab Courier	T _X
Relinqui	shed By	Company	Date	Time	Received By	Cc	mpany		Date		Time	н	and Delivered	
W - Wa S - Soi SL - SI	l udge tiscellan il	tter SÉ - Sediment SO - Soll L Leachate WI - Wipe	Client Comments				L	Lab Comments	S:			·		
														TAL-4124-500 (1209)

(optional)

Contact: Alina Satkosk

Preservative

Parameter

110 9 W 130 9 W

Fax:

E-Mail:

4617 710

Client Project #

Lab Project #

Sandle Fredrick

Bill To

Fax:

X

PO#/Reference# ___

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contact: ACCOUNTS Payable

106985

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING
2417 Bond Street, University Park, IL 60484
Prone: 708:534:5200 Fax: 708:534:5211

ClientmKC

Lab ID MS/MSD

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Project Name
GETS | SVE
Project Location/State
MAA I SAN, WI

Sample ID

Alina Satkork

Influent

Effluent

Trip Blank

Parameter	Method
VOCs	
Bromoform	624
Carbon Tetrachloride	624
Dichlorobromomethane	624
1,2-Dichloroethane	624.
1,1-Dichloroethylene	624
Methyl Bromide	624
Methyl Chloride	624
1,1,2,2-Tetrachloroethane	624
Tetrachloroethylene	624
1,1,2-Trichloroethane	624
1,1,1-Trichloroethane	624
Trichloroethylene	624
Vinyl Chloride	624
Cis-1,2-Dichloroethene	624
Trans-1,2-Dichloroethene	624
TSS	
Suspended Solids, Total	2540D
BTEX	
Benzene	
Toluene	624
Ethylbenzene Xylenes	

PAHs (Group of 10)	
Benzo(a)anthracene	
Benzo(b)fluoranthene	
Benzo(g,h,i)perylene	
Benzo(k)fluoranthene	7 1
Chrysene	625 SIM
Dibenzo(a,h)anthracene	
Fluoranthene	
Indeno(1,2,3-cd)pyrene	
Phenanthrene	
Pyrene	
PAHs	
Benzo(a)pyrene	625 SIM
Naphthalene	025 SIIVI
Oil and Grease	
Oil and Grease	1664
BOD ₅	
BOD₅	5210B
Anions	
Chloride	300





Client: Madison-Kipp Corporation

Job Number: 500-126216-1

List Source: TestAmerica Chicago

Login Number: 126216

List Number: 1

Creator: Sanchez, Ariel M

Creator: Sanchez, Ariel M		
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	
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.	False	Received Trip Blank(s) not listed on COC.
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	

TestAmerica Chicago



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: 500-126216-2

Client Project/Site: MadisonKipp - GETS/SVE

For:

Madison-Kipp Corporation 201 Waubesa Street Madison, Wisconsin 53704

Attn: Alina Satkoski

last 7

Authorized for release by: 4/12/2017 3:57:17 PM Eric Lang, Manager of Project Management (708)534-5200 eric.lang@testamericainc.com

Designee for

Sandie Fredrick, Project Manager II (920)261-1660 sandie.fredrick@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.



Review your project results through
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Have a Question?



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Case Narrative

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-2

Job ID: 500-126216-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-126216-2

Comments

No additional comments.

Receipt

The samples were received on 4/7/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6° C.

GC/MS Semi VOA

Method(s) 625 SIM: The laboratory control sample (LCS) for preparation batch 490-420911 and analytical batch 490-421020 recovered outside control limits for the following analytes: Benzo[a]anthracene and Chrysene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 625 SIM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 490-420911 recovered outside control limits for the following analytes: Benzo[a]anthracene and Chrysene.

Method(s) 625 SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-420911 and analytical batch 490-421020.

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

General Chemistry

Method(s) SM 5210B: The BOD unseeded control blank (USB) was found outside on control limit of <0.2mg/L. However, the laboratory control standard (LCS) was in control; therefore, the data was reported.

(USB 500-379338/1)

No additional analytical or quality issues were noted, other than those described above or 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: 500-126216-2

Lab Sample ID: 500-126216-1

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
Naphthalene	0.12	0.096	0.048 ug/L	1 625 SIM	Total/NA

Client Sample ID: Effluent Lab Sample ID: 500-126216-2

No Detections.

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Method Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-2

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: 500-126216-2

Lab Sample ID	Client Sample ID	Matrix	Collected Received
500-126216-1	Influent	Water	04/06/17 07:10 04/07/17 09:30
500-126216-2	Effluent	Water	04/06/17 07:30 04/07/17 09:30

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Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-2

Lab Sample ID: 500-126216-1

Matrix: Water

Client Sample ID: Influent Date Collected: 04/06/17 07:10

Date Received: 04/07/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<0.024	*	0.048	0.024	ug/L		04/09/17 15:44	04/10/17 18:06	1
Benzo[a]pyrene	<0.024		0.048	0.024	ug/L		04/09/17 15:44	04/10/17 18:06	1
Benzo[b]fluoranthene	<0.024		0.048	0.024	ug/L		04/09/17 15:44	04/10/17 18:06	1
Benzo[g,h,i]perylene	<0.048		0.096	0.048	ug/L		04/09/17 15:44	04/10/17 18:06	1
Benzo[k]fluoranthene	<0.048		0.096	0.048	ug/L		04/09/17 15:44	04/10/17 18:06	1
Chrysene	<0.048	*	0.096	0.048	ug/L		04/09/17 15:44	04/10/17 18:06	1
Dibenz(a,h)anthracene	<0.024		0.048	0.024	ug/L		04/09/17 15:44	04/10/17 18:06	1
Fluoranthene	<0.048		0.096	0.048	ug/L		04/09/17 15:44	04/10/17 18:06	1
Indeno[1,2,3-cd]pyrene	<0.024		0.048	0.024	ug/L		04/09/17 15:44	04/10/17 18:06	1
Naphthalene	0.12		0.096	0.048	ug/L		04/09/17 15:44	04/10/17 18:06	1
Phenanthrene	<0.048		0.096	0.048	ug/L		04/09/17 15:44	04/10/17 18:06	1
Pyrene	<0.048		0.096	0.048	ug/L		04/09/17 15:44	04/10/17 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	37		27 - 120				04/09/17 15:44	04/10/17 18:06	1
Terphenyl-d14	65		13 - 120				04/09/17 15:44	04/10/17 18:06	1
2-Fluorobiphenyl (Surr)	44		10 - 120				04/09/17 15:44	04/10/17 18:06	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			04/07/17 19:12	1

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Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-2

Lab Sample ID: 500-126216-2

Matrix: Water

Client Sample ID: Effluent
Date Collected: 04/06/17 07:30
Date Received: 04/07/17 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<0.025	*	0.050	0.025	ug/L		04/09/17 15:44	04/10/17 18:28	1
Benzo[a]pyrene	<0.025		0.050	0.025	ug/L		04/09/17 15:44	04/10/17 18:28	1
Benzo[b]fluoranthene	<0.025		0.050	0.025	ug/L		04/09/17 15:44	04/10/17 18:28	1
Benzo[g,h,i]perylene	<0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 18:28	1
Benzo[k]fluoranthene	<0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 18:28	1
Chrysene	<0.050	*	0.10	0.050	ug/L		04/09/17 15:44	04/10/17 18:28	1
Dibenz(a,h)anthracene	<0.025		0.050	0.025	ug/L		04/09/17 15:44	04/10/17 18:28	1
Fluoranthene	<0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 18:28	1
Indeno[1,2,3-cd]pyrene	<0.025		0.050	0.025	ug/L		04/09/17 15:44	04/10/17 18:28	1
Naphthalene	<0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 18:28	1
Phenanthrene	<0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 18:28	1
Pyrene	<0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 18:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	54	· 	27 - 120				04/09/17 15:44	04/10/17 18:28	1
Terphenyl-d14	87		13 - 120				04/09/17 15:44	04/10/17 18:28	1
2-Fluorobiphenyl (Surr)	70		10 - 120				04/09/17 15:44	04/10/17 18:28	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			04/07/17 16:18	1

Definitions/Glossary

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

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

TestAmerica Job ID: 500-126216-2

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

Glossary

TEF

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

QC Association Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-2

GC/MS Semi VOA

Prep Batch: 420911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126216-1	Influent	Total/NA	Water	625	
500-126216-2	Effluent	Total/NA	Water	625	
MB 490-420911/1-A	Method Blank	Total/NA	Water	625	
LCS 490-420911/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 490-420911/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 421020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126216-1	Influent	Total/NA	Water	625 SIM	420911
500-126216-2	Effluent	Total/NA	Water	625 SIM	420911
MB 490-420911/1-A	Method Blank	Total/NA	Water	625 SIM	420911
LCS 490-420911/2-A	Lab Control Sample	Total/NA	Water	625 SIM	420911
LCSD 490-420911/3-A	Lab Control Sample Dup	Total/NA	Water	625 SIM	420911

General Chemistry

Analysis Batch: 379338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126216-1	Influent	Total/NA	Water	SM 5210B	
500-126216-2	Effluent	Total/NA	Water	SM 5210B	
USB 500-379338/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 500-379338/2	Lab Control Sample	Total/NA	Water	SM 5210B	

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Surrogate Summary

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-2

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

Matrix: Water Prep Type: Total/NA

			Pe	ercent Surro	gate Recovery (Acceptance Limits)
		NBZ	TPH	FBP	
Lab Sample ID	Client Sample ID	(27-120)	(13-120)	(10-120)	
500-126216-1	Influent	37	65	44	
500-126216-2	Effluent	54	87	70	
LCS 490-420911/2-A	Lab Control Sample	51	76	61	
LCSD 490-420911/3-A	Lab Control Sample Dup	44	67	52	
MB 490-420911/1-A	Method Blank	51	76	53	

Surrogate Legend

NBZ = Nitrobenzene-d5

TPH = Terphenyl-d14

FBP = 2-Fluorobiphenyl (Surr)

TestAmerica Job ID: 500-126216-2

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

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

Lab Sample ID: MB 490-420911/1-A Client Sample ID: Method Blank **Matrix: Water**

Prep Type: Total/NA **Analysis Batch: 421020 Prep Batch: 420911**

	MB I	MB							
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<0.025		0.050	0.025	ug/L		04/09/17 15:44	04/10/17 16:59	1
Benzo[a]pyrene	<0.025		0.050	0.025	ug/L		04/09/17 15:44	04/10/17 16:59	1
Benzo[b]fluoranthene	<0.025		0.050	0.025	ug/L		04/09/17 15:44	04/10/17 16:59	1
Benzo[g,h,i]perylene	<0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 16:59	1
Benzo[k]fluoranthene	<0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 16:59	1
Chrysene	< 0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 16:59	1
Dibenz(a,h)anthracene	<0.025		0.050	0.025	ug/L		04/09/17 15:44	04/10/17 16:59	1
Fluoranthene	< 0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 16:59	1
Indeno[1,2,3-cd]pyrene	<0.025		0.050	0.025	ug/L		04/09/17 15:44	04/10/17 16:59	1
Naphthalene	<0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 16:59	1
Phenanthrene	< 0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 16:59	1
Pyrene	< 0.050		0.10	0.050	ug/L		04/09/17 15:44	04/10/17 16:59	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 51 Nitrobenzene-d5 27 - 120 04/09/17 15:44 04/10/17 16:59 Terphenyl-d14 76 13 - 120 04/09/17 15:44 04/10/17 16:59 2-Fluorobiphenyl (Surr) 53 10 - 120 04/09/17 15:44 04/10/17 16:59

Lab Sample ID: LCS 490-420911/2-A

Matrix: Water

Analysis Batch: 421020

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

Prep Batch: 420911

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzo[a]anthracene	4.00	7.41	*	ug/L		185	33 - 143	
Benzo[a]pyrene	4.00	2.74		ug/L		68	17 - 163	
Benzo[b]fluoranthene	4.00	3.27		ug/L		82	24 - 159	
Benzo[g,h,i]perylene	4.00	3.01		ug/L		75	10 - 219	
Benzo[k]fluoranthene	4.00	2.82		ug/L		70	11 - 162	
Chrysene	4.00	10.4	*	ug/L		260	17 - 168	
Dibenz(a,h)anthracene	4.00	2.77		ug/L		69	10 - 227	
Fluoranthene	4.00	2.53		ug/L		63	26 - 137	
Indeno[1,2,3-cd]pyrene	4.00	2.67		ug/L		67	10 - 171	
Naphthalene	4.00	2.59		ug/L		65	21 - 133	
Phenanthrene	4.00	2.83		ug/L		71	54 - 120	
Pyrene	4.00	3.59		ug/L		90	52 - 115	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
Nitrobenzene-d5	51	27 - 120
Terphenyl-d14	76	13 - 120
2-Fluorobiphenyl (Surr)	61	10 - 120

Lab Sample ID: LCSD 490-420911/3-A				Client S	ample	ID: Lat	Control:	Sample	Dup
Matrix: Water							Prep Ty	e: Tot	al/NA
Analysis Batch: 421020							Prep Ba	itch: 42	20911
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzo[a]anthracene	4.00	2.45	*	ug/L		61	33 - 143	100	30

TestAmerica Chicago

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4/12/2017

TestAmerica Job ID: 500-126216-2

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

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

2

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

Lab Sample ID: LCSD 490-420911/3-A Matrix: Water

Analysis Batch: 421020

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 420911

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzo[a]pyrene	4.00	2.14		ug/L		54	17 - 163	24	30
Benzo[b]fluoranthene	4.00	2.55		ug/L		64	24 - 159	25	30
Benzo[g,h,i]perylene	4.00	2.43		ug/L		61	10 - 219	21	30
Benzo[k]fluoranthene	4.00	2.23		ug/L		56	11 - 162	23	30
Chrysene	4.00	2.33	*	ug/L		58	17 - 168	127	30
Dibenz(a,h)anthracene	4.00	2.26		ug/L		57	10 - 227	20	30
Fluoranthene	4.00	2.08		ug/L		52	26 - 137	19	30
Indeno[1,2,3-cd]pyrene	4.00	2.22		ug/L		56	10 - 171	18	30
Naphthalene	4.00	2.12		ug/L		53	21 - 133	20	30
Phenanthrene	4.00	2.37		ug/L		59	54 - 120	18	30
Pyrene	4.00	3.11		ug/L		78	52 - 115	14	30

LCSD LCSD

Surrogate	%Recovery Quality	fier Limits
Nitrobenzene-d5	44	27 - 120
Terphenyl-d14	67	13 - 120
2-Fluorobiphenyl (Surr)	52	10 - 120

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 500-379338/1

Matrix: Water

Analysis Batch: 379338

USB USB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Biochemical Oxygen Demand <2.0 2.0 2.0 mg/L 04/07/17 12:50 1

Lab Sample ID: LCS 500-379338/2

Matrix: Water

Analysis Batch: 37933

Analysis Batch: 3/9338								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Biochemical Oxygen Demand	198	220		mg/L		111	85 - 115	

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TestAmerica Chicago

Lab Chronicle

Client: Madison-Kipp Corporation Project/Site: MadisonKipp - GETS/SVE TestAmerica Job ID: 500-126216-2

Lab Sample ID: 500-126216-1

Matrix: Water

Client Sample ID: Influent
Date Collected: 04/06/17 07:10
Date Received: 04/07/17 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	625			420911	04/09/17 15:44	DHC	TAL NSH
Total/NA	Analysis	625 SIM		1	421020	04/10/17 18:06	T1C	TAL NSH
Total/NA	Analysis	SM 5210B		1	379338		MAN	TAL CHI
					(Start) C	4/07/17 19:12		
					(End) C	4/07/17 19:30		

Client Sample ID: Effluent Lab Sample ID: 500-126216-2

Matrix: Water

Date Collected: 04/06/17 07:30 Date Received: 04/07/17 09:30

Batch Batch Dilution Batch Prepared **Prep Type** Туре Method Factor Number or Analyzed Run Analyst Lab Total/NA 625 420911 04/09/17 15:44 Prep DHC TAL NSH Total/NA Analysis 625 SIM 1 421020 04/10/17 18:28 T1C TAL NSH Total/NA Analysis SM 5210B 1 379338 MAN TAL CHI (Start) 04/07/17 16:18 (End) 04/07/17 16:36

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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Accreditation/Certification Summary

Client: Madison-Kipp Corporation

TestAmerica Job ID: 500-126216-2

Project/Site: MadisonKipp - GETS/SVE

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	08-31-17

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998020430	08-31-17

Chain of Custody Record

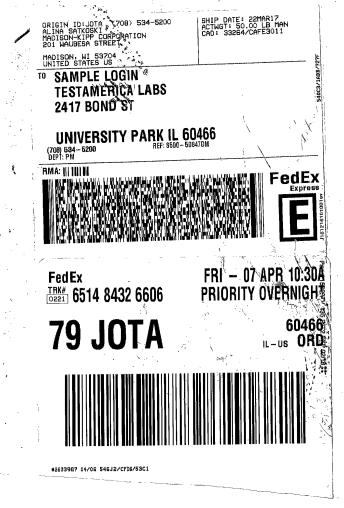
	5517 (1 1 1	0110	<u></u>	Contact: +		TICOS		Contact: _f	tccw	11D I	ayu	vik		-	101011
TLIC	LEADER IN ENVIRON	IMENITAL TECT	INC	Company:	MKC			Company: _	-m	IKC_	'		Lab	Job #: <u>SOO</u>	-126216
Inc			ING	Address:				Address:					01.0	for all Occasions Normalisms	
	2417 Bond Street, University Phone: 708:534:5200 Fa			Address:				Address:					UNS	in-of-Gustody-Number:	1
				Phone:				Phone:					Pag	elof	
				Fax:				Fax:					•		~ 11-251
				E-Mail:				PO#/Refere	nce# / C	0698	95		Tem	perature °C of Cooler:	5.475-6
Client	nkc	Client Pr	roject #		Preservative	l	8	8	2						Preservative Key
Project Na	GETS/SVE				Parameter			پي ا	61						
Project Lo	cation/State XXISON, WI	Lab Proj						1 TSS/ hlonde	1+ NOG 22					50	
	lina Satko	sei Sar	ndie Fred	urick		rocs	艾	1/2	Oil + Gre						00-126216 COC
Lab ID	Sample ID		Dat	Sampling e Time	# of Containers Matrix	2	HAD	BOD	Q			i			Comments
1	Influer	it	4/6/	17 710	19 W	X	X	X	χ					For	VCCs 7
2	Effluen:	۲	4/61	17 130	9 W	X	λ	χ	$ \chi $						PAH See
3	Trip Blan	K	701												achecl
					1 1		•))		1 0	enalyte
															list
						-									
					1 -										
+															
													·		
1 Da	d Time Required (Business Day	/s) 7 Days 10	Days 15 Days	Other	Sample Disp	osal n to Client	Disp	oosal by Lab	Archi	uo for	Months	/A foo may b	o passaged if account	oles are retained longe	ur than 1 month)
	d Due Date	_								Ve 101					alan i monay
Relinquishe Relinquishe	"a detrost	MKC MKC	4/6/11	7	71me 200		in Sa	and 2	ompany TA	UI	Date OH	07/17	1093D	Lab Couri	er
Relinquishe	ову (Company Company	Date		Time	Received By			ompany		Date Date		Time Time	Shipp	ed TX
, rom quisite	· · · · · · · · · · · · · · · · · · ·	-outhailt	Date		THE	neceived by		U.	лирану		Date		TIME	Hand Deliver	be
WW - Water S - Soil SL - Slud MS - Miss OL - Oil A - Air	r SO – Soil L – Leach ge WI – Wip	iment nate e nking Water	Client Comments						L	ab Comments	:				

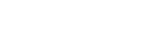
Contact: ACCOUNTS Payable

<u>TestAmerica</u>

Parameter	Method
VOCs	
Bromoform	624
Carbon Tetrachloride	624
Dichlorobromomethane	624
1,2-Dichloroethane	624.
1,1-Dichloroethylene	624
Methyl Bromide	624
Methyl Chloride	624
1,1,2,2-Tetrachloroethane	624
Tetrachloroethylene	624
1,1,2-Trichloroethane	624
1,1,1-Trichloroethane	624
Trichloroethylene	624
Vinyl Chloride	624
Cis-1,2-Dichloroethene	624
Trans-1,2-Dichloroethene	624
TSS	
Suspended Solids, Total	2540D
BTEX	<u> </u>
Benzene	_
Toluene	624
Ethylbenzene	_
Xylenes	

PAHs (Group of 10)	
Benzo(a)anthracene	
Benzo(b)fluoranthene] ,
Benzo(g,h,i)perylene	
Benzo(k)fluoranthene	
Chrysene	625 SIM
Dibenzo(a,h)anthracene	025 31101
Fluoranthene	
Indeno(1,2,3-cd)pyrene]
Phenanthrene]
Pyrene	
PAHs	
Benzo(a)pyrene	625 SIM
Naphthalene	020 51101
Oil and Grease	
Oil and Grease	1664
BOD₅	
BOD ₅	5210B
Anions	
Chloride	300





500-126216 Waybill



COOLER RECEIPT FORM



Cooler Received/Opened On 4/8/2017 @ 0915	
Time Samples Removed From Cooler 108 Time Samples Placed In Storage 120	(2 Hour Window)
1. Tracking #	
IR Gun ID_17960353_ pH Strip Lot Chlorine Strip Lot	4
2. Temperature of rep. sample or temp blank when opened:Degrees Celsius	•
3. If Item #2 temperatures is 0°C or less, was the representative sample or temp blank frozen	? YES NONA
4. Were custody seals on outside of cooler?	YESNONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	YESNONA
6. Were custody papers inside cooler?	NONA
I certify that I opened the cooler and answered questions 1-6 (initial)	
7. Were custody seals on containers: YES NO and Intact	YESNONA
Were these signed and dated correctly?	YESNO. NA
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Pape	r Other None
9. Cooling process: lce lce-pack lce (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	YESNONA
11. Were all container labels complete (#, date, signed, pres., etc)?	YESNONA
12. Did all container labels and tags agree with custody papers?	YESNONA
13a. Were VOA vials received?	YESNONA
b. Was there any observable headspace present in any VOA vial?	YESNONA
14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, sequen	ce #
I certify that I unloaded the cooler and answered questions 7-14 (initial)	
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO.(NA)
b. Did the bottle labels indicate that the correct preservatives were used	ESNONA
16. was residual chlorine present?	YESNONA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)	1726
17. Were custody papers properly filled out (ink, signed, etc)?	YESNONA
18. Did you sign the custody papers in the appropriate place?	(ESNONA
19. Were correct containers used for the analysis requested?	YESNONA
20. Was sufficient amount of sample sent in each container?	YESNONA
I certify that I entered this project into LIMS and answered questions 17-20 (initial)	G
certify that I attached a label with the unique LIMS number to each container (initial)	KiG_
21. Were there Non-Conformance issues at login? YES. (NO) Was a NCM generated? YES.	ÑQ#

			ure(s) °C and Other Remarks:	Cooler Temperature(s) °C and	Cooler 1					Custody Seals Intact: Custody Seal No.:
Company		Date/Time:		ad by:	Received by:	Company			Date/Time:	Relinquished by:
Company	CIPO	9/8/17 Date/Time:	1.3			Company	1330		Date Time:	Relinquished
Company	2160	Date/Time:	ļ	ad by:	Received by:	Company	100		F	Relinquished by:
		Method of Shipment:	Method o		Time:			Date:		Empty Kit Relinquished by:
			uirements:	Special Instructions/QC Requirements	Special Ins		: 2	erable Rank	Primary Deliverable Rank: 2	Deliverable Requested: I, II, III, IV, Other (specify)
1 month) Months	d longer than 1	amples are retained Ion	(A fee may be assessed if samples are retained longer		Sample Disposal					Possible Hazard Identification Unconfirmed
If the laboratory does not strought to TestAmerica	tus should be broug	is forwarded under chaininges to accreditation stat	ss. This sample shipment will be provided. Any cha	t subcontract laboratorions or other instructions ca Laboratories, Inc.	mpliance upon out stAmerica laborato ance to TestAmeri	& accreditation cor sed back to the Tes ng to said complica	nethod, analyte and second sec	ownership of n zed, the sample signed Chain of	oratories, Inc. places the tests/matrix being analyz rent to date, return the s	Note: Since laboratory accreditations are subject to change, TestAmerica, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chan-of-custody. If the laboratory does no ourrently 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.
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		£.								
		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1								
		5								
		2			×	Water		07:30 Central	4/6/17	Effluent (500-126216-2)
		2			×	Water		07:10 Central	4/6/17	Influent (500-126216-1)
		X			X	Preservation Code:	Preserv	X		
Special Instructions/Note:	Special I	Total Numb			Field Filtere Perform MS 625_SIM/625_	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	• •	Sample Time	Sample Date	Sample Identification - Client ID (Lab ID)
	Other:				MSD (- 		SSOW#:	Sile:
Z - other (specify)	L-EDA				es or				Project #: 50009145	Project Name: MadisonKipp - GETS/SVE
	I - Ice J - DI Water	ers			No)	i			WO#	Email:
	G - Amchlor H - Ascorbic Acid	.s. s.							#	615-726-0177(Tel) 615-726-3404(Fax)
P - Na2O4S Q - Na2SO3 R - Na2S2O3	D - Nitric Acid E - NaHSO4 F - MeOH	<u></u>			npound				3	State, Zip: TN, 37204
N - None O - AsNaO2	B - NaOH C - Zn Acetate				1			(days):	TAT Requested (days):	Ciy. Nashville
odes:	Preservation Codes:		is Requested	Analysis				sted:	Due Date Requested: 4/12/2017	Address: 2960 Foster Creighton Drive,
	Job #: 500-126216-2			Accreditations Required (See note): State Program - Wisconsin	Accreditations Required (See note State Program - Wisconsin					Company: TestAmerica Laboratories, Inc
	Page: Page 1 of 1		WISCUIISIII	E-Mail: sandie.fredrick@testamericainc.com	l: lie.fredrick@te	E-Mail: sandi			Phone:	Client Contact: Shipping/Receiving
	35674.1				Fredrick, Sandie J	Fredric			Sampler:	Client Information (Sub Contract Lab)
SIATIOICO	LEADER IN	တ	126216		ecord	Chain of Custody Record	of Cus	Chain		2417 Bond Street University Park, IL 60484 Phone (708) 534-5200 Fax (708) 534-5211
))))	/ } + >		00: 500							TestAmerica Chicago

Login Sample Receipt Checklist

Client: Madison-Kipp Corporation Job Number: 500-126216-2

Login Number: 126216 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.</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	
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.	False	Received Trip Blank(s) not listed on COC.
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	

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Client: Madison-Kipp Corporation

Job Number: 500-126216-2

Login Number: 126216

List Source: TestAmerica Nashville List Number: 2 List Creation: 04/08/17 11:49 AM

Creator: Gundi, Hozar K

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey neter.</td <td>N/A</td> <td></td>	N/A	
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 ampered 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	
s 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	