Post Office Box 8043 Madison, WI 53708-8043

201 Waubesa Street Madison, WI 53704-5728

March 2, 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 February, with the exception of maintenance activities. This letter summarizes the activities completed in February 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 February 8, 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 February, the GETS was shut down for less than 24 hours at a time in order to change the hydrogen peroxide tank and repair a level switch. Due to an issue with the air stripper, the GETS ran at 40 gpm on February 29th. The air stripper issue was addressed and the system has returned to operating at 45 gpm. If you have any questions or need additional information, please contact me at asatkoski@madison-kipp.com or (608) 242-5200.

Alina Satkoski

alinalathere:

Madison Kipp Corporation

Attachment A Discharge Monitoring Report Form

Attachment B Laboratory Reports

Copies:

Andrew Stehn - TRC (electronic)

Mike Schmoller - 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: Arcadis/TRC

FIN#:

							ΓIIN#.				
Outfall # and	Description	Flow (gal/day)	Oil & Grease (mg/L)	BOD₅ (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)
Effluent	Month: February 8, 2016	64,800	< 0.57	< 2.0	< 0.40	< 0.048	< 0.024	< 0.048	0	< 0.15	< 1.6
	Month:										
	Month:										
	Month:										
See Footnotes		(4)			(1)	(2)			(3)		
Effluent Limits (reference)	er to sec. 4 of the		10 mg/l	20 mg/L	750 μg/L	0.1 μg/l	0.1 μg/l	70 μg/l		50 μg/I	40 mg/L
Sample Frequency:	Pre-treatment	Daily	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
Sample Frequency:	Post-treatment	Daily	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
Sample Type		Estimate	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Impaired or TMDL	surface waters		Does this fac	ility discharge a po	ollutant of concern	to an impaired surfa	ace water or to	a surface water w	ith a TMDL alloca	tion?   No	• Yes
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: January 18, 2016	68.4	< 0.20	< 0.35	< 0.39	43	110	19	6.4		
	Month:										
	Month:										
	Month:										
See Footnotes	•	(4)		(4)				(4)			
Effluent Limits (refe permit)	er to sec. 4 of the		10 ug/L		50 μg/L	50 μg/L	395 mg/L		50 μg/L		
Sample Frequency:	Pre-treatment	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly		
Sample Frequency:	Post-treatment	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly		
Sample Type		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.

#### 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.

AlinaSattest:	3-2-2016
Signature of Person Completing Form	Date
AlinaSattesk:	3-2-2016
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: 500-107349-1

Client Project/Site: MadisonKipp GETS/SVE Sampling

#### For:

Madison-Kipp Corporation 201 Waubesa Street Madison, Wisconsin 53704

Attn: Alina Satkoski

[m47]

Authorized for release by: 2/11/2016 11:20:21 AM 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

Total Access

**Have a Question?** 



Visit us at: www.testamericainc.com

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#### **Case Narrative**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

Job ID: 500-107349-1

**Laboratory: TestAmerica Chicago** 

Narrative

Job Narrative 500-107349-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/9/2016 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.3° C.

#### **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 Sampling

TestAmerica Job ID: 500-107349-1

Client Sample ID: Influent Lab Sample ID: 500-107349-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM (Oil & Grease)	0.68	JB	5.6	0.61	mg/L	1	_	1664B	Total/NA
Chloride	100		5.0	1.9	mg/L	25		300.0	Total/NA

Client Sample ID: Effluent Lab Sample ID: 500-10	7349-2
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<del>_</del>							
Analyte	Result	Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Chloride	110		5.0	1.9 ma/l		300.0	Total/NA

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### **Method Summary**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

Method	Method Description	Protocol	Laboratory
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

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

### **Sample Summary**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-107349-1	Influent	Water	02/08/16 08:05	02/09/16 09:10
500-107349-2	Effluent	Water	02/08/16 08:10	02/09/16 09:10

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Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

**Client Sample ID: Influent** Lab Sample ID: 500-107349-1 Date Collected: 02/08/16 08:05

Matrix: Water

Date Received: 02/09/16 09:10

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	0.68	J B	5.6	0.61	mg/L		02/09/16 18:18	02/09/16 20:15	1
Chloride	100		5.0	1.9	mg/L			02/09/16 22:19	25
Total Suspended Solids	<1.6		5.0	1.6	mg/L			02/09/16 12:12	1
	Analyte HEM (Oil & Grease) Chloride	Analyte         Result           HEM (Oil & Grease)         0.68           Chloride         100	Analyte         Result         Qualifier           HEM (Oil & Grease)         0.68         J B           Chloride         100	Analyte         Result HEM (Oil & Grease)         Qualifier 0.68 J B         RL J B           Chloride         100         5.0	Analyte         Result Qualifier         RL MDL           HEM (Oil & Grease)         0.68 J B         5.6         0.61           Chloride         100         5.0         1.9	Analyte         Result HEM (Oil & Grease)         Qualifier         RL JB         MDL Unit MDL MDL         Unit MDL MDL           Chloride         100         5.6         0.61         mg/L	Analyte         Result HEM (Oil & Grease)         Qualifier         RL JB         MDL Jmit Mg/L         D           Chloride         100         5.6         0.61         mg/L	Analyte         Result Qualifier         RL DIM (Oil & Grease)         MDL Unit (DIM (Oil & Grease))         D (Oil & Oil (Oil & Oil (Oil & Oil (Oil & Oil (Oil (Oil & Oil (Oil & Oil (Oil (Oil & Oil )))))))         Double (Oil & Oil )))))))         Description (Oil & Oil )))))))         Description (Oil & Oil )))))))         Description (Oil & Oil )))))))         Description (Oil & Oil ))))))))))         Description (Oil & Oil (Oil & Oil (Oil & Oil (Oil & Oil )))))))))         Description (Oil & Oil )))))))))))))))         Description (Oil & Oil (Oil & Oil (Oil & Oil (Oil & Oil	Analyte         Result (Oil & Grease)         Qualifier         RL (Oil & MDL)         Unit (Unit)         D (Unit)         Prepared (Oil & Oil ))))))))))           Chloride         100

Client: Madison-Kipp Corporation

**Client Sample ID: Effluent** 

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

Lab Sample ID: 500-107349-2

Date Collected: 02/08/16 08:10 Matrix: Water

Date Received: 02/09/16 09:10

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	<0.57		5.3	0.57	mg/L		02/09/16 18:26	02/09/16 20:20	1
Chloride	110		5.0	1.9	mg/L			02/09/16 22:32	25
Total Suspended Solids	<1.6		5.0	1.6	mg/L			02/09/16 12:14	1

### **Definitions/Glossary**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

#### **Qualifiers**

#### **General Chemistry**

Qualifier	Qualifier Description
В	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not
	applicable.

### Glossary

RPD

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)

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

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

TestAmerica Chicago

### **QC Association Summary**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

### **General Chemistry**

### Analysis Batch: 322196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-107349-1	Influent	Total/NA	Water	SM 2540D	
500-107349-2	Effluent	Total/NA	Water	SM 2540D	
LCS 500-322196/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 500-322196/1	Method Blank	Total/NA	Water	SM 2540D	

#### Prep Batch: 322233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-107349-1	Influent	Total/NA	Water	1664B	
500-107349-2	Effluent	Total/NA	Water	1664B	
LCS 500-322233/2-A	Lab Control Sample	Total/NA	Water	1664B	
MB 500-322233/1-A	Method Blank	Total/NA	Water	1664B	

#### Analysis Batch: 322235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-107349-1	Influent	Total/NA	Water	1664B	322233
500-107349-2	Effluent	Total/NA	Water	1664B	322233
LCS 500-322233/2-A	Lab Control Sample	Total/NA	Water	1664B	322233
MB 500-322233/1-A	Method Blank	Total/NA	Water	1664B	322233

### Analysis Batch: 322296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-107349-1	Influent	Total/NA	Water	300.0	
500-107349-2	Effluent	Total/NA	Water	300.0	
500-107349-2 MS	Effluent	Total/NA	Water	300.0	
500-107349-2 MSD	Effluent	Total/NA	Water	300.0	
LCS 500-322296/4	Lab Control Sample	Total/NA	Water	300.0	
MB 500-322296/3	Method Blank	Total/NA	Water	300.0	

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Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 500-322233/1-A

**Matrix: Water** 

Analysis Batch: 322235

Prep Type: Total/NA

Prep Batch: 322233

мв мв

Result Qualifier RL MDL Unit D Prepared Dil Fac Analyte Analyzed 5.0 0.54 mg/L 02/09/16 15:20 HEM (Oil & Grease) 0.900 J 02/09/16 18:40

Lab Sample ID: LCS 500-322233/2-A

**Matrix: Water** 

HEM (Oil & Grease)

Analyte

Analysis Batch: 322235

Prep Type: Total/NA

Prep Batch: 322233

Prep Type: Total/NA

Client Sample ID: Effluent

Prep Type: Total/NA

LCS LCS Spike Result Qualifier Added Unit %Rec Limits 40.0 35.1 mg/L 88 78 - 114

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-322296/3

**Matrix: Water** 

Analysis Batch: 322296

Prep Type: Total/NA

MR MR

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 0.20 Chloride <0.076 0.076 mg/L 02/09/16 19:15

Lab Sample ID: LCS 500-322296/4

**Matrix: Water** 

Analysis Batch: 322296

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Chloride 3.00 2 89 90 \_ 110 mg/L

Lab Sample ID: 500-107349-2 MS

**Matrix: Water** 

Analysis Batch: 322296

Sample Sample Spike MS MS %Rec. Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Chloride 25.0 110 129 4 mg/L 94 80 - 120

Analysis Batch: 322296

Lab Sample ID: 500-107349-2 MSD Client Sample ID: Effluent **Matrix: Water** Prep Type: Total/NA

MSD MSD Sample Sample Spike %Rec. RPD RPD Limit Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 110 25.0 126 4 mg/L 84 80 - 120 20

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

Lab Sample ID: MB 500-322196/1

**Matrix: Water** 

Analysis Batch: 322196

мв мв

Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Total Suspended Solids <1.6 5.0 1.6 mg/L 02/09/16 12:00

TestAmerica Chicago

Prep Type: Total/NA

Client Sample ID: Method Blank

### **QC Sample Results**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

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

Lab Sample ID: LCS 500-322196/2

Matrix: Water

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

Analysis Batch: 322196

Spike LCS LCS %Rec. Analyte Added Result Qualifier Limits Unit D %Rec Total Suspended Solids 200 230 115 80 - 120 mg/L

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#### **Lab Chronicle**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

Lab Sample ID: 500-107349-1

Matrix: Water

**Client Sample ID: Influent** Date Collected: 02/08/16 08:05 Date Received: 02/09/16 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	1664B			322233	02/09/16 18:18	SSF	TAL CHI
Total/NA	Analysis	1664B		1	322235	02/09/16 20:15	SSF	TAL CHI
Total/NA	Analysis	300.0		25	322296	02/09/16 22:19	CCK	TAL CHI
Total/NA	Analysis	SM 2540D		1	322196		SMO	TAL CHI
					(Start)	02/09/16 12:12		
					(End)	02/09/16 12:14		

Lab Sample ID: 500-107349-2 **Client Sample ID: Effluent** 

Date Collected: 02/08/16 08:10 Matrix: Water

Date Received: 02/09/16 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	1664B			322233	02/09/16 18:26	SSF	TAL CHI
Total/NA	Analysis	1664B		1	322235	02/09/16 20:20	SSF	TAL CHI
Total/NA	Analysis	300.0		25	322296	02/09/16 22:32	CCK	TAL CHI
Total/NA	Analysis	SM 2540D		1	322196		SMO	TAL CHI
					(Start)	02/09/16 12:14		
					(End)	02/09/16 12:15		

Laboratory References:

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

### **Certification Summary**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-1

### **Laboratory: TestAmerica Chicago**

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	<b>Expiration Date</b>
Wisconsin	State Program	5	999580010	08-31-16

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2417 Bond Street, University Park, IL 6048 Phone: 708.534.5200 Fax: 708.534.5



500-107349 COC

	(optional)	(optional)
	Report To  Contact: Aling SatKOSKI	Contact: ACCOUNTS Payable
		Company: MKC
	Address: 201 Walbesa 5t.	Address: 201 Like USC 57.
	Address: MADISON WI	Address: M. M. BCM, WI 5370-
•	Phone: 108-242-5200	Phone:
	F	Tow.

**Chain of Custody Record** 500-107349

	,
Chain of Custody Number:	

Page	<b>S</b> :	of	1
l ago		O1	<i></i>

Temperature °C of Cooler:

	E-Mail: U	isatroski @	maolisa	1-Kipp.	Con Referen	nce#(	6371	 Temperature	°C of Cooler:
Client M KC	Client Project #	Preservative		7	7	2			Preservative Key  1. HCL, Cool to 4°
Project Name  GETS   SVE SO  Project Location/State  Mad is W   WT  Sampler  AU O SCHOSKS  GETS   SVE SO  Project Name  GETS   SVE SO  Project Name  GETS   SVE SO  Sampler  AU O SCHOSKS	Lab PM Sampling	Parameter  Containers  Matrix	VOC	THE CONTRACTOR OF THE CONTRACT	BOD/TSS/ Of 18 rigg	Oil + Groase			2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
		305 9 W	$\chi$	$\chi$	χ	$\mathcal{X}$			For VOC +
1 Influent 2 Effluent 3 Trip Blan	2/8/10 8	310 9 W	$\lambda$	χ_	$\lambda$	1			PAH Sel
3 Trio Blan	k	iw	$\lambda_{-}$						attached
									attached anaryte list
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. i							<u>.</u>		,
									9
Turnaround Time Required (Business Days)	-	Sample Dispo	sal						

1 Day 2 Day Requested Due Date	rs 5 Days 7 Days	0th	Return to Client	Disposal by Lab Archive	for Months (A fee m	ay be assessed if samples a	are retained longer than 1	month)
Relinquished By		14C 2/8/110	Time Received By	wilcott Smith CAR	t 2/9/16	<sup>Tim</sup> 09/0	Lab Courier	
Relinquished By	Company	Date	Time Received By	Company	Date /	Time	Shipped	Fedix
Relinquished By	Company	. Date	Time Received By	Company	Date	Time	Hand Delivered	
	Matrix Key	Client Comments		Lat	b Comments:			
WW - Wastewater	SE - Sediment							
W - Water	SO – Soil							
S – Soil	L – Leachate							
SL - Sludge	WI – Wipe							
MS - Miscellaneous	DW - Drinking Water							
OL – Oil	O – Other							
A – Air								

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	<del></del>
Benzene	4
Toluene	624
Ethylbenzene	4
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 3110
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 <sub>5</sub>	
BOD₅	5210B
Anions	
Chloride	300

### **Login Sample Receipt Checklist**

Client: Madison-Kipp Corporation Job Number: 500-107349-1

Login Number: 107349 List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Creator: Scott, Sherri L		
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	5.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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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: 500-107349-2

Client Project/Site: MadisonKipp GETS/SVE Sampling

#### For:

Madison-Kipp Corporation 201 Waubesa Street Madison, Wisconsin 53704

Attn: Alina Satkoski

Sanda Ireduik

Authorized for release by: 2/25/2016 4:53:19 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 Sampling

TestAmerica Job ID: 500-107349-2

Job ID: 500-107349-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-107349-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/9/2016 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.3° C.

#### GC/MS VOA

Method(s) 624: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (500-107349-1). 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.

#### GC/MS Semi VOA

Method(s) 625 SIM: Internal standard (ISTD) response for Perylene-d12 in the following sample was outside of acceptance limits: Effluent (500-107349-2). No compounds were detected above the method detection limit; therefore, the data is reported.

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

**Client Sample ID: Influent** 

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

Lab Sample ID: 500-107349-1

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
Tetrachloroethene - DL	2300	50	19 ug/L	50 624	Total/NA

**Client Sample ID: Effluent** Lab Sample ID: 500-107349-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	19		1.0	0.41	ug/L	1	_	624	Total/NA
Tetrachloroethene	43		1.0	0.37	ug/L	1		624	Total/NA
Trichloroethene	6.4		0.50	0.16	ug/L	1		624	Total/NA

**Client Sample ID: Trip Blank** Lab Sample ID: 500-107349-3

No Detections.

### **Method Summary**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CHI
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 Sampling

TestAmerica Job ID: 500-107349-2

Lab Sample ID	Client Sample ID	Matrix	Collected Received
500-107349-1	Influent	Water	02/08/16 08:05 02/09/16 09:10
500-107349-2	Effluent	Water	02/08/16 08:10 02/09/16 09:10
500-107349-3	Trip Blank	Water	02/08/16 00:00 02/09/16 09:10

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

Lab Sample ID: 500-107349-1

Matrix: Water

Client Sample ID: Influent Date Collected: 02/08/16 08:05 Date Received: 02/09/16 09:10

Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.73		2.5	0.73	ug/L			02/14/16 07:53	5
Bromoform	<2.2		5.0	2.2	ug/L			02/14/16 07:53	5
Carbon tetrachloride	<1.9		5.0	1.9	ug/L			02/14/16 07:53	5
Chloroform	<1.9		5.0	1.9	ug/L			02/14/16 07:53	5
cis-1,2-Dichloroethene	<2.0		5.0	2.0	ug/L			02/14/16 07:53	5
Dichlorobromomethane	<1.9		5.0	1.9	ug/L			02/14/16 07:53	5
1,2-Dichloroethane	<2.0		5.0	2.0	ug/L			02/14/16 07:53	5
1,1-Dichloroethene	<2.0		5.0	2.0	ug/L			02/14/16 07:53	5
Ethylbenzene	<0.92		2.5	0.92	ug/L			02/14/16 07:53	5
Methyl bromide	<3.2		10	3.2	ug/L			02/14/16 07:53	5
Methyl chloride	<1.6		5.0	1.6	ug/L			02/14/16 07:53	5
Methyl tert-butyl ether	<2.0		5.0	2.0	ug/L			02/14/16 07:53	5
1,1,2,2-Tetrachloroethane	<2.0		5.0	2.0	ug/L			02/14/16 07:53	5
Toluene	<0.76		2.5	0.76	ug/L			02/14/16 07:53	5
trans-1,2-Dichloroethene	<1.7		5.0	1.7	ug/L			02/14/16 07:53	5
1,1,1-Trichloroethane	<1.9		5.0	1.9	ug/L			02/14/16 07:53	5
1,1,2-Trichloroethane	<1.8		5.0	1.8	ug/L			02/14/16 07:53	5
Trichloroethene	<0.82		2.5	0.82	ug/L			02/14/16 07:53	5
Vinyl chloride	<1.0		2.5	1.0	ug/L			02/14/16 07:53	5
Xylenes, Total	<2.0		5.0	2.0	ug/L			02/14/16 07:53	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 120					02/14/16 07:53	5
1,2-Dichloroethane-d4 (Surr)	96		75 - 125					02/14/16 07:53	5
Toluene-d8 (Surr)	102		75 - 120					02/14/16 07:53	5

Method: 624 - Volatile Orga Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	2300		50	19	ug/L			02/14/16 08:20	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 120					02/14/16 08:20	50
1,2-Dichloroethane-d4 (Surr)	99		75 <sub>-</sub> 125					02/14/16 08:20	50
.,,									

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<0.024	0.048	0.024	ug/L		02/11/16 13:20	02/24/16 19:36	1
Benzo[a]pyrene	<0.024	0.048	0.024	ug/L		02/11/16 13:20	02/24/16 19:36	1
Benzo[b]fluoranthene	<0.024	0.048	0.024	ug/L		02/11/16 13:20	02/24/16 19:36	1
Benzo[g,h,i]perylene	<0.048	0.096	0.048	ug/L		02/11/16 13:20	02/24/16 19:36	1
Benzo[k]fluoranthene	<0.048	0.096	0.048	ug/L		02/11/16 13:20	02/24/16 19:36	1
Chrysene	<0.048	0.096	0.048	ug/L		02/11/16 13:20	02/24/16 19:36	1
Dibenz(a,h)anthracene	<0.024	0.048	0.024	ug/L		02/11/16 13:20	02/24/16 19:36	1
Fluoranthene	<0.048	0.096	0.048	ug/L		02/11/16 13:20	02/24/16 19:36	1
Indeno[1,2,3-cd]pyrene	<0.024	0.048	0.024	ug/L		02/11/16 13:20	02/24/16 19:36	1
Naphthalene	<0.048	0.096	0.048	ug/L		02/11/16 13:20	02/24/16 19:36	1
Phenanthrene	<0.048	0.096	0.048	ug/L		02/11/16 13:20	02/24/16 19:36	1
Pyrene	<0.048	0.096	0.048	ug/L		02/11/16 13:20	02/24/16 19:36	1

TestAmerica Chicago

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Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

Client Sample ID: Influent Lab Sample ID: 500-107349-1

Date Collected: 02/08/16 08:05

Date Received: 02/09/16 09:10

Matrix: Water

Surrogate	%Recovery Qualit	fier Limits		Prepared	Analyzed	Dil Fac
2-Fluorophenol	40	29 - 120		02/11/16 13:20	02/24/16 19:36	1
Nitrobenzene-d5	28	27 - 120		02/11/16 13:20	02/24/16 19:36	1
Phenol-d5	21	10 - 120		02/11/16 13:20	02/24/16 19:36	1
Terphenyl-d14	35	13 - 120		02/11/16 13:20	02/24/16 19:36	1
2,4,6-Tribromophenol	42	10 - 120		02/11/16 13:20	02/24/16 19:36	1
2-Fluorobiphenyl (Surr)	38	10 - 120		02/11/16 13:20	02/24/16 19:36	1
General Chemistry						
Analyte	Result Qualif	ier RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<2.0	2.0	2.0 mg/L		02/10/16 06:57	1

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Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

Lab Sample ID: 500-107349-2

**Matrix: Water** 

**Client Sample ID: Effluent** Date Collected: 02/08/16 08:10 Date Received: 02/09/16 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			02/14/16 07:27	1
Bromoform	<0.45		1.0	0.45	ug/L			02/14/16 07:27	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			02/14/16 07:27	1
Chloroform	<0.37		1.0	0.37	ug/L			02/14/16 07:27	1
cis-1,2-Dichloroethene	19		1.0	0.41	ug/L			02/14/16 07:27	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			02/14/16 07:27	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			02/14/16 07:27	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			02/14/16 07:27	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			02/14/16 07:27	1
Methyl bromide	<0.65		2.0	0.65	ug/L			02/14/16 07:27	1
Methyl chloride	<0.32		1.0	0.32	ug/L			02/14/16 07:27	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			02/14/16 07:27	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			02/14/16 07:27	1
Tetrachloroethene	43		1.0	0.37	ug/L			02/14/16 07:27	1
Toluene	<0.15		0.50	0.15	ug/L			02/14/16 07:27	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			02/14/16 07:27	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			02/14/16 07:27	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			02/14/16 07:27	1
Trichloroethene	6.4		0.50	0.16	ug/L			02/14/16 07:27	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			02/14/16 07:27	1
Xylenes, Total	<0.40		1.0	0.40	ug/L			02/14/16 07:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 120			-		02/14/16 07:27	1
1,2-Dichloroethane-d4 (Surr)	96		75 - 125					02/14/16 07:27	1
Toluene-d8 (Surr)	100		75 - 120					02/14/16 07:27	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<0.024	*	0.048	0.024	ug/L		02/11/16 13:20	02/24/16 20:00	1
Benzo[a]pyrene	<0.024		0.048	0.024	ug/L		02/11/16 13:20	02/24/16 20:00	1
Benzo[b]fluoranthene	<0.024		0.048	0.024	ug/L		02/11/16 13:20	02/24/16 20:00	1
Benzo[g,h,i]perylene	<0.048		0.096	0.048	ug/L		02/11/16 13:20	02/24/16 20:00	1
Benzo[k]fluoranthene	<0.048		0.096	0.048	ug/L		02/11/16 13:20	02/24/16 20:00	1
Chrysene	<0.048	*	0.096	0.048	ug/L		02/11/16 13:20	02/24/16 20:00	1
Dibenz(a,h)anthracene	<0.024		0.048	0.024	ug/L		02/11/16 13:20	02/24/16 20:00	1
Fluoranthene	<0.048		0.096	0.048	ug/L		02/11/16 13:20	02/24/16 20:00	1
Indeno[1,2,3-cd]pyrene	<0.024		0.048	0.024	ug/L		02/11/16 13:20	02/24/16 20:00	1
Naphthalene	<0.048		0.096	0.048	ug/L		02/11/16 13:20	02/24/16 20:00	1
Phenanthrene	<0.048		0.096	0.048	ug/L		02/11/16 13:20	02/24/16 20:00	1
Pyrene	<0.048	*	0.096	0.048	ug/L		02/11/16 13:20	02/24/16 20:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorophenol	36		29 - 120				02/11/16 13:20	02/24/16 20:00	1
Nitrobenzene-d5	51		27 - 120				02/11/16 13:20	02/24/16 20:00	1
Phenol-d5	30		10 - 120				02/11/16 13:20	02/24/16 20:00	1
Terphenyl-d14	24	*	13 - 120				02/11/16 13:20	02/24/16 20:00	1
2,4,6-Tribromophenol	28		10 - 120				02/11/16 13:20	02/24/16 20:00	1
2-Fluorobiphenyl (Surr)	55		10 - 120				02/11/16 13:20	02/24/16 20:00	1

TestAmerica Chicago

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2/25/2016

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

Lab Sample ID: 500-107349-2

**Matrix: Water** 

Client Sample ID: Effluent Date Collected: 02/08/16 08:10 Date Received: 02/09/16 09:10

General Chemistry Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<2.0	2.0	2.0 mg/L			02/10/16 06:59	1

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Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

Lab Sample ID: 500-107349-3

**Matrix: Water** 

Client Sample ID: Trip Blank Date Collected: 02/08/16 00:00

Date Received: 02/09/16 09:10

1,2-Dichloroethane-d4 (Surr)

Toluene-d8 (Surr)

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15	0.50	0.15	ug/L			02/14/16 02:06	1
Bromoform	<0.45	1.0	0.45	ug/L			02/14/16 02:06	1
Carbon tetrachloride	<0.38	1.0	0.38	ug/L			02/14/16 02:06	1
Chloroform	<0.37	1.0	0.37	ug/L			02/14/16 02:06	1
cis-1,2-Dichloroethene	<0.41	1.0	0.41	ug/L			02/14/16 02:06	1
Dichlorobromomethane	<0.37	1.0	0.37	ug/L			02/14/16 02:06	1
1,2-Dichloroethane	<0.39	1.0	0.39	ug/L			02/14/16 02:06	1
1,1-Dichloroethene	<0.39	1.0	0.39	ug/L			02/14/16 02:06	1
Ethylbenzene	<0.18	0.50	0.18	ug/L			02/14/16 02:06	1
Methyl bromide	<0.65	2.0	0.65	ug/L			02/14/16 02:06	1
Methyl chloride	<0.32	1.0	0.32	ug/L			02/14/16 02:06	1
Methyl tert-butyl ether	<0.39	1.0	0.39	ug/L			02/14/16 02:06	1
1,1,2,2-Tetrachloroethane	<0.40	1.0	0.40	ug/L			02/14/16 02:06	1
Tetrachloroethene	<0.37	1.0	0.37	ug/L			02/14/16 02:06	1
Toluene	<0.15	0.50	0.15	ug/L			02/14/16 02:06	1
trans-1,2-Dichloroethene	<0.35	1.0	0.35	ug/L			02/14/16 02:06	1
1,1,1-Trichloroethane	<0.38	1.0	0.38	ug/L			02/14/16 02:06	1
1,1,2-Trichloroethane	<0.35	1.0	0.35	ug/L			02/14/16 02:06	1
Trichloroethene	<0.16	0.50	0.16	ug/L			02/14/16 02:06	1
Vinyl chloride	<0.20	0.50	0.20	ug/L			02/14/16 02:06	1
Xylenes, Total	<0.40	1.0	0.40	ug/L			02/14/16 02:06	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96	75 - 120					02/14/16 02:06	1

75 - 125

75 - 120

96

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2/25/2016

02/14/16 02:06

02/14/16 02:06

### **Definitions/Glossary**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

#### **Qualifiers**

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

Qualifier Qualifier Description

\* ISTD response or retention time outside acceptable limits

### **Glossary**

Abbreviation	These commonly used abbreviations may or may not be present in this report.					
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis					
%R	Percent Recovery					
CFL	Contains Free Liquid					
CNF	Contains no Free Liquid					
DER	Duplicate error ratio (normalized absolute difference)					
Dil Fac	Dilution Factor					
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample					

DL, IVA, IVL, IIV	indicates a Dilution, ite-analysis, ite-extraction, or additional limital metals/amon
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration

MDL Method Detection Limit
ML Minimum Level (Dioxin)
NC Not Calculated

ND Not detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC Quality Control RER Relative error ratio

RL Reporting Limit or Requested Limit (Radiochemistry)

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

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TestAmerica Chicago

### **QC Association Summary**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

### **GC/MS VOA**

### Analysis Batch: 322715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-107349-1	Influent	Total/NA	Water	624	
500-107349-1 - DL	Influent	Total/NA	Water	624	
500-107349-2	Effluent	Total/NA	Water	624	
500-107349-2 MS	Effluent	Total/NA	Water	624	
500-107349-2 MSD	Effluent	Total/NA	Water	624	
500-107349-3	Trip Blank	Total/NA	Water	624	
LCS 500-322715/4	Lab Control Sample	Total/NA	Water	624	
MB 500-322715/6	Method Blank	Total/NA	Water	624	

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

#### **Prep Batch: 317461**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-107349-1	Influent	Total/NA	Water	625	
500-107349-2	Effluent	Total/NA	Water	625	
LCS 490-317461/2-A	Lab Control Sample	Total/NA	Water	625	
MB 490-317461/1-A	Method Blank	Total/NA	Water	625	

### **Analysis Batch: 319026**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-107349-1	Influent	Total/NA	Water	625 SIM	317461
500-107349-2	Effluent	Total/NA	Water	625 SIM	317461
LCS 490-317461/2-A	Lab Control Sample	Total/NA	Water	625 SIM	317461
MB 490-317461/1-A	Method Blank	Total/NA	Water	625 SIM	317461

### **General Chemistry**

### **Analysis Batch: 322279**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-107349-1	Influent	Total/NA	Water	SM 5210B	
500-107349-2	Effluent	Total/NA	Water	SM 5210B	
LCS 500-322279/2	Lab Control Sample	Total/NA	Water	SM 5210B	
USB 500-322279/1	Method Blank	Total/NA	Water	SM 5210B	

Project/Site: MadisonKipp GETS/SVE Sampling

Client: Madison-Kipp Corporation

TestAmerica Job ID: 500-107349-2

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

**Matrix: Water** Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		BFB	12DCE	TOL					
Lab Sample ID	Client Sample ID	(75-120)	(75-125)	(75-120)					
500-107349-1	Influent	99	96	102					
500-107349-1 - DL	Influent	98	99	99					
500-107349-2	Effluent	98	96	100					
500-107349-2 MS	Effluent	100	96	102					
500-107349-2 MSD	Effluent	100	99	103					
500-107349-3	Trip Blank	96	96	100					
LCS 500-322715/4	Lab Control Sample	98	99	101					
MB 500-322715/6	Method Blank	97	99	99					

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

TOL = Toluene-d8 (Surr)

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

**Matrix: Water** Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
		2FP	NBZ	PHL	TPH	TBP	FBP	
Lab Sample ID	Client Sample ID	(29-120)	(27-120)	(10-120)	(13-120)	(10-120)	(10-120)	
500-107349-1	Influent	40	28	21	35	42	38	
500-107349-2	Effluent	36	51	30	24 *	28	55	
LCS 490-317461/2-A	Lab Control Sample	77	70	51	85	73	75	
MB 490-317461/1-A	Method Blank	68	65	42	72	59	76	

#### **Surrogate Legend**

2FP = 2-Fluorophenol

NBZ = Nitrobenzene-d5

PHL = Phenol-d5

TPH = Terphenyl-d14

TBP = 2,4,6-Tribromophenol

FBP = 2-Fluorobiphenyl (Surr)

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TestAmerica Job ID: 500-107349-2

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

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

Lab Sample ID: MB 500-322715/6

**Matrix: Water** 

Analysis Batch: 322715

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

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			02/14/16 01:39	1
Bromoform	<0.45		1.0	0.45	ug/L			02/14/16 01:39	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			02/14/16 01:39	1
Chloroform	<0.37		1.0	0.37	ug/L			02/14/16 01:39	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			02/14/16 01:39	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			02/14/16 01:39	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			02/14/16 01:39	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			02/14/16 01:39	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			02/14/16 01:39	1
Methyl bromide	<0.65		2.0	0.65	ug/L			02/14/16 01:39	1
Methyl chloride	<0.32		1.0	0.32	ug/L			02/14/16 01:39	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			02/14/16 01:39	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			02/14/16 01:39	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			02/14/16 01:39	1
Toluene	<0.15		0.50	0.15	ug/L			02/14/16 01:39	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			02/14/16 01:39	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			02/14/16 01:39	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			02/14/16 01:39	1
Trichloroethene	<0.16		0.50	0.16	ug/L			02/14/16 01:39	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			02/14/16 01:39	1
Xylenes, Total	<0.40		1.0	0.40	ug/L			02/14/16 01:39	1
1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene trans-1,2-Dichloroethene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Vinyl chloride	<0.40 <0.37 <0.15 <0.35 <0.38 <0.35 <0.16 <0.20		1.0 1.0 0.50 1.0 1.0 1.0 0.50	0.40 0.37 0.15 0.35 0.38 0.35 0.16	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L			02/14/16 01:39 02/14/16 01:39 02/14/16 01:39 02/14/16 01:39 02/14/16 01:39 02/14/16 01:39 02/14/16 01:39	1 1 1 1 1 1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyze	d Dil Fac	
4-Bromofluorobenzene (Surr)	97		75 - 120	02/14/16 01	:39 1	
1,2-Dichloroethane-d4 (Surr)	99		75 - 125	02/14/16 01	:39 1	
Toluene-d8 (Surr)	99		75 - 120	02/14/16 01	:39 1	

Lab Sample ID: LCS 500-322715/4

**Matrix: Water** 

**Analysis Batch: 322715** 

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

Analysis Daton. 3227 13	<u> </u>						
	Spike		LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	50.0	46.6		ug/L		93	37 - 151
Bromoform	50.0	48.9		ug/L		98	45 - 169
Carbon tetrachloride	50.0	42.1		ug/L		84	70 - 140
Chloroform	50.0	44.9		ug/L		90	51 <sub>-</sub> 138
cis-1,2-Dichloroethene	50.0	47.7		ug/L		95	70 - 130
Dichlorobromomethane	50.0	47.3		ug/L		95	35 - 155
1,2-Dichloroethane	50.0	47.0		ug/L		94	49 - 155
1,1-Dichloroethene	50.0	45.7		ug/L		91	10 - 234
Ethylbenzene	50.0	46.3		ug/L		93	37 - 162
Methyl bromide	50.0	40.5		ug/L		81	10 - 242
Methyl chloride	50.0	47.6		ug/L		95	10 - 273
m&p-Xylene	50.0	45.5		ug/L		91	
o-Xylene	50.0	46.8		ug/L		94	
1,1,2,2-Tetrachloroethane	50.0	48.3		ug/L		97	46 - 157
Tetrachloroethene	50.0	45.0		ug/L		90	64 - 148
Toluene	50.0	42.2		ug/L		84	47 - 150

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TestAmerica Job ID: 500-107349-2

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

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

Lab Sample ID: LCS 500-322715/4

**Matrix: Water** 

Analysis Batch: 322715

**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	44.7		ug/L		89	54 - 156	
1,1,1-Trichloroethane	50.0	43.2		ug/L		86	52 - 162	
1,1,2-Trichloroethane	50.0	49.9		ug/L		100	52 - 150	
Trichloroethene	50.0	47.1		ug/L		94	71 - 157	
Vinyl chloride	50.0	48.3		ug/L		97	10 - 251	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		75 - 120
1,2-Dichloroethane-d4 (Surr)	99		75 - 125
Toluene-d8 (Surr)	101		75 - 120

Lab Sample ID: 500-107349-2 MS

**Client Sample ID: Effluent** 

Prep Type: Total/NA

**Matrix: Water** Analysis Batch: 322715

•	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.15		50.0	49.0		ug/L		98	37 - 151	
Bromoform	<0.45		50.0	49.1		ug/L		98	45 - 169	
Carbon tetrachloride	<0.38		50.0	45.1		ug/L		90	70 - 140	
Chloroform	<0.37		50.0	46.4		ug/L		93	51 - 138	
cis-1,2-Dichloroethene	19		50.0	68.2		ug/L		99	70 - 130	
Dichlorobromomethane	<0.37		50.0	48.9		ug/L		98	35 - 155	
1,2-Dichloroethane	<0.39		50.0	48.7		ug/L		97	49 - 155	
1,1-Dichloroethene	<0.39		50.0	49.2		ug/L		98	10 - 234	
Ethylbenzene	<0.18		50.0	48.7		ug/L		97	37 - 162	
Methyl bromide	<0.65		50.0	42.8		ug/L		86	10 - 242	
Methyl chloride	<0.32		50.0	46.9		ug/L		94	10 - 273	
m&p-Xylene	<0.40		50.0	48.4		ug/L		97		
o-Xylene	<0.22		50.0	49.7		ug/L		99		
1,1,2,2-Tetrachloroethane	<0.40		50.0	52.6		ug/L		105	46 - 157	
Tetrachloroethene	43		50.0	89.6		ug/L		92	64 - 148	
Toluene	<0.15		50.0	44.9		ug/L		90	47 - 150	
trans-1,2-Dichloroethene	< 0.35		50.0	47.5		ug/L		95	54 - 156	
1,1,1-Trichloroethane	<0.38		50.0	45.8		ug/L		92	52 - 162	
1,1,2-Trichloroethane	<0.35		50.0	53.5		ug/L		107	52 - 150	
Trichloroethene	6.4		50.0	52.3		ug/L		92	71 - 157	
Vinyl chloride	<0.20		50.0	46.5		ug/L		93	10 - 251	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		75 - 120
1,2-Dichloroethane-d4 (Surr)	96		75 - 125
Toluene-d8 (Surr)	102		75 - 120

TestAmerica Job ID: 500-107349-2

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

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

Lab Sample ID: 500-107349-2 MSD

**Matrix: Water** 

**Analysis Batch: 322715** 

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 Benzene 49.0 ug/L 98 37 - 151 0 20 50.0 Bromoform < 0.45 49.4 ug/L 99 45 - 169 20 1 Carbon tetrachloride < 0.38 50.0 45.4 ug/L 91 70 - 140 20 < 0.37 20 Chloroform 50.0 47.8 ug/L 96 51 - 138cis-1,2-Dichloroethene 19 50.0 69.5 ug/L 101 70 - 130 2 20 Dichlorobromomethane <0.37 50.0 48.6 ug/L 97 35 - 155 20 50.0 97 49 - 155 20 1,2-Dichloroethane < 0.39 48.7 ug/L 0 1,1-Dichloroethene 50.0 48.0 96 10 - 234 20 < 0.39 ug/L 50.0 48.6 97 37 - 162 20 Ethylbenzene <0.18 ug/L O Methyl bromide < 0.65 50.0 42.1 ug/L 84 10 - 242 2 20 Methyl chloride 50.0 48.2 ug/L 3 20 < 0.32 96 10 - 273m&p-Xylene < 0.40 50.0 47.5 ug/L 95 2 o-Xylene < 0.22 50.0 49.1 ug/L 98 1 1,1,2,2-Tetrachloroethane < 0.40 50.0 53.2 ug/L 106 46 - 157 20 Tetrachloroethene 43 50.0 91.5 ug/L 96 64 - 148 2 20 47 - 150 Toluene 50.0 44.6 89 20 <0.15 ug/L 50.0 trans-1,2-Dichloroethene < 0.35 46.9 ug/L 94 54 - 156 20 1,1,1-Trichloroethane 46.8 94 < 0.38 50.0 ug/L 52 - 162 2 20 1,1,2-Trichloroethane < 0.35 50.0 52.9 ug/L 106 52 - 150 20 Trichloroethene 6.4 50.0 51.8 ug/L 91 71 - 157 20 Vinyl chloride <0.20 50.0 48.2 ug/L 96 10 - 251 20

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		75 - 120
1,2-Dichloroethane-d4 (Surr)	99		75 - 125
Toluene-d8 (Surr)	103		75 - 120

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

Lab Sample ID: MB 490-317461/1-A

**Matrix: Water** 

**Analysis Batch: 319026** 

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 317461

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<0.025		0.050	0.025	ug/L		02/11/16 13:20	02/24/16 18:46	1
Benzo[a]pyrene	<0.025		0.050	0.025	ug/L		02/11/16 13:20	02/24/16 18:46	1
Benzo[b]fluoranthene	<0.025		0.050	0.025	ug/L		02/11/16 13:20	02/24/16 18:46	1
Benzo[g,h,i]perylene	<0.050		0.10	0.050	ug/L		02/11/16 13:20	02/24/16 18:46	1
Benzo[k]fluoranthene	<0.050		0.10	0.050	ug/L		02/11/16 13:20	02/24/16 18:46	1
Chrysene	<0.050		0.10	0.050	ug/L		02/11/16 13:20	02/24/16 18:46	1
Dibenz(a,h)anthracene	<0.025		0.050	0.025	ug/L		02/11/16 13:20	02/24/16 18:46	1
Fluoranthene	<0.050		0.10	0.050	ug/L		02/11/16 13:20	02/24/16 18:46	1
Indeno[1,2,3-cd]pyrene	<0.025		0.050	0.025	ug/L		02/11/16 13:20	02/24/16 18:46	1
Naphthalene	<0.050		0.10	0.050	ug/L		02/11/16 13:20	02/24/16 18:46	1
Phenanthrene	<0.050		0.10	0.050	ug/L		02/11/16 13:20	02/24/16 18:46	1
Pyrene	<0.050		0.10	0.050	ug/L		02/11/16 13:20	02/24/16 18:46	1

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Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

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

MR MR

Lab Sample ID: MB 490-317461/1-A

**Matrix: Water** 

**Analysis Batch: 319026** 

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

Prep Batch: 317461

	IVI D IVI	ID				
Surrogate	%Recovery Q	ualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	68		29 - 120	02/11/16 13:20	02/24/16 18:46	1
Nitrobenzene-d5	65		27 - 120	02/11/16 13:20	02/24/16 18:46	1
Phenol-d5	42		10 - 120	02/11/16 13:20	02/24/16 18:46	1
Terphenyl-d14	72		13 - 120	02/11/16 13:20	02/24/16 18:46	1
2,4,6-Tribromophenol	59		10 - 120	02/11/16 13:20	02/24/16 18:46	1
2-Fluorobiphenyl (Surr)	76		10 - 120	02/11/16 13:20	02/24/16 18:46	1

Lab Sample ID: LCS 490-317461/2-A

**Matrix: Water** 

Analysis Batch: 319026

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 317461

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	0.800	0.688		ug/L		86	33 - 143
Benzo[a]pyrene	0.800	0.640		ug/L		80	17 - 163
Benzo[b]fluoranthene	0.800	0.747		ug/L		93	24 - 159
Benzo[g,h,i]perylene	0.800	0.695		ug/L		87	10 - 219
Benzo[k]fluoranthene	0.800	0.706		ug/L		88	11 - 162
Chrysene	0.800	0.753		ug/L		94	17 - 168
Dibenz(a,h)anthracene	0.800	0.465		ug/L		58	10 - 227
Fluoranthene	0.800	0.730		ug/L		91	26 - 137
Indeno[1,2,3-cd]pyrene	0.800	0.471		ug/L		59	10 - 171
Naphthalene	0.800	0.653		ug/L		82	21 - 133
Phenanthrene	0.800	0.632		ug/L		79	54 - 120
Pyrene	0.800	0.691		ug/L		86	52 - 115

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorophenol	77		29 - 120
Nitrobenzene-d5	70		27 - 120
Phenol-d5	51		10 - 120
Terphenyl-d14	85		13 - 120
2,4,6-Tribromophenol	73		10 - 120
2-Fluorobiphenyl (Surr)	75		10 - 120

#### Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 500-322279/1

**Matrix: Water** 

Analysis Batch: 322279

Biochemical Oxygen Demand

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

**Client Sample ID: Lab Control Sample** 

 USB
 USB

 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 <2.0</td>
 2.0
 2.0
 mg/L
 02/10/16 06:55
 1

Lab Sample ID: LCS 500-322279/2

**Matrix: Water** 

Analysis Batch: 322279

Analysis Batch. 022270	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	
Biochemical Oxygen Demand	198	207	mg/L		104	85 - 115	

TestAmerica Chicago

**Prep Type: Total/NA** 

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### **Lab Chronicle**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

Lab Sample ID: 500-107349-1

**Matrix: Water** 

**Client Sample ID: Influent** Date Collected: 02/08/16 08:05 Date Received: 02/09/16 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	624		5	322715	02/14/16 07:53	TCT	TAL CHI
Total/NA	Analysis	624	DL	50	322715	02/14/16 08:20	TCT	TAL CHI
Total/NA	Prep	625			317461	02/11/16 13:20	MRM	TAL NSH
Total/NA	Analysis	625 SIM		1	319026	02/24/16 19:36	WDS	TAL NSH
Total/NA	Analysis	SM 5210B		1	322279		MAN	TAL CHI
					(Start)	02/10/16 06:57		
					(End)	02/10/16 06:59		

Lab Sample ID: 500-107349-2 **Client Sample ID: Effluent** 

Date Collected: 02/08/16 08:10 **Matrix: Water** 

Date Received: 02/09/16 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	322715	02/14/16 07:27	TCT	TAL CHI
Total/NA	Prep	625			317461	02/11/16 13:20	MRM	TAL NSH
Total/NA	Analysis	625 SIM		1	319026	02/24/16 20:00	WDS	TAL NSH
Total/NA	Analysis	SM 5210B		1	322279		MAN	TAL CHI
					(Start)	02/10/16 06:59		
					(End)	02/10/16 07:01		

**Client Sample ID: Trip Blank** Lab Sample ID: 500-107349-3

Date Collected: 02/08/16 00:00 **Matrix: Water** 

Date Received: 02/09/16 09:10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	322715	02/14/16 02:06	TCT	TAL CHI

#### **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

TestAmerica Chicago

### **Certification Summary**

Client: Madison-Kipp Corporation

Project/Site: MadisonKipp GETS/SVE Sampling

TestAmerica Job ID: 500-107349-2

### **Laboratory: TestAmerica Chicago**

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	<b>Expiration Date</b>
Wisconsin	State Program	5	999580010	08-31-16

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

Authority	Program	<b>EPA Region</b>	Certification ID	<b>Expiration Date</b>
Wisconsin	State Program	5	998020430	08-31-16

# <u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TI

A – Air

2417 Bond Street, University Park, IL 6048 Phone: 708.534.5200 Fax: 708.534.5



500-107349 COC

1	(optional)	(optional)
	Report To	Bill To
	Contact: Alina Satkoski	contact: Accounts Payable
	l —	Company: MKC
	Address: 20, waubesa St.	Address: 201 Waubesa 54.
ļ	Address: Madison WI	Address: MW BCM, WI 5370-
	Phone: 108-242-5200	Phone:
	Fax:	Fax:

Chain	of	Custody	Record
Lah	loh #:	500-1073	349

Lab Job #:	070	
Chain of Custody Number:		

Page	<b>J</b>	of	1
· -			

Temperature  $^{\circ}$ C of Cooler:  $\underline{53}$ 

			E-Mai	1: (15 at)	205/21	001	naolisa	n-Kipp.	COM/Refere	ice#	037	 	I	emperature *C	of Cooler:
Client	KC	Client Project #			Preserva			7	7	2					Preservative Key  1. HCL, Cool to 4°
Sampler	GETS   SVE Southern Survey State   Survey Su	Lab Project #			Paramo	eter	VOC	なる	N 18 mide	1 + 2 mase					2. H2SO4, Cool to 4° 3. HN03, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
-Lab ID MS/MSD			Samp Date	Time	# of Containers	Matrix	<i>&gt;</i>	2	35	ā					Comments
	Influent Effluent Trip Blan	a	18116 1816	805	91	N	$\chi$	$\chi$	$\lambda$	$\mathcal{X}_{-}$		 , <u></u>			For VOC +
2	Effluent	a	18/0	810	9	W	$\lambda$	X_		1				***	PAH Sec
3	Trip Blar	1k			10	N	$\lambda_{-}$								attached
												 			anaryte list
								•							•
_								,							
									* * * * * * * * * * * * * * * * * * * *						
			_		-										
															a
	Time Bending (Business Dave)				0							 			

jurnaround Time Require				Sample Dispo	ISal					
1 Day 2 Days Requested Due Date	5 Days 7 Days	_ 10 Days	Other	Return	n to Client	Disposal by Lab Archive for	Months (A fee m	ay be assessed if samples	are retained longer than	1 month)
Relinquished By	WKOW W	ike		Time	Received By William	looth CAI	2/9/16	Tim 9910	Lab Courier	
Relinquished By	Company		Date	Time	Received By	Company	Date /	Time	Shipped	Fedix
Relinquished By	Company		Date	Time	Received By	Company	Date	Time	Hand Delivered	
N	/latrix Key	Client Cor	nments			Lab Comm	nents:			
WW - Wastewater	SE - Sediment									
W - Water	SO – Soil									
S – Soil	L – Leachate									
SL - Sludge	WI – Wipe									
MS - Miscellaneous	DW - Drinking Water									
OL - Oil	O – Other	1								

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	4
Toluene	624
Ethylbenzene	4
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	023 31101
Fluoranthene	i
Indeno(1,2,3-cd)pyrene	
Phenanthrene	
Pyrene	
PAHs	
Benzo(a)pyrene	625 SIM
Naphthalene	025 31101
Oil and Grease	
Oil and Grease	1664
BOD <sub>5</sub>	
BOD₅	5210B
Anions	
Chloride	300

Client: Madison-Kipp Corporation Job Number: 500-107349-2

Login Number: 107349 List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Creator. Scott, Sherri L		
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	5.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica Chicago

Client: Madison-Kipp Corporation

Job Number: 500-107349-2

Login Number: 107349 List Source: TestAmerica Nashville List Number: 2

List Creation: 02/11/16 08:38 AM

**Creator: Armstrong, Daniel** 

oreator. Armstrong, burner		
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	1.3C
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	