

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-58164-1  
Client Project/Site: MadisonKipp WI001283.0008.00006

For:  
ARCADIS U.S., Inc.  
126 North Jefferson Street  
Suite 400  
Milwaukee, Wisconsin 53202

Attn: Rebecca Robbennolt



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Authorized for release by:  
6/20/2013 3:38:17 PM

Sandie Fredrick, Project Manager I  
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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Detection Summary . . . . .	4
Method Summary . . . . .	5
Sample Summary . . . . .	6
Client Sample Results . . . . .	7
Definitions . . . . .	10
QC Association . . . . .	11
Surrogate Summary . . . . .	12
QC Sample Results . . . . .	13
Chronicle . . . . .	15
Certification Summary . . . . .	17
Chain of Custody . . . . .	18
Receipt Checklists . . . . .	19

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

**Job ID: 500-58164-1**

**Laboratory: TestAmerica Chicago**

## Narrative

### Job Narrative 500-58164-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 6/19/2013 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

#### GC Semi VOA

Method(s) 8082: The following sample was diluted to bring the concentration of target analytes within the calibration range: MKC-1D-Base (500-58164-1). Elevated reporting limits (RLs) are provided.

Method(s) 8082: The laboratory control sample (LCS) for batch 190355 recovered outside control limits for the following analytes: AR1016. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. Equipment Blank #1 (500-58164-4), Equipment Blank #2 (500-58164-5)

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.



# Detection Summary

Client: ARCADIS U.S., Inc.  
Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

## Client Sample ID: MKC-1D-Base

Lab Sample ID: 500-58164-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	640		41	16	ug/Kg	2	☼	8082	Total/NA
PCB-1254	340		41	8.9	ug/Kg	2	☼	8082	Total/NA

## Client Sample ID: MKC-4D-Base

Lab Sample ID: 500-58164-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	23		20	7.8	ug/Kg	1	☼	8082	Total/NA
PCB-1254	19	J	20	4.3	ug/Kg	1	☼	8082	Total/NA

## Client Sample ID: MKC-5D-Base

Lab Sample ID: 500-58164-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	210		21	8.1	ug/Kg	1	☼	8082	Total/NA
PCB-1254	140		21	4.4	ug/Kg	1	☼	8082	Total/NA

## Client Sample ID: Equipment Blank #1

Lab Sample ID: 500-58164-4

No Detections.

## Client Sample ID: Equipment Blank #2

Lab Sample ID: 500-58164-5

No Detections.

## Client Sample ID: MKC-66D-Base

Lab Sample ID: 500-58164-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	89		20	7.8	ug/Kg	1	☼	8082	Total/NA
PCB-1254	61		20	4.3	ug/Kg	1	☼	8082	Total/NA

## Client Sample ID: MKC-67D-Base

Lab Sample ID: 500-58164-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	230		21	8.2	ug/Kg	1	☼	8082	Total/NA
PCB-1254	110		21	4.5	ug/Kg	1	☼	8082	Total/NA

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: ARCADIS U.S., Inc.  
Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

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

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# Sample Summary

Client: ARCADIS U.S., Inc.  
Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-58164-1	MKC-1D-Base	Solid	06/18/13 15:06	06/19/13 09:50
500-58164-2	MKC-4D-Base	Solid	06/18/13 13:18	06/19/13 09:50
500-58164-3	MKC-5D-Base	Solid	06/18/13 13:15	06/19/13 09:50
500-58164-4	Equipment Blank #1	Water	06/18/13 16:20	06/19/13 09:50
500-58164-5	Equipment Blank #2	Water	06/18/13 16:21	06/19/13 09:50
500-58164-6	MKC-66D-Base	Solid	06/18/13 15:38	06/19/13 09:50
500-58164-7	MKC-67D-Base	Solid	06/18/13 15:41	06/19/13 09:50



# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

## Client Sample ID: MKC-1D-Base

Lab Sample ID: 500-58164-1

Date Collected: 06/18/13 15:06

Matrix: Solid

Date Received: 06/19/13 09:50

Percent Solids: 79.5

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<15		41	15	ug/Kg	☼	06/19/13 17:07	06/20/13 09:57	2
PCB-1221	<18		41	18	ug/Kg	☼	06/19/13 17:07	06/20/13 09:57	2
PCB-1232	<18		41	18	ug/Kg	☼	06/19/13 17:07	06/20/13 09:57	2
PCB-1242	<14		41	14	ug/Kg	☼	06/19/13 17:07	06/20/13 09:57	2
<b>PCB-1248</b>	<b>640</b>		41	16	ug/Kg	☼	06/19/13 17:07	06/20/13 09:57	2
<b>PCB-1254</b>	<b>340</b>		41	8.9	ug/Kg	☼	06/19/13 17:07	06/20/13 09:57	2
PCB-1260	<20		41	20	ug/Kg	☼	06/19/13 17:07	06/20/13 09:57	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	77		50 - 116				06/19/13 17:07	06/20/13 09:57	2
DCB Decachlorobiphenyl	111		48 - 142				06/19/13 17:07	06/20/13 09:57	2

## Client Sample ID: MKC-4D-Base

Lab Sample ID: 500-58164-2

Date Collected: 06/18/13 13:18

Matrix: Solid

Date Received: 06/19/13 09:50

Percent Solids: 80.5

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<7.0		20	7.0	ug/Kg	☼	06/19/13 17:07	06/20/13 03:56	1
PCB-1221	<8.7		20	8.7	ug/Kg	☼	06/19/13 17:07	06/20/13 03:56	1
PCB-1232	<8.7		20	8.7	ug/Kg	☼	06/19/13 17:07	06/20/13 03:56	1
PCB-1242	<6.5		20	6.5	ug/Kg	☼	06/19/13 17:07	06/20/13 03:56	1
<b>PCB-1248</b>	<b>23</b>		20	7.8	ug/Kg	☼	06/19/13 17:07	06/20/13 03:56	1
<b>PCB-1254</b>	<b>19 J</b>		20	4.3	ug/Kg	☼	06/19/13 17:07	06/20/13 03:56	1
PCB-1260	<9.7		20	9.7	ug/Kg	☼	06/19/13 17:07	06/20/13 03:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	65		50 - 116				06/19/13 17:07	06/20/13 03:56	1
DCB Decachlorobiphenyl	102		48 - 142				06/19/13 17:07	06/20/13 03:56	1

## Client Sample ID: MKC-5D-Base

Lab Sample ID: 500-58164-3

Date Collected: 06/18/13 13:15

Matrix: Solid

Date Received: 06/19/13 09:50

Percent Solids: 80.9

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<7.3		21	7.3	ug/Kg	☼	06/19/13 17:07	06/20/13 04:24	1
PCB-1221	<9.0		21	9.0	ug/Kg	☼	06/19/13 17:07	06/20/13 04:24	1
PCB-1232	<8.9		21	8.9	ug/Kg	☼	06/19/13 17:07	06/20/13 04:24	1
PCB-1242	<6.7		21	6.7	ug/Kg	☼	06/19/13 17:07	06/20/13 04:24	1
<b>PCB-1248</b>	<b>210</b>		21	8.1	ug/Kg	☼	06/19/13 17:07	06/20/13 04:24	1
<b>PCB-1254</b>	<b>140</b>		21	4.4	ug/Kg	☼	06/19/13 17:07	06/20/13 04:24	1
PCB-1260	<10		21	10	ug/Kg	☼	06/19/13 17:07	06/20/13 04:24	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	60		50 - 116				06/19/13 17:07	06/20/13 04:24	1
DCB Decachlorobiphenyl	81		48 - 142				06/19/13 17:07	06/20/13 04:24	1

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# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

## Client Sample ID: Equipment Blank #1

Lab Sample ID: 500-58164-4

Date Collected: 06/18/13 16:20

Matrix: Water

Date Received: 06/19/13 09:50

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.065	*	0.39	0.065	ug/L		06/19/13 13:37	06/20/13 10:12	1
PCB-1221	<0.19		0.39	0.19	ug/L		06/19/13 13:37	06/20/13 10:12	1
PCB-1232	<0.19		0.39	0.19	ug/L		06/19/13 13:37	06/20/13 10:12	1
PCB-1242	<0.19		0.39	0.19	ug/L		06/19/13 13:37	06/20/13 10:12	1
PCB-1248	<0.19		0.39	0.19	ug/L		06/19/13 13:37	06/20/13 10:12	1
PCB-1254	<0.19		0.39	0.19	ug/L		06/19/13 13:37	06/20/13 10:12	1
PCB-1260	<0.068		0.39	0.068	ug/L		06/19/13 13:37	06/20/13 10:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		50 - 120	06/19/13 13:37	06/20/13 10:12	1
DCB Decachlorobiphenyl	54		29 - 126	06/19/13 13:37	06/20/13 10:12	1

## Client Sample ID: Equipment Blank #2

Lab Sample ID: 500-58164-5

Date Collected: 06/18/13 16:21

Matrix: Water

Date Received: 06/19/13 09:50

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.063	*	0.38	0.063	ug/L		06/19/13 13:37	06/20/13 10:26	1
PCB-1221	<0.19		0.38	0.19	ug/L		06/19/13 13:37	06/20/13 10:26	1
PCB-1232	<0.19		0.38	0.19	ug/L		06/19/13 13:37	06/20/13 10:26	1
PCB-1242	<0.19		0.38	0.19	ug/L		06/19/13 13:37	06/20/13 10:26	1
PCB-1248	<0.19		0.38	0.19	ug/L		06/19/13 13:37	06/20/13 10:26	1
PCB-1254	<0.19		0.38	0.19	ug/L		06/19/13 13:37	06/20/13 10:26	1
PCB-1260	<0.066		0.38	0.066	ug/L		06/19/13 13:37	06/20/13 10:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		50 - 120	06/19/13 13:37	06/20/13 10:26	1
DCB Decachlorobiphenyl	79		29 - 126	06/19/13 13:37	06/20/13 10:26	1

## Client Sample ID: MKC-66D-Base

Lab Sample ID: 500-58164-6

Date Collected: 06/18/13 15:38

Matrix: Solid

Date Received: 06/19/13 09:50

Percent Solids: 80.3

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<7.0		20	7.0	ug/Kg	✱	06/19/13 17:07	06/20/13 04:38	1
PCB-1221	<8.7		20	8.7	ug/Kg	✱	06/19/13 17:07	06/20/13 04:38	1
PCB-1232	<8.6		20	8.6	ug/Kg	✱	06/19/13 17:07	06/20/13 04:38	1
PCB-1242	<6.5		20	6.5	ug/Kg	✱	06/19/13 17:07	06/20/13 04:38	1
<b>PCB-1248</b>	<b>89</b>		20	7.8	ug/Kg	✱	06/19/13 17:07	06/20/13 04:38	1
<b>PCB-1254</b>	<b>61</b>		20	4.3	ug/Kg	✱	06/19/13 17:07	06/20/13 04:38	1
PCB-1260	<9.7		20	9.7	ug/Kg	✱	06/19/13 17:07	06/20/13 04:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		50 - 116	06/19/13 17:07	06/20/13 04:38	1
DCB Decachlorobiphenyl	103		48 - 142	06/19/13 17:07	06/20/13 04:38	1

TestAmerica Chicago



# Client Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

**Client Sample ID: MKC-67D-Base**

**Lab Sample ID: 500-58164-7**

**Date Collected: 06/18/13 15:41**

**Matrix: Solid**

**Date Received: 06/19/13 09:50**

**Percent Solids: 79.1**

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<7.4		21	7.4	ug/Kg	☼	06/19/13 17:07	06/20/13 04:51	1
PCB-1221	<9.2		21	9.2	ug/Kg	☼	06/19/13 17:07	06/20/13 04:51	1
PCB-1232	<9.1		21	9.1	ug/Kg	☼	06/19/13 17:07	06/20/13 04:51	1
PCB-1242	<6.9		21	6.9	ug/Kg	☼	06/19/13 17:07	06/20/13 04:51	1
<b>PCB-1248</b>	<b>230</b>		21	8.2	ug/Kg	☼	06/19/13 17:07	06/20/13 04:51	1
<b>PCB-1254</b>	<b>110</b>		21	4.5	ug/Kg	☼	06/19/13 17:07	06/20/13 04:51	1
PCB-1260	<10		21	10	ug/Kg	☼	06/19/13 17:07	06/20/13 04:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		50 - 116	06/19/13 17:07	06/20/13 04:51	1
DCB Decachlorobiphenyl	94		48 - 142	06/19/13 17:07	06/20/13 04:51	1

## Definitions/Glossary

Client: ARCADIS U.S., Inc.  
Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

### Qualifiers

#### GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

## GC Semi VOA

### Analysis Batch: 190263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-58164-1	MKC-1D-Base	Total/NA	Solid	8082	190381
500-58164-2	MKC-4D-Base	Total/NA	Solid	8082	190381
500-58164-3	MKC-5D-Base	Total/NA	Solid	8082	190381
500-58164-6	MKC-66D-Base	Total/NA	Solid	8082	190381
500-58164-7	MKC-67D-Base	Total/NA	Solid	8082	190381
LCS 500-190381/2-A	Lab Control Sample	Total/NA	Solid	8082	190381
MB 500-190381/1-A	Method Blank	Total/NA	Solid	8082	190381

### Prep Batch: 190355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-58164-4	Equipment Blank #1	Total/NA	Water	3510C	
500-58164-5	Equipment Blank #2	Total/NA	Water	3510C	
LCS 500-190355/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-190355/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 500-190355/1-A	Method Blank	Total/NA	Water	3510C	

### Prep Batch: 190381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-58164-1	MKC-1D-Base	Total/NA	Solid	3541	
500-58164-2	MKC-4D-Base	Total/NA	Solid	3541	
500-58164-3	MKC-5D-Base	Total/NA	Solid	3541	
500-58164-6	MKC-66D-Base	Total/NA	Solid	3541	
500-58164-7	MKC-67D-Base	Total/NA	Solid	3541	
LCS 500-190381/2-A	Lab Control Sample	Total/NA	Solid	3541	
MB 500-190381/1-A	Method Blank	Total/NA	Solid	3541	

### Analysis Batch: 190435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-58164-4	Equipment Blank #1	Total/NA	Water	8082	190355
500-58164-5	Equipment Blank #2	Total/NA	Water	8082	190355
LCS 500-190355/2-A	Lab Control Sample	Total/NA	Water	8082	190355
LCSD 500-190355/3-A	Lab Control Sample Dup	Total/NA	Water	8082	190355
MB 500-190355/1-A	Method Blank	Total/NA	Water	8082	190355

## General Chemistry

### Analysis Batch: 190283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-58164-1	MKC-1D-Base	Total/NA	Solid	Moisture	
500-58164-2	MKC-4D-Base	Total/NA	Solid	Moisture	
500-58164-3	MKC-5D-Base	Total/NA	Solid	Moisture	
500-58164-6	MKC-66D-Base	Total/NA	Solid	Moisture	
500-58164-7	MKC-67D-Base	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: ARCADIS U.S., Inc.  
Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (50-116)	DCB1 (48-142)
500-58164-1	MKC-1D-Base	77	111
500-58164-2	MKC-4D-Base	65	102
500-58164-3	MKC-5D-Base	60	81
500-58164-6	MKC-66D-Base	73	103
500-58164-7	MKC-67D-Base	68	94
LCS 500-190381/2-A	Lab Control Sample	72	84
MB 500-190381/1-A	Method Blank	74	86

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2 (50-120)	DCB2 (29-126)
500-58164-4	Equipment Blank #1	76	54
500-58164-5	Equipment Blank #2	85	79
LCS 500-190355/2-A	Lab Control Sample	83	75
LCSD 500-190355/3-A	Lab Control Sample Dup	78	59
MB 500-190355/1-A	Method Blank	78	73

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 500-190355/1-A**

**Matrix: Water**

**Analysis Batch: 190435**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 190355**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.067		0.40	0.067	ug/L		06/19/13 13:37	06/20/13 09:29	1
PCB-1221	<0.20		0.40	0.20	ug/L		06/19/13 13:37	06/20/13 09:29	1
PCB-1232	<0.20		0.40	0.20	ug/L		06/19/13 13:37	06/20/13 09:29	1
PCB-1242	<0.20		0.40	0.20	ug/L		06/19/13 13:37	06/20/13 09:29	1
PCB-1248	<0.20		0.40	0.20	ug/L		06/19/13 13:37	06/20/13 09:29	1
PCB-1254	<0.20		0.40	0.20	ug/L		06/19/13 13:37	06/20/13 09:29	1
PCB-1260	<0.070		0.40	0.070	ug/L		06/19/13 13:37	06/20/13 09:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	78		50 - 120	06/19/13 13:37	06/20/13 09:29	1
DCB Decachlorobiphenyl	73		29 - 126	06/19/13 13:37	06/20/13 09:29	1

**Lab Sample ID: LCS 500-190355/2-A**

**Matrix: Water**

**Analysis Batch: 190435**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 190355**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.02	4.51	*	ug/L		112	64 - 110
PCB-1260	4.02	4.04		ug/L		101	51 - 110

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	83		50 - 120
DCB Decachlorobiphenyl	75		29 - 126

**Lab Sample ID: LCSD 500-190355/3-A**

**Matrix: Water**

**Analysis Batch: 190435**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 190355**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	4.02	4.04		ug/L		101	64 - 110	11	20
PCB-1260	4.02	3.50		ug/L		87	51 - 110	14	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	78		50 - 120
DCB Decachlorobiphenyl	59		29 - 126

**Lab Sample ID: MB 500-190381/1-A**

**Matrix: Solid**

**Analysis Batch: 190263**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 190381**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg		06/19/13 17:07	06/19/13 23:22	1
PCB-1221	<7.3		17	7.3	ug/Kg		06/19/13 17:07	06/19/13 23:22	1
PCB-1232	<7.3		17	7.3	ug/Kg		06/19/13 17:07	06/19/13 23:22	1
PCB-1242	<5.5		17	5.5	ug/Kg		06/19/13 17:07	06/19/13 23:22	1
PCB-1248	<6.6		17	6.6	ug/Kg		06/19/13 17:07	06/19/13 23:22	1
PCB-1254	<3.6		17	3.6	ug/Kg		06/19/13 17:07	06/19/13 23:22	1

TestAmerica Chicago

# QC Sample Results

Client: ARCADIS U.S., Inc.  
 Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: MB 500-190381/1-A**

**Matrix: Solid**

**Analysis Batch: 190263**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 190381**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	<8.2		17	8.2	ug/Kg		06/19/13 17:07	06/19/13 23:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		50 - 116	06/19/13 17:07	06/19/13 23:22	1
DCB Decachlorobiphenyl	86		48 - 142	06/19/13 17:07	06/19/13 23:22	1

**Lab Sample ID: LCS 500-190381/2-A**

**Matrix: Solid**

**Analysis Batch: 190263**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 190381**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	167	138		ug/Kg		83	59 - 110
PCB-1260	167	141		ug/Kg		84	69 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	72		50 - 116
DCB Decachlorobiphenyl	84		48 - 142

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
 Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

## Client Sample ID: MKC-1D-Base

Lab Sample ID: 500-58164-1

Date Collected: 06/18/13 15:06

Matrix: Solid

Date Received: 06/19/13 09:50

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			190381	06/19/13 17:07	DEA	TAL CHI
Total/NA	Analysis	8082		2	190263	06/20/13 09:57	GMO	TAL CHI
Total/NA	Analysis	Moisture		1	190283	06/19/13 08:56	CMV	TAL CHI

## Client Sample ID: MKC-4D-Base

Lab Sample ID: 500-58164-2

Date Collected: 06/18/13 13:18

Matrix: Solid

Date Received: 06/19/13 09:50

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			190381	06/19/13 17:07	DEA	TAL CHI
Total/NA	Analysis	8082		1	190263	06/20/13 03:56	GMO	TAL CHI
Total/NA	Analysis	Moisture		1	190283	06/19/13 08:56	CMV	TAL CHI

## Client Sample ID: MKC-5D-Base

Lab Sample ID: 500-58164-3

Date Collected: 06/18/13 13:15

Matrix: Solid

Date Received: 06/19/13 09:50

Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			190381	06/19/13 17:07	DEA	TAL CHI
Total/NA	Analysis	8082		1	190263	06/20/13 04:24	GMO	TAL CHI
Total/NA	Analysis	Moisture		1	190283	06/19/13 08:56	CMV	TAL CHI

## Client Sample ID: Equipment Blank #1

Lab Sample ID: 500-58164-4

Date Collected: 06/18/13 16:20

Matrix: Water

Date Received: 06/19/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			190355	06/19/13 13:37	SCH	TAL CHI
Total/NA	Analysis	8082		1	190435	06/20/13 10:12	GMO	TAL CHI

## Client Sample ID: Equipment Blank #2

Lab Sample ID: 500-58164-5

Date Collected: 06/18/13 16:21

Matrix: Water

Date Received: 06/19/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			190355	06/19/13 13:37	SCH	TAL CHI
Total/NA	Analysis	8082		1	190435	06/20/13 10:26	GMO	TAL CHI

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

## Client Sample ID: MKC-66D-Base

Lab Sample ID: 500-58164-6

Date Collected: 06/18/13 15:38

Matrix: Solid

Date Received: 06/19/13 09:50

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			190381	06/19/13 17:07	DEA	TAL CHI
Total/NA	Analysis	8082		1	190263	06/20/13 04:38	GMO	TAL CHI
Total/NA	Analysis	Moisture		1	190283	06/19/13 08:56	CMV	TAL CHI

## Client Sample ID: MKC-67D-Base

Lab Sample ID: 500-58164-7

Date Collected: 06/18/13 15:41

Matrix: Solid

Date Received: 06/19/13 09:50

Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			190381	06/19/13 17:07	DEA	TAL CHI
Total/NA	Analysis	8082		1	190263	06/20/13 04:51	GMO	TAL CHI
Total/NA	Analysis	Moisture		1	190283	06/19/13 08:56	CMV	TAL CHI

### Laboratory References:

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



# Certification Summary

Client: ARCADIS U.S., Inc.  
 Project/Site: MadisonKipp WI001283.0008.00006

TestAmerica Job ID: 500-58164-1

## Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	06-30-13 *
California	NELAP	9	01132CA	04-30-14
Georgia	State Program	4	N/A	04-30-14
Georgia	State Program	4	939	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14
Iowa	State Program	7	82	05-01-14
Kansas	NELAP	7	E-10161	10-31-13
Kentucky	State Program	4	90023	12-31-13
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-13
Massachusetts	State Program	1	M-IL035	06-30-13
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-13
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-13
South Carolina	State Program	4	77001	06-30-13 *
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-13
Wyoming	State Program	8	8TMS-Q	07-15-13

\* Expired certification is currently pending renewal and is considered valid.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 6  
Phone: 708.534.5200 Fax: 708.53



500-58164 COC

Report To: (optional)  
Contact: Rebecca Rebschmitt  
Company: ARCADIS  
Address: 226 N Jefferson St #400  
Address: Milwaukee, WI 53202  
Phone: 414-276-7742  
Fax: \_\_\_\_\_  
E-Mail: rebecca.rebschmitt@arcadis-us.com

Bill To: (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#/Reference#: \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-58164  
Chain of Custody Number: \_\_\_\_\_  
Page 1 of 1  
Temperature °C of Cooler: 2.4

Client		Project #		Preservative							Preservative Key	
ARCADIS		W1601283 - 0008.00006		8								
Project Name		Lab Project #		Parameter							Comments	
Madison Kipp												
Project Location/State		Lab PM										
Madison, WI				PCB								
Sampler												
V. Yates												
Lab ID	MS/MSD	Sample ID	Date		Time	# of Containers	Matrix					
1	110	MKC-1D-BASE	6/18/13		1500	1	S	I				
		<del>MKC-2D-BASE</del>					S	T				
		<del>MKC-3D-BASE</del>					S	T				
2	157	MKC-4D-BASE			1318	1	S	I				
3	160	MKC-5D-BASE		1315	1	S	I					
4	175	EQUIPMENT BLANK #1		1620	1	W	I					
5	176	EQUIPMENT BLANK #2		1621	1	W	I					
6	177	MKC-6D-BASE		1538 →	1	S	I					
7	20	MKC-67D-BASE		1541 →	1	S	I					

Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other

Sample Disposal

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

Relinquished By: <u>V. Yates</u>	Company: <u>ARCADIS</u>	Date: <u>6/18/13</u>	Time: <u>1730</u>	Received By: <u>Shawn Scott</u>	Company: <u>TA-CHT</u>	Date: <u>6/19/13</u>	Time: <u>0950</u>
Relinquished By:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:
Relinquished By:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:

Lab Courier: \_\_\_\_\_  
Shipped: FEDEX  
Hand Delivered: \_\_\_\_\_

Matrix Key

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

Client Comments

1 Day TAT PLS.  
PLS contact Rebecca Rebschmitt w  
questions 414-276-7742

Lab Comments:

## Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 500-58164-1

**Login Number: 58164**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4
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.	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

