

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: 500-57720-1
Client Project/Site: MadisonKipp WI001283.0008.00006

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

Attn: Rebecca Robbennolt



Authorized for release by:
6/10/2013 12:13:36 PM

Sandie Fredrick, Project Manager I
sandie.fredrick@testamericainc.com

LINKS

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results through
TotalAccess

Have a Question?



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

TestAmerica Job ID: 500-57720-1

Job ID: 500-57720-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-57720-1

Comments

No additional comments.

Receipt

The samples were received on 6/6/2013 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7° C.

GC Semi VOA

No analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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Detection Summary

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

TestAmerica Job ID: 500-57720-1

Client Sample ID: 245-6D-Base

Lab Sample ID: 500-57720-1

No Detections.

Client Sample ID: 245-7D-Base

Lab Sample ID: 500-57720-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	28		18	5.8	ug/Kg	1	*	8082	Total/NA

Client Sample ID: 245-14D-Base

Lab Sample ID: 500-57720-3

No Detections.

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: 500-57720-1

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: 500-57720-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-57720-1	245-6D-Base	Solid	06/05/13 10:12	06/06/13 10:00
500-57720-2	245-7D-Base	Solid	06/05/13 10:15	06/06/13 10:00
500-57720-3	245-14D-Base	Solid	06/05/13 10:18	06/06/13 10:00

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Client Sample Results

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

TestAmerica Job ID: 500-57720-1

Client Sample ID: 245-6D-Base

Lab Sample ID: 500-57720-1

Date Collected: 06/05/13 10:12

Matrix: Solid

Date Received: 06/06/13 10:00

Percent Solids: 91.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.1		17	6.1	ug/Kg	☼	06/07/13 16:57	06/08/13 04:10	1
PCB-1221	<7.6		17	7.6	ug/Kg	☼	06/07/13 16:57	06/08/13 04:10	1
PCB-1232	<7.5		17	7.5	ug/Kg	☼	06/07/13 16:57	06/08/13 04:10	1
PCB-1242	<5.7		17	5.7	ug/Kg	☼	06/07/13 16:57	06/08/13 04:10	1
PCB-1248	<6.8		17	6.8	ug/Kg	☼	06/07/13 16:57	06/08/13 04:10	1
PCB-1254	<3.7		17	3.7	ug/Kg	☼	06/07/13 16:57	06/08/13 04:10	1
PCB-1260	<8.5		17	8.5	ug/Kg	☼	06/07/13 16:57	06/08/13 04:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	64		50 - 116	06/07/13 16:57	06/08/13 04:10	1
DCB Decachlorobiphenyl	99		48 - 142	06/07/13 16:57	06/08/13 04:10	1

Client Sample ID: 245-7D-Base

Lab Sample ID: 500-57720-2

Date Collected: 06/05/13 10:15

Matrix: Solid

Date Received: 06/06/13 10:00

Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.2		18	6.2	ug/Kg	☼	06/07/13 16:57	06/08/13 04:23	1
PCB-1221	<7.7		18	7.7	ug/Kg	☼	06/07/13 16:57	06/08/13 04:23	1
PCB-1232	<7.7		18	7.7	ug/Kg	☼	06/07/13 16:57	06/08/13 04:23	1
PCB-1242	28		18	5.8	ug/Kg	☼	06/07/13 16:57	06/08/13 04:23	1
PCB-1248	<6.9		18	6.9	ug/Kg	☼	06/07/13 16:57	06/08/13 04:23	1
PCB-1254	<3.8		18	3.8	ug/Kg	☼	06/07/13 16:57	06/08/13 04:23	1
PCB-1260	<8.6		18	8.6	ug/Kg	☼	06/07/13 16:57	06/08/13 04:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		50 - 116	06/07/13 16:57	06/08/13 04:23	1
DCB Decachlorobiphenyl	103		48 - 142	06/07/13 16:57	06/08/13 04:23	1

Client Sample ID: 245-14D-Base

Lab Sample ID: 500-57720-3

Date Collected: 06/05/13 10:18

Matrix: Solid

Date Received: 06/06/13 10:00

Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.2		18	6.2	ug/Kg	☼	06/07/13 16:57	06/08/13 04:37	1
PCB-1221	<7.8		18	7.8	ug/Kg	☼	06/07/13 16:57	06/08/13 04:37	1
PCB-1232	<7.7		18	7.7	ug/Kg	☼	06/07/13 16:57	06/08/13 04:37	1
PCB-1242	<5.8		18	5.8	ug/Kg	☼	06/07/13 16:57	06/08/13 04:37	1
PCB-1248	<6.9		18	6.9	ug/Kg	☼	06/07/13 16:57	06/08/13 04:37	1
PCB-1254	<3.8		18	3.8	ug/Kg	☼	06/07/13 16:57	06/08/13 04:37	1
PCB-1260	<8.6		18	8.6	ug/Kg	☼	06/07/13 16:57	06/08/13 04:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		50 - 116	06/07/13 16:57	06/08/13 04:37	1
DCB Decachlorobiphenyl	102		48 - 142	06/07/13 16:57	06/08/13 04:37	1

TestAmerica Chicago

Definitions/Glossary

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

TestAmerica Job ID: 500-57720-1

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)
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: 500-57720-1

GC Semi VOA

Analysis Batch: 188993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57720-1	245-6D-Base	Total/NA	Solid	8082	189046
500-57720-2	245-7D-Base	Total/NA	Solid	8082	189046
500-57720-3	245-14D-Base	Total/NA	Solid	8082	189046
LCS 500-189046/2-A	Lab Control Sample	Total/NA	Solid	8082	189046
MB 500-189046/1-A	Method Blank	Total/NA	Solid	8082	189046

Prep Batch: 189046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57720-1	245-6D-Base	Total/NA	Solid	3541	
500-57720-2	245-7D-Base	Total/NA	Solid	3541	
500-57720-3	245-14D-Base	Total/NA	Solid	3541	
LCS 500-189046/2-A	Lab Control Sample	Total/NA	Solid	3541	
MB 500-189046/1-A	Method Blank	Total/NA	Solid	3541	

General Chemistry

Analysis Batch: 188838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57720-1	245-6D-Base	Total/NA	Solid	Moisture	
500-57720-2	245-7D-Base	Total/NA	Solid	Moisture	
500-57720-3	245-14D-Base	Total/NA	Solid	Moisture	

Surrogate Summary

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

TestAmerica Job ID: 500-57720-1

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)
500-57720-1	245-6D-Base	64	99
500-57720-2	245-7D-Base	68	103
500-57720-3	245-14D-Base	74	102
LCS 500-189046/2-A	Lab Control Sample	79	87
MB 500-189046/1-A	Method Blank	74	77

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: 500-57720-1

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

Lab Sample ID: MB 500-189046/1-A

Matrix: Solid

Analysis Batch: 188993

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 189046

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg		06/07/13 16:57	06/08/13 01:53	1
PCB-1221	<7.3		17	7.3	ug/Kg		06/07/13 16:57	06/08/13 01:53	1
PCB-1232	<7.3		17	7.3	ug/Kg		06/07/13 16:57	06/08/13 01:53	1
PCB-1242	<5.5		17	5.5	ug/Kg		06/07/13 16:57	06/08/13 01:53	1
PCB-1248	<6.6		17	6.6	ug/Kg		06/07/13 16:57	06/08/13 01:53	1
PCB-1254	<3.6		17	3.6	ug/Kg		06/07/13 16:57	06/08/13 01:53	1
PCB-1260	<8.2		17	8.2	ug/Kg		06/07/13 16:57	06/08/13 01:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		50 - 116	06/07/13 16:57	06/08/13 01:53	1
DCB Decachlorobiphenyl	77		48 - 142	06/07/13 16:57	06/08/13 01:53	1

Lab Sample ID: LCS 500-189046/2-A

Matrix: Solid

Analysis Batch: 188993

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 189046

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	167	144		ug/Kg		86	59 - 110
PCB-1260	167	147		ug/Kg		88	69 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	79		50 - 116
DCB Decachlorobiphenyl	87		48 - 142

Lab Chronicle

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

TestAmerica Job ID: 500-57720-1

Client Sample ID: 245-6D-Base

Lab Sample ID: 500-57720-1

Date Collected: 06/05/13 10:12

Matrix: Solid

Date Received: 06/06/13 10:00

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			189046	06/07/13 16:57	DEA	TAL CHI
Total/NA	Analysis	8082		1	188993	06/08/13 04:10	PG	TAL CHI
Total/NA	Analysis	Moisture		1	188838	06/06/13 13:37	CMV	TAL CHI

Client Sample ID: 245-7D-Base

Lab Sample ID: 500-57720-2

Date Collected: 06/05/13 10:15

Matrix: Solid

Date Received: 06/06/13 10:00

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			189046	06/07/13 16:57	DEA	TAL CHI
Total/NA	Analysis	8082		1	188993	06/08/13 04:23	PG	TAL CHI
Total/NA	Analysis	Moisture		1	188838	06/06/13 13:37	CMV	TAL CHI

Client Sample ID: 245-14D-Base

Lab Sample ID: 500-57720-3

Date Collected: 06/05/13 10:18

Matrix: Solid

Date Received: 06/06/13 10:00

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			189046	06/07/13 16:57	DEA	TAL CHI
Total/NA	Analysis	8082		1	188993	06/08/13 04:37	PG	TAL CHI
Total/NA	Analysis	Moisture		1	188838	06/06/13 13:37	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: 500-57720-1

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
Virginia	NELAP	3	460142	06-14-13
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

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.534.5201



500-57720 COC

Report To (optional)
Contact: Rebecca Robbenolt
Company: ARCADIS
Address: 126 N Jefferson St #400
Address: Milwaukee, WI
Phone: 414-276-7742
Fax:
E-Mail: rebecca.robbenolt@arcadis-us.com

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

Chain of Custody Record

Lab Job #: 500-57720
Chain of Custody Number: _____
Page _____ of _____
Temperature °C of Cooler: 2.7

Client		Client Project #		Preservative		Parameter		Sampler		Lab Project #		Lab PM		Preservative Key	
Madison Kipp		W1001283.0008.0006		8		PCB		V. gates						1. HCL, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Comments								
1		245- 7D ^{6D} -Base	6/5/13	1012	1	S									
2		245-7D-Base	6/5/13	1015	1	S									
3		245-14D-Base	6/5/13	1018	1	S									

Turnaround Time Required (Business Days)

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

Requested Due Date _____

Sample Disposal

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

Relinquished By <u>David Hohn</u>	Company <u>ARCADIS</u>	Date <u>06/05/13</u>	Time <u>1730</u>	Received By <u>JL</u>	Company <u>TA</u>	Date <u>6/6/13</u>	Time <u>1000</u>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: _____
Shipped: FX
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

Lab Comments:

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 500-57720-1

Login Number: 57720

List Source: TestAmerica Chicago

List Number: 1

Creator: Lunt, Jeff T

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	2.7
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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	

