

Mike Schmoller  
Project Manager  
Wisconsin Department of Natural Resources  
South Central Region  
3911 Fish Hatchery Road  
Fitchburg, WI 53711

Subject:

Summary of Soil Removal Activities, Madison-Kipp Corporation Site, 201 Waubesa Street, Madison, Wisconsin. Facility ID No. 113125320, BRRTS No. 02-13-558625

Dear Mr. Schmoller:

On behalf of Madison-Kipp Corporation (MKC), this letter provides a summary of the soil removal activities completed in August 2014 for soils containing polychlorinated biphenyls (PCBs). The excavation activities were related to the Madison-Kipp site located at 201 Waubesa Street in Madison, Wisconsin (Figure 1). The activities were performed on City of Madison property adjacent to the rain garden and the northern MKC property boundary as shown on Figure 1. Activities associated with the adjacent rain garden were documented in the *Summary of Rain Garden Soil Removal Activities* report dated August 6, 2014 and submitted to the Wisconsin Department of Natural Resources (WDNR), city of Madison, and United States Environmental Protection Agency (U.S. EPA). The soil removal activities documented in this letter were performed subsequent to the rain garden activities, and were completed in accordance with the electronic correspondence submitted to WDNR on July 16, 2014 and approved by WDNR on August 6, 2014. A WDNR 712.09 submittal certification is included in Attachment A.

The following presents a brief description of the approved work:

- Excavation and disposal of soils containing PCBs at concentrations above the Toxic Substances Control Act (TSCA) disposal limit of 50 milligrams per kilogram to a depth of approximately 4 feet below ground surface.
- Collection of confirmation soil samples along the base and side walls of the excavation area.
- Backfill the excavated area with clean, imported material.

This letter report documents completion of the PCB-related removal activities.

Imagine the result

ARCADIS U.S., Inc.  
126 North Jefferson Street  
Suite 400  
Milwaukee  
Wisconsin 53202  
Tel 414 276 7742  
Fax 414 276 7603  
[www.arcadis-us.com](http://www.arcadis-us.com)

ENVIRONMENT

Date:

October 13, 2014

Contact:

Jennine Trask

Phone:

414.277.6203

Email:

[Jennine.Trask@arcadis-us.com](mailto:Jennine.Trask@arcadis-us.com)

Our ref:

WI001368.0020.00001

### Excavation and Confirmation Soil Sampling Activities

Excavation and backfill activities were performed on site on August 12 and 13, 2014. Prior to beginning the excavation activities, utility marking arrangements were made through Digger's Hotline (the State of Wisconsin Public Utility clearance service) and discussions with MKC. The work area was also inspected by Madison Gas and Electric due to the presence of nearby overhead utility lines, and activities were authorized to proceed. An excavation permit (Application to Excavate in the Public Right-of-Way) was also secured from the city of Madison to excavate on city property.

Excavation activities were completed by R.W. Collins. All excavated soils were placed into a lined roll-off bin for subsequent disposal. The excavation encompassed a 10 by 10 foot area to a total depth of approximately 4 feet below ground surface and was located on city of Madison property adjacent to the rain garden and the northern MKC property boundary as shown on Figure 1. A total of approximately 27 tons of soil were excavated and disposed of at Environmental Quality's Wayne Disposal Landfill located in Belleville, Michigan. Following the completion of soil removal, the excavation was left open pending confirmation soil sample results.

Confirmation soil samples were collected from three side walls of the excavation as well as the base of the excavation as shown on Figure 1. The northeastern sidewall of the excavation was not sampled since soils were excavated to the clean backfill of the adjacent rain garden. A total of three side wall samples and one base sample were collected during the excavation activities. The soil samples were submitted for laboratory analysis of PCBs by U.S. EPA SW-846 Method 8082. Samples were collected in clean, laboratory-supplied sample containers and placed in a cooler filled with ice. The samples were submitted to Environmental Chemistry Consulting Services, Inc. laboratory located in Madison, Wisconsin, using appropriate chain-of-custody procedures.

PCBs were not detected above the TSCA disposal limit of 50 milligrams per kilogram in any of the samples collected. A summary of the confirmation soil sample analytical results for the excavation area is presented in Table 1. A copy of the laboratory analytical report is included as Attachment B.

This data was provided to WDNR and the city of Madison on August 13, 2014.

**Backfill**

Backfill activities were performed by R.W. Collins following receipt of soil confirmation sample analytical results on August 13, 2014. The excavation was backfilled to grade with gravel and compacted in one-foot lifts. The excavation area was subsequently paved with 6-inches of asphalt by MKC.

**Quality Assurance/Quality Control (QA/QC)**

Several QA/QC measures were utilized to ensure the integrity of the confirmation soil sampling procedures and laboratory analysis including collecting and analyzing matrix spike/matrix spike duplicate (MS/MSD) samples and field duplicate samples.

Laboratory accuracy was assessed by determining percent recoveries from the analysis of laboratory control samples. Accuracy relative to the sample matrix was assessed by determining percent recoveries from the analysis of MS/MSD samples. One MS/MSD sample was submitted for laboratory analysis.

Precision is defined as the measure of agreement among repeated measurements of the same property under identical or substantially similar locations. One duplicate sample was taken in the field to evaluate the precision of the field sample collection procedures and submitted for laboratory analysis.

An equipment blank sample was collected by routing laboratory provided deionized water through decontaminated sampling equipment. The equipment blank sample was analyzed to check procedural contamination and/or ambient conditions and/or sample container contamination at the site that may cause sample contamination. One equipment blank sample was submitted for laboratory analysis.

After review of the QA/QC sample data, there was no evidence of contamination or other anomalies that would indicate inaccurate or misrepresented data. All QA/QC sample results were within acceptable limits.

**Conclusions**

Soil excavation and backfill activities were completed on city of Madison property adjacent to the rain garden and the northern MKC property boundary in accordance with the WDNR-approved correspondence. Soils in this area were excavated and disposed at Environmental Quality's Wayne Disposal Landfill located in Belleville,

Michigan. All confirmation soil sample analytical results were below the TSCA disposal limit. No further actions are necessary in this area.

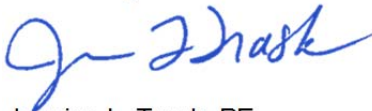
If you have any questions or require any additional information, please contact us at 414.276.7742.

Sincerely,

ARCADIS U.S., Inc.



Christopher D. Kubacki, PE  
Senior Engineer



Jennine L. Trask, PE  
Project Manager

Electronic Copies:

David Crass – Michael Best  
Linda Hanefeld – WDNR  
John Hausbeck – City of Madison  
Alina Satkoski – Madison-Kipp Corporation  
Ken Zolnierczyk – U.S. EPA

**Attachments:**

Table 1 – Excavation Confirmation Soil Sample Analytical Results  
Figure 1 – Excavation Area and Confirmation Soil Sample Locations  
Attachment A – Submittal Certification  
Attachment B – Laboratory Report



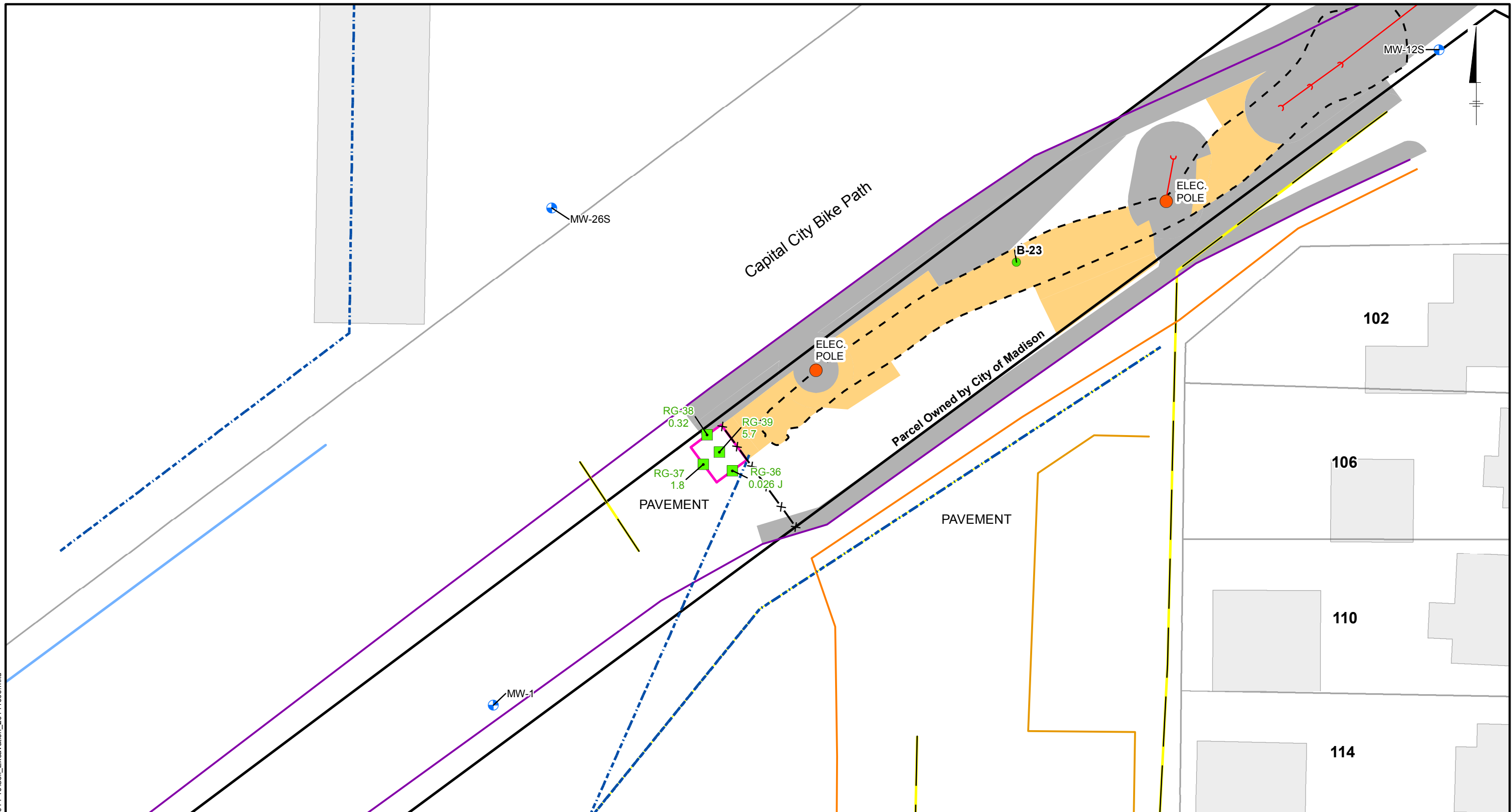
**Table 1. Summary of Soil Removal Activities - Confirmation Soil Sample Analytical Results, August 2014, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.**

Sample Location	Industrial	TSCA	RG-36	RG-37	RG-38	RG-39	
Sample ID	Direct	Disposal	RG-36 (8/12/2014)	RG-37 (8/12/2014)	RG-38 (8/12/2014)	RG-39 (8/12/2014)	DUP-01 (8/12/2014)
Sample Date	Contact RCL	Limit	8/12/2014	8/12/2014	8/12/2014	8/12/2014	8/12/2014
<b>PCBs</b>							
Aroclor 1016	21.2	NE	<0.018	0.70	0.080 J	1.3	2.5
Aroclor 1221	0.744	NE	<0.0099	<0.0090	<0.0089	<0.0092	<0.0095
Aroclor 1232	0.744	NE	<0.0068	<0.0061	<0.0061	<0.0063	<0.0065
Aroclor 1242	0.744	NE	<0.011	<0.0096	<0.0095	<0.0099	<0.010
Aroclor 1248	0.744	NE	<0.013	<0.012	<0.011	<0.012	<0.012
Aroclor 1254	0.744	NE	0.026 J	<b>1.1</b>	0.24	<b>4.4</b>	<b>3.7</b>
Aroclor 1260	0.744	NE	<0.0058	<0.0053	<0.0052	<0.0054	<0.0056
<b>Total Detected PCBs</b>	NE	50	0.026 J	1.8	0.32	5.7	6.2

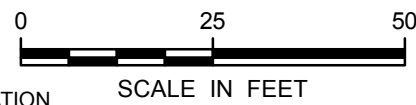
Concentrations presented in milligrams per kilogram (mg/kg).

- 100** Exceeds the WDNR's industrial direct contact residual contaminant level.
- 100** Exceeds the Toxic Substance Control Act disposal limit.
- < Constituent not detected above noted laboratory detection limit.
- DUP Duplicate sample.
- J Constituent concentration is an approximate value.
- NE Criteria not established.
- PCBs Polychlorinated biphenyls.
- RCL Residual contaminant level.
- TSCA Toxic Substance Control Act.

CITY: MIKE DIV/GRP: IM\_DB: MG\_LD: CK MADISON-KIPP  
Z:\GIS\PROJECTS\ENV\MadisonKipp\Map\2014-10\Soil\_Excavation\_20141006.mxd



LEGEND	
<span style="color: green;">■</span>	ALL CONFIRMATION SOIL SAMPLE TOTAL DETECTED PCB RESULTS <50 MG/KG
<span style="color: green;">●</span>	SOIL BORING LOCATION
<span style="color: blue;">⊕</span>	MONITORING WELL
<span style="color: orange;">●</span>	UTILITY POLE
<span style="color: green;">1.8</span>	TOTAL DETECTED PCBs IN MG/KG
<span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	PARCELS
<span style="background-color: lightgrey; display: inline-block; width: 10px; height: 10px;"></span>	BUILDING FOOTPRINTS
<span style="color: blue;">—</span>	WATER MAIN
<span style="color: green;">—</span>	ABANDONED SANITARY MAIN
<span style="color: yellow;">—</span>	SANITARY LATERALS
<span style="color: brown;">—</span>	SANITARY MAINS
<span style="color: blue;">- - -</span>	ONSITE STORM WATER DISCHARGE
<span style="color: green;">—</span>	ELECTRIC
<span style="color: red;">—</span>	GROUND TENSION WIRE
<span style="color: orange;">—</span>	GAS
<span style="color: yellow;">—</span>	SVE TRENCH
<span style="color: purple;">—</span>	COMMUNICATIONS
<span style="color: blue;">- - -</span>	STORM WATER
<span style="color: black;">x-x</span>	FENCE
<span style="border: 2px solid pink; display: inline-block; width: 10px; height: 10px;"></span>	ESTIMATED EXTENT OF EXCAVATION
<span style="background-color: orange; display: inline-block; width: 10px; height: 10px;"></span>	ESTIMATED EXTENT OF RAIN GARDEN EXCAVATION
<span style="background-color: grey; display: inline-block; width: 10px; height: 10px;"></span>	UTILITY BUFFER
<span style="border: 1px dashed black; display: inline-block; width: 10px; height: 10px;"></span>	PERIMETER OF RAIN GARDEN



ALL LOCATIONS ARE APPROXIMATE

MADISON-KIPP CORPORATION  
201 WAUBESA STREET  
MADISON, WISCONSIN

**SOIL EXCAVATION  
ADJACENT TO THE RAIN GARDEN**

**ARCADIS**

FIGURE  
**1**



**Attachment A**

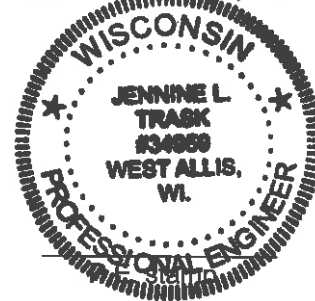
Submittal Certification

**Submittal Certification**

This attachment was prepared to satisfy the requirements of Wisconsin Administrative Code Chapter NR 712.09 and is applicable to the following document.

**Summary of Soil Removal Activities  
Madison-Kipp Corporation  
201 Waubesa Street  
Madison, Wisconsin**

I, Jennine L. Trask, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.



J. J. Mark CAM # 34959  
Signature, title and P.E. number

I, Christopher Kubacki, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Christopher Kubacki, Senior Engineer  
Signature and title

10/13/14  
Date





**Attachment B**

Laboratory Report



2525 Advance Road  
Madison, WI 53718  
608.221.8700 Phone  
608.221.4889 Fax

August 13, 2014

Chris Kubacki  
ARCADIS  
126 N Jefferson St., Ste 400  
Milwaukee, WI 53202  
RE: Madison Kipp - Madison, WI

Enclosed are the analytical results for the samples received by the laboratory on 08/12/2014.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. These results are in compliance with the 2009 NELAC Standards and the appropriate agencies listed below, unless otherwise noted in the case narrative. This analytical report should be reproduced in its entirety.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jessica Esser  
Project Manager

**Certification List**

**Expires**

DODELAP	DOD ELAP Accreditation (A2LA)	3269.01	03/31/2016
ILEPA	Illinois Secondary NELAP Accreditation	003174	04/30/2015
KDHE	Kansas Secondary NELAP Accreditation	E-10384	04/30/2015
LELAP	Louisiana Primary NELAP Accreditation	04165	06/30/2015
NJDEP	New Jersey Secondary NELAP Accreditation	WI004	06/30/2015
WDNR	Wisconsin Certification under NR 149	113289110	08/31/2014



ARCADIS  
126 N Jefferson St., Ste 400  
Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
Project Number: W1001368  
Project Manager: Chris Kubacki

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
RG-36	A143304-01	Soil	08/12/2014	08/12/2014
RG-37	A143304-02	Soil	08/12/2014	08/12/2014
RG-38	A143304-03	Soil	08/12/2014	08/12/2014
RG-39	A143304-04	Soil	08/12/2014	08/12/2014
DUP-01	A143304-05	Soil	08/12/2014	08/12/2014
EB-01	A143304-06	Water	08/12/2014	08/12/2014
TB-01	A143304-07	Water	08/12/2014	08/12/2014

### CASE NARRATIVE

**Sample Receipt Information:**

7 samples were received on 8/12/2014. Samples were hand delivered. Samples were received in acceptable condition.

Please see the chain of custody (COC) document at the end of this report for additional information.



ARCADIS  
 126 N Jefferson St., Ste 400  
 Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
 Project Number: W1001368  
 Project Manager: Chris Kubacki

**RG-36**  
**A143304-01 (Soil)**

Date Sampled  
**08/12/2014 13:00**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
---------	--------	--------------------	-----------------------	-------	----------	----------	----------	--------	------------

**ECCS**

**Polychlorinated Biphenyls by EPA Method 8082**

**Preparation Batch: A408022**

PCB-1016	ND	0.018	0.24	mg/kg dry	1	08/12/2014	08/12/2014 16:57	EPA 8082A	
PCB-1221	ND	0.0099	0.24	mg/kg dry	1	08/12/2014	08/12/2014 16:57	EPA 8082A	
PCB-1232	ND	0.0068	0.24	mg/kg dry	1	08/12/2014	08/12/2014 16:57	EPA 8082A	
PCB-1242	ND	0.011	0.24	mg/kg dry	1	08/12/2014	08/12/2014 16:57	EPA 8082A	
PCB-1248	ND	0.013	0.24	mg/kg dry	1	08/12/2014	08/12/2014 16:57	EPA 8082A	
<b>PCB-1254</b>	<b>0.026</b>	0.011	0.24	mg/kg dry	1	08/12/2014	08/12/2014 16:57	EPA 8082A	J
PCB-1260	ND	0.0058	0.24	mg/kg dry	1	08/12/2014	08/12/2014 16:57	EPA 8082A	
<b>Total PCBs</b>	<b>0.026</b>	0.018	0.24	mg/kg dry	1	08/12/2014	08/12/2014 16:57	EPA 8082A	J
<i>Surrogate: Decachlorobiphenyl</i>			99.6 %	59.1-127		08/12/2014	08/12/2014 16:57	EPA 8082A	
<i>Surrogate: Tetrachloro-meta-xylene</i>			98.6 %	77.4-119		08/12/2014	08/12/2014 16:57	EPA 8082A	

**Classical Chemistry Parameters**

**Preparation Batch: A408036**

<b>% Solids</b>	<b>82.7</b>		0.00	% by Weight	1	08/12/2014	08/13/2014 09:00	SM 2540B	
-----------------	-------------	--	------	-------------	---	------------	------------------	----------	--



ARCADIS  
 126 N Jefferson St., Ste 400  
 Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
 Project Number: W1001368  
 Project Manager: Chris Kubacki

**RG-37**  
**A143304-02 (Soil)**

Date Sampled  
 08/12/2014 13:05

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
---------	--------	--------------------	-----------------------	-------	----------	----------	----------	--------	------------

**ECCS**

**Polychlorinated Biphenyls by EPA Method 8082**

**Preparation Batch: A408022**

<b>PCB-1016</b>	<b>0.70</b>	0.016	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:22	EPA 8082A	
PCB-1221	ND	0.0090	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:22	EPA 8082A	
PCB-1232	ND	0.0061	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:22	EPA 8082A	
PCB-1242	ND	0.0096	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:22	EPA 8082A	
PCB-1248	ND	0.012	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:22	EPA 8082A	
<b>PCB-1254</b>	<b>1.1</b>	0.0096	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:22	EPA 8082A	
PCB-1260	ND	0.0053	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:22	EPA 8082A	
<b>Total PCBs</b>	<b>1.8</b>	0.016	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:22	EPA 8082A	

Surrogate: Decachlorobiphenyl

95.5 % 59.1-127

08/12/2014

08/12/2014 17:22

EPA 8082A

Surrogate: Tetrachloro-meta-xylene

100 % 77.4-119

08/12/2014

08/12/2014 17:22

EPA 8082A

**Classical Chemistry Parameters**

**Preparation Batch: A408036**

<b>% Solids</b>	<b>91.2</b>	0.00	% by Weight	1	08/12/2014	08/13/2014 09:00	SM 2540B		
-----------------	-------------	------	-------------	---	------------	------------------	----------	--	--



ARCADIS  
 126 N Jefferson St., Ste 400  
 Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
 Project Number: W1001368  
 Project Manager: Chris Kubacki

**RG-38**  
**A143304-03 (Soil)**

Date Sampled  
 08/12/2014 13:10

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
---------	--------	--------------------	-----------------------	-------	----------	----------	----------	--------	------------

**ECCS**

**Polychlorinated Biphenyls by EPA Method 8082**

**Preparation Batch: A408022**

<b>PCB-1016</b>	<b>0.080</b>	0.016	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:47	EPA 8082A	J
PCB-1221	ND	0.0089	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:47	EPA 8082A	
PCB-1232	ND	0.0061	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:47	EPA 8082A	
PCB-1242	ND	0.0095	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:47	EPA 8082A	
PCB-1248	ND	0.011	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:47	EPA 8082A	
<b>PCB-1254</b>	<b>0.24</b>	0.0095	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:47	EPA 8082A	
PCB-1260	ND	0.0052	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:47	EPA 8082A	
<b>Total PCBs</b>	<b>0.32</b>	0.016	0.22	mg/kg dry	1	08/12/2014	08/12/2014 17:47	EPA 8082A	

Surrogate: Decachlorobiphenyl

96.4 % 59.1-127

08/12/2014

08/12/2014 17:47

EPA 8082A

Surrogate: Tetrachloro-meta-xylene

105 % 77.4-119

08/12/2014

08/12/2014 17:47

EPA 8082A

**Classical Chemistry Parameters**

**Preparation Batch: A408036**

<b>% Solids</b>	<b>92.5</b>	0.00	% by Weight	1	08/12/2014	08/13/2014 09:00	SM 2540B		
-----------------	-------------	------	-------------	---	------------	------------------	----------	--	--



ARCADIS  
 126 N Jefferson St., Ste 400  
 Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
 Project Number: W1001368  
 Project Manager: Chris Kubacki

**RG-39**  
**A143304-04 (Soil)**

Date Sampled  
 08/12/2014 13:15

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
---------	--------	--------------------	-----------------------	-------	----------	----------	----------	--------	------------

**ECCS**

**Polychlorinated Biphenyls by EPA Method 8082**

**Preparation Batch: A408022**

<b>PCB-1016</b>	<b>1.3</b>	0.017	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:12	EPA 8082A	
PCB-1221	ND	0.0092	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:12	EPA 8082A	
PCB-1232	ND	0.0063	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:12	EPA 8082A	
PCB-1242	ND	0.0099	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:12	EPA 8082A	
PCB-1248	ND	0.012	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:12	EPA 8082A	
<b>PCB-1254</b>	<b>4.4</b>	0.0099	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:12	EPA 8082A	
PCB-1260	ND	0.0054	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:12	EPA 8082A	
<b>Total PCBs</b>	<b>5.7</b>	0.017	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:12	EPA 8082A	

Surrogate: Decachlorobiphenyl

98.5 % 59.1-127

08/12/2014

08/12/2014 18:12

EPA 8082A

Surrogate: Tetrachloro-meta-xylene

105 % 77.4-119

08/12/2014

08/12/2014 18:12

EPA 8082A

**Classical Chemistry Parameters**

**Preparation Batch: A408036**

<b>% Solids</b>	<b>88.8</b>	0.00	% by Weight	1	08/12/2014	08/13/2014 09:00	SM 2540B		
-----------------	-------------	------	-------------	---	------------	------------------	----------	--	--



ARCADIS  
 126 N Jefferson St., Ste 400  
 Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
 Project Number: W1001368  
 Project Manager: Chris Kubacki

**DUP-01**  
**A143304-05 (Soil)**

Date Sampled  
**08/12/2014 00:00**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
---------	--------	--------------------	-----------------------	-------	----------	----------	----------	--------	------------

**ECCS**

**Polychlorinated Biphenyls by EPA Method 8082**

**Preparation Batch: A408022**

<b>PCB-1016</b>	<b>2.5</b>	0.017	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:37	EPA 8082A	
PCB-1221	ND	0.0095	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:37	EPA 8082A	
PCB-1232	ND	0.0065	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:37	EPA 8082A	
PCB-1242	ND	0.010	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:37	EPA 8082A	
PCB-1248	ND	0.012	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:37	EPA 8082A	
<b>PCB-1254</b>	<b>3.7</b>	0.010	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:37	EPA 8082A	
PCB-1260	ND	0.0056	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:37	EPA 8082A	
<b>Total PCBs</b>	<b>6.2</b>	0.017	0.23	mg/kg dry	1	08/12/2014	08/12/2014 18:37	EPA 8082A	

Surrogate: Decachlorobiphenyl

101 % 59.1-127

08/12/2014

08/12/2014 18:37

EPA 8082A

Surrogate: Tetrachloro-meta-xylene

110 % 77.4-119

08/12/2014

08/12/2014 18:37

EPA 8082A

**Classical Chemistry Parameters**

**Preparation Batch: A408036**

<b>% Solids</b>	<b>86.0</b>	0.00	% by Weight	1	08/12/2014	08/13/2014 09:00	SM 2540B		
-----------------	-------------	------	-------------	---	------------	------------------	----------	--	--





ARCADIS  
 126 N Jefferson St., Ste 400  
 Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
 Project Number: W1001368  
 Project Manager: Chris Kubacki

**EB-01**  
**A143304-06 (Water)**

Date Sampled  
 08/12/2014 13:30

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
---------	--------	--------------------	-----------------------	-------	----------	----------	----------	--------	------------

**ECCS**

**Polychlorinated Biphenyls by EPA Method 8082**

**Preparation Batch: A408031**

PCB-1016	ND	0.035	0.13	ug/L	1	08/12/2014	08/12/2014 22:48	EPA 8082A	
PCB-1221	ND	0.020	0.25	ug/L	1	08/12/2014	08/12/2014 22:48	EPA 8082A	
PCB-1232	ND	0.037	0.13	ug/L	1	08/12/2014	08/12/2014 22:48	EPA 8082A	
PCB-1242	ND	0.038	0.13	ug/L	1	08/12/2014	08/12/2014 22:48	EPA 8082A	
PCB-1248	ND	0.020	0.13	ug/L	1	08/12/2014	08/12/2014 22:48	EPA 8082A	
PCB-1254	ND	0.0090	0.13	ug/L	1	08/12/2014	08/12/2014 22:48	EPA 8082A	
PCB-1260	ND	0.025	0.13	ug/L	1	08/12/2014	08/12/2014 22:48	EPA 8082A	
Total PCBs	ND	0.038	0.25	ug/L	1	08/12/2014	08/12/2014 22:48	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl</i>			95.5 %	75.4-168		08/12/2014	08/12/2014 22:48	EPA 8082A	
<i>Surrogate: Tetrachloro-meta-xylene</i>			97.8 %	74.3-141		08/12/2014	08/12/2014 22:48	EPA 8082A	



ARCADIS  
 126 N Jefferson St., Ste 400  
 Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
 Project Number: W1001368  
 Project Manager: Chris Kubacki

**TB-01**  
**A143304-07 (Water)**

Date Sampled  
 08/12/2014 00:00

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
---------	--------	--------------------	-----------------------	-------	----------	----------	----------	--------	------------

**ECCS**

**Polychlorinated Biphenyls by EPA Method 8082**

**Preparation Batch: A408031**

PCB-1016	ND	0.035	0.13	ug/L	1	08/12/2014	08/12/2014 23:13	EPA 8082A	
PCB-1221	ND	0.020	0.25	ug/L	1	08/12/2014	08/12/2014 23:13	EPA 8082A	
PCB-1232	ND	0.037	0.13	ug/L	1	08/12/2014	08/12/2014 23:13	EPA 8082A	
PCB-1242	ND	0.038	0.13	ug/L	1	08/12/2014	08/12/2014 23:13	EPA 8082A	
PCB-1248	ND	0.020	0.13	ug/L	1	08/12/2014	08/12/2014 23:13	EPA 8082A	
PCB-1254	ND	0.0090	0.13	ug/L	1	08/12/2014	08/12/2014 23:13	EPA 8082A	
PCB-1260	ND	0.025	0.13	ug/L	1	08/12/2014	08/12/2014 23:13	EPA 8082A	
Total PCBs	ND	0.038	0.25	ug/L	1	08/12/2014	08/12/2014 23:13	EPA 8082A	
<i>Surrogate: Decachlorobiphenyl</i>			93.0 %	75.4-168		08/12/2014	08/12/2014 23:13	EPA 8082A	
<i>Surrogate: Tetrachloro-meta-xylene</i>			98.1 %	74.3-141		08/12/2014	08/12/2014 23:13	EPA 8082A	



ARCADIS  
 126 N Jefferson St., Ste 400  
 Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
 Project Number: W1001368  
 Project Manager: Chris Kubacki

**Polychlorinated Biphenyls by EPA Method 8082 - Quality Control**  
**ECCS**

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch A408022 - EPA 3570**

**Blank (A408022-BLK1)**

Prepared: 08/12/2014 Analyzed: 08/12/2014 13:11

PCB-1016	ND	0.20	mg/kg wet							
PCB-1221	ND	0.20	mg/kg wet							
PCB-1232	ND	0.20	mg/kg wet							
PCB-1242	ND	0.20	mg/kg wet							
PCB-1248	ND	0.20	mg/kg wet							
PCB-1254	ND	0.20	mg/kg wet							
PCB-1260	ND	0.20	mg/kg wet							
Total PCBs	ND	0.20	mg/kg wet							
<i>Surrogate: Decachlorobiphenyl</i>	0.294		mg/kg wet	0.3168		92.7	59.1-127			
<i>Surrogate: Tetrachloro-meta-xylene</i>	0.226		mg/kg wet	0.2400		94.0	77.4-119			

**LCS (A408022-BS1)**

Prepared: 08/12/2014 Analyzed: 08/12/2014 13:36

PCB-1260	3.72	0.20	mg/kg wet	4.000		93.1	73.1-132			
<i>Surrogate: Decachlorobiphenyl</i>	0.304		mg/kg wet	0.3168		95.8	59.1-127			
<i>Surrogate: Tetrachloro-meta-xylene</i>	0.237		mg/kg wet	0.2400		98.8	77.4-119			

**Matrix Spike (A408022-MS1)**

Source: A143304-03

Prepared: 08/12/2014 Analyzed: 08/12/2014 19:02

PCB-1260	4.24	0.22	mg/kg dry	4.326	ND	97.9	62.1-148			
<i>Surrogate: Decachlorobiphenyl</i>	0.336		mg/kg dry	0.3426		98.0	59.1-127			
<i>Surrogate: Tetrachloro-meta-xylene</i>	0.261		mg/kg dry	0.2596		100	77.4-119			

**Matrix Spike Dup (A408022-MSD1)**

Source: A143304-03

Prepared: 08/12/2014 Analyzed: 08/12/2014 19:27

PCB-1260	4.18	0.22	mg/kg dry	4.326	ND	96.6	62.1-148	1.37	20	
<i>Surrogate: Decachlorobiphenyl</i>	0.332		mg/kg dry	0.3426		96.8	59.1-127			
<i>Surrogate: Tetrachloro-meta-xylene</i>	0.271		mg/kg dry	0.2596		104	77.4-119			

**Batch A408031 - EPA 3511**

**Blank (A408031-BLK1)**

Prepared: 08/12/2014 Analyzed: 08/12/2014 21:33

PCB-1016	ND	0.13	ug/L							
PCB-1221	ND	0.25	ug/L							
PCB-1232	ND	0.13	ug/L							
PCB-1242	ND	0.13	ug/L							
PCB-1248	ND	0.13	ug/L							
PCB-1254	ND	0.13	ug/L							
PCB-1260	ND	0.13	ug/L							
Total PCBs	ND	0.25	ug/L							
<i>Surrogate: Decachlorobiphenyl</i>	0.983		ug/L	0.9900		99.2	75.4-168			
<i>Surrogate: Tetrachloro-meta-xylene</i>	0.754		ug/L	0.7500		100	74.3-141			



ARCADIS  
 126 N Jefferson St., Ste 400  
 Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
 Project Number: W1001368  
 Project Manager: Chris Kubacki

**Polychlorinated Biphenyls by EPA Method 8082 - Quality Control**

**ECCS**

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch A408031 - EPA 3511**

**LCS (A408031-BS1)**

Prepared: 08/12/2014 Analyzed: 08/12/2014 21:58

PCB-1260	11.8	0.13	ug/L	12.50		94.6	70-130			
<i>Surrogate: Decachlorobiphenyl</i>	<i>1.00</i>		<i>ug/L</i>	<i>0.9900</i>		<i>101</i>	<i>75.4-168</i>			
<i>Surrogate: Tetrachloro-meta-xylene</i>	<i>0.761</i>		<i>ug/L</i>	<i>0.7500</i>		<i>101</i>	<i>74.3-141</i>			

**LCS Dup (A408031-BSD1)**

Prepared: 08/12/2014 Analyzed: 08/12/2014 22:23

PCB-1260	11.8	0.13	ug/L	12.50		94.7	70-130	0.190	20	
<i>Surrogate: Decachlorobiphenyl</i>	<i>0.942</i>		<i>ug/L</i>	<i>0.9900</i>		<i>95.1</i>	<i>75.4-168</i>			
<i>Surrogate: Tetrachloro-meta-xylene</i>	<i>0.766</i>		<i>ug/L</i>	<i>0.7500</i>		<i>102</i>	<i>74.3-141</i>			



2525 Advance Road  
Madison, WI 53718  
608.221.8700 Phone  
608.221.4889 Fax

ARCADIS  
126 N Jefferson St., Ste 400  
Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
Project Number: W1001368  
Project Manager: Chris Kubacki

### Classical Chemistry Parameters - Quality Control

#### ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

#### Batch A408036 - % Solids

Duplicate (A408036-DUP1)	Source: A143307-11	Prepared: 08/12/2014	Analyzed: 08/13/2014 09:00		
% Solids	89.0	0.00 % by Weight	88.2	0.854	20



ARCADIS  
126 N Jefferson St., Ste 400  
Milwaukee WI, 53202

Project: Madison Kipp - Madison, WI  
Project Number: W1001368  
Project Manager: Chris Kubacki

### Notes and Definitions

- J Analyte was detected but is below the reporting limit. The concentration is estimated.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. If the word 'dry' does not appear after the units, results are reported on an as-is basis.
- RPD Relative Percent Difference

