



2525 Advance Road  
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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
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**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	
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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
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**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		
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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
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**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		
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 Milwaukee WI, 53202

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 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
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**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		
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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
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**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		
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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
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**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	





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

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 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
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**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	



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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
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**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			



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**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
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**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			
Surrogate: Decachlorobiphenyl	1.00		ug/L	0.9900		101	75.4-168			
Surrogate: Tetrachloro-meta-xylene	0.761		ug/L	0.7500		101	74.3-141			

**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	
Surrogate: Decachlorobiphenyl	0.942		ug/L	0.9900		95.1	75.4-168			
Surrogate: Tetrachloro-meta-xylene	0.766		ug/L	0.7500		102	74.3-141			



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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
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#### 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



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### 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

