

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: 500-82876-3
Client Project/Site: Waukegan Station Ash Ponds

For:
KPRG and Associates, Inc.
14665 West Lisbon Road,
Suite 2B
Brookfield, Wisconsin 53005

Attn: Richard Gnat



Authorized for release by:
9/9/2014 3:38:26 PM

Bonnie Stadelmann, Senior Project Manager
(708)534-5200
bonnie.stadelmann@testamericainc.com

..... LINKS

Review your project results through
Total Access

Have a Question?
Ask The Expert

Visit us at:
www.testamericainc.com

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.

Comp. Ex. 229K

MWG13-15_45563

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	6
Sample Summary	7
Client Sample Results	8
Definitions	13
QC Association	14
Surrogate Summary	18
QC Sample Results	19
Chain of Custody	25
Receipt Checklists	27
Certification Summary	29

Case Narrative

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Job ID: 500-82876-3

3

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-82876-3

Comments

No additional comments.

Receipt

The samples were received on 8/23/2014 6:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.5° C, 3.8° C, 3.9° C and 4.2° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

4

Client Sample ID: ELUC MW-10

Lab Sample ID: 500-82876-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.75		0.0010		mg/L	1		6020A	Dissolved
Barium	0.072		0.0025		mg/L	1		6020A	Dissolved
Boron	0.77		0.050		mg/L	1		6020A	Dissolved
Iron	7.3		0.10		mg/L	1		6020A	Dissolved
Manganese	0.19		0.0025		mg/L	1		6020A	Dissolved
Nickel	0.0021		0.0020		mg/L	1		6020A	Dissolved
Sulfate	170		50		mg/L	10		9038	Dissolved
Chloride	61		2.0		mg/L	1		9251	Dissolved
Total Dissolved Solids	770		10		mg/L	1		SM 2540C	Dissolved
Fluoride	0.19		0.10		mg/L	1		SM 4500 F C	Dissolved

Client Sample ID: ELUC MW-11

Lab Sample ID: 500-82876-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.3		0.0010		mg/L	1		6020A	Dissolved
Barium	0.039		0.0025		mg/L	1		6020A	Dissolved
Boron	5.1		0.50		mg/L	10		6020A	Dissolved
Iron	2.0		0.10		mg/L	1		6020A	Dissolved
Manganese	0.23		0.0025		mg/L	1		6020A	Dissolved
Selenium	0.0089		0.0025		mg/L	1		6020A	Dissolved
Sulfate	210		50		mg/L	10		9038	Dissolved
Chloride	290		10		mg/L	5		9251	Dissolved
Total Dissolved Solids	1100		10		mg/L	1		SM 2540C	Dissolved
Fluoride	0.14		0.10		mg/L	1		SM 4500 F C	Dissolved

Client Sample ID: ELUC MW-12

Lab Sample ID: 500-82876-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0011		0.0010		mg/L	1		6020A	Dissolved
Barium	0.10		0.0025		mg/L	1		6020A	Dissolved
Boron	1.9		0.25		mg/L	5		6020A	Dissolved
Cadmium	0.0026		0.00050		mg/L	1		6020A	Dissolved
Cobalt	0.0033		0.0010		mg/L	1		6020A	Dissolved
Iron	2.2		0.10		mg/L	1		6020A	Dissolved
Manganese	0.11		0.0025		mg/L	1		6020A	Dissolved
Nickel	0.016		0.0020		mg/L	1		6020A	Dissolved
Selenium	0.0059		0.0025		mg/L	1		6020A	Dissolved
Zinc	0.14		0.020		mg/L	1		6020A	Dissolved
Sulfate	200		50		mg/L	10		9038	Dissolved
Chloride	410		50		mg/L	25		9251	Dissolved
Total Dissolved Solids	1100		10		mg/L	1		SM 2540C	Dissolved
Fluoride	0.10		0.10		mg/L	1		SM 4500 F C	Dissolved

Client Sample ID: ELUC MW-14

Lab Sample ID: 500-82876-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.13		0.0010		mg/L	1		6020A	Dissolved
Barium	0.049		0.0025		mg/L	1		6020A	Dissolved
Boron	1.0		0.25		mg/L	5		6020A	Dissolved
Chromium	0.0060		0.0050		mg/L	1		6020A	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Client Sample ID: ELUC MW-14 (Continued)

Lab Sample ID: 500-82876-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Iron	2.0		0.10		mg/L	1			6020A	Dissolved
Manganese	0.18		0.0025		mg/L	1			6020A	Dissolved
Sulfate	370		100		mg/L	20			9038	Dissolved
Chloride	120		10		mg/L	5			9251	Dissolved
Total Dissolved Solids	1300		10		mg/L	1			SM 2540C	Dissolved
Fluoride	0.14		0.10		mg/L	1			SM 4500 F C	Dissolved

4

Client Sample ID: ELUC MW-15

Lab Sample ID: 500-82876-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	0.0048		0.0010		mg/L	1			6020A	Dissolved
Barium	0.087		0.0025		mg/L	1			6020A	Dissolved
Boron	3.7		0.25		mg/L	5			6020A	Dissolved
Cobalt	0.0011		0.0010		mg/L	1			6020A	Dissolved
Iron	11		0.10		mg/L	1			6020A	Dissolved
Manganese	0.39		0.0025		mg/L	1			6020A	Dissolved
Cyanide, Total	0.17		0.010		mg/L	1			9014	Dissolved
Sulfate	250		100		mg/L	20			9038	Dissolved
Chloride	57		2.0		mg/L	1			9251	Dissolved
Total Dissolved Solids	950		10		mg/L	1			SM 2540C	Dissolved
Fluoride	0.28		0.10		mg/L	1			SM 4500 F C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Method Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
314.0	Perchlorate (IC)	EPA	TAL SAC
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
9014	Cyanide	SW846	TAL CHI
9038	Sulfate, Turbidimetric	SW846	TAL CHI
9251	Chloride	SW846	TAL CHI
Nitrate by calc	Nitrogen, Nitrate-Nitrite	SM	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 NO2 B	Nitrogen, Nitrite	SM	TAL CHI
SM 4500 NO3 F	Nitrogen, Nitrate	SM	TAL CHI

5

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

TestAmerica Chicago

Sample Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-82876-12	ELUC MW-10	Water	08/22/14 15:10	08/23/14 06:30
500-82876-13	ELUC MW-11	Water	08/22/14 17:25	08/23/14 06:30
500-82876-14	ELUC MW-12	Water	08/22/14 13:45	08/23/14 06:30
500-82876-15	ELUC MW-14	Water	08/22/14 16:40	08/23/14 06:30
500-82876-16	ELUC MW-15	Water	08/22/14 12:25	08/23/14 06:30

6

TestAmerica Chicago

MWG13-15_45569
9/9/2014

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Client Sample ID: ELUC MW-10

Lab Sample ID: 500-82876-12

Date Collected: 08/22/14 15:10

Matrix: Water

Date Received: 08/23/14 06:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			08/25/14 17:18	1
Toluene	<0.00050		0.00050		mg/L			08/25/14 17:18	1
Ethylbenzene	<0.00050		0.00050		mg/L			08/25/14 17:18	1
Xylenes, Total	<0.0010		0.0010		mg/L			08/25/14 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 125		08/25/14 17:18	1
Toluene-d8 (Surr)	101		75 - 120		08/25/14 17:18	1
4-Bromofluorobenzene (Surr)	94		75 - 120		08/25/14 17:18	1
Dibromofluoromethane	97		75 - 120		08/25/14 17:18	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			09/08/14 23:07	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/25/14 11:40	08/25/14 12:50	1
Arsenic	0.75		0.0010		mg/L		08/25/14 11:40	08/25/14 12:50	1
Barium	0.072		0.0025		mg/L		08/25/14 11:40	08/25/14 12:50	1
Beryllium	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 12:50	1
Boron	0.77		0.050		mg/L		08/25/14 11:40	08/26/14 16:06	1
Cadmium	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 12:50	1
Chromium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 12:50	1
Cobalt	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 12:50	1
Copper	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 12:50	1
Iron	7.3		0.10		mg/L		08/25/14 11:40	08/25/14 12:50	1
Lead	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 12:50	1
Manganese	0.19		0.0025		mg/L		08/25/14 11:40	08/25/14 12:50	1
Nickel	0.0021		0.0020		mg/L		08/25/14 11:40	08/25/14 12:50	1
Selenium	<0.0025		0.0025		mg/L		08/25/14 11:40	08/25/14 12:50	1
Silver	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 12:50	1
Thallium	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 12:50	1
Vanadium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 12:50	1
Zinc	<0.020		0.020		mg/L		08/25/14 11:40	08/25/14 12:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/03/14 11:25	09/04/14 13:23	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		09/03/14 12:30	09/03/14 16:38	1
Sulfate	170		50		mg/L			09/09/14 05:18	10
Chloride	61		2.0		mg/L			08/23/14 19:30	1
Nitrogen, Nitrate	<0.10		0.10		mg/L			08/29/14 08:53	1
Total Dissolved Solids	770		10		mg/L			08/26/14 04:48	1
Fluoride	0.19		0.10		mg/L			08/30/14 20:20	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			08/22/14 21:06	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			08/28/14 13:17	1

TestAmerica Chicago

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Client Sample ID: ELUC MW-11

Lab Sample ID: 500-82876-13

Date Collected: 08/22/14 17:25

Matrix: Water

Date Received: 08/23/14 06:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			08/25/14 17:43	1
Toluene	<0.00050		0.00050		mg/L			08/25/14 17:43	1
Ethylbenzene	<0.00050		0.00050		mg/L			08/25/14 17:43	1
Xylenes, Total	<0.0010		0.0010		mg/L			08/25/14 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 125		08/25/14 17:43	1
Toluene-d8 (Surr)	97		75 - 120		08/25/14 17:43	1
4-Bromofluorobenzene (Surr)	96		75 - 120		08/25/14 17:43	1
Dibromofluoromethane	93		75 - 120		08/25/14 17:43	1

7

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			09/08/14 23:22	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/25/14 11:40	08/25/14 12:53	1
Arsenic	1.3		0.0010		mg/L		08/25/14 11:40	08/25/14 12:53	1
Barium	0.039		0.0025		mg/L		08/25/14 11:40	08/25/14 12:53	1
Beryllium	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 12:53	1
Boron	5.1		0.50		mg/L		08/25/14 11:40	08/26/14 16:10	10
Cadmium	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 12:53	1
Chromium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 12:53	1
Cobalt	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 12:53	1
Copper	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 12:53	1
Iron	2.0		0.10		mg/L		08/25/14 11:40	08/25/14 12:53	1
Lead	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 12:53	1
Manganese	0.23		0.0025		mg/L		08/25/14 11:40	08/25/14 12:53	1
Nickel	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 12:53	1
Selenium	0.0089		0.0025		mg/L		08/25/14 11:40	08/25/14 12:53	1
Silver	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 12:53	1
Thallium	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 12:53	1
Vanadium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 12:53	1
Zinc	<0.020		0.020		mg/L		08/25/14 11:40	08/25/14 12:53	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/03/14 11:25	09/04/14 13:25	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		09/03/14 12:30	09/03/14 16:38	1
Sulfate	210		50		mg/L			09/09/14 05:19	10
Chloride	290		10		mg/L			08/23/14 20:01	5
Nitrogen, Nitrate	<0.10		0.10		mg/L			08/29/14 08:53	1
Total Dissolved Solids	1100		10		mg/L			08/26/14 04:51	1
Fluoride	0.14		0.10		mg/L			08/30/14 20:32	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			08/22/14 21:07	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			08/28/14 13:20	1

TestAmerica Chicago

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Client Sample ID: ELUC MW-12

Lab Sample ID: 500-82876-14

Date Collected: 08/22/14 13:45

Matrix: Water

Date Received: 08/23/14 06:30

Method: 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			08/25/14 18:08	1
Toluene	<0.00050		0.00050		mg/L			08/25/14 18:08	1
Ethylbenzene	<0.00050		0.00050		mg/L			08/25/14 18:08	1
Xylenes, Total	<0.0010		0.0010		mg/L			08/25/14 18:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 125					08/25/14 18:08	1
Toluene-d8 (Surr)	98		75 - 120					08/25/14 18:08	1
4-Bromofluorobenzene (Surr)	97		75 - 120					08/25/14 18:08	1
Dibromofluoromethane	94		75 - 120					08/25/14 18:08	1

7

Method: 314.0 - Perchlorate (IC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			09/08/14 23:38	1

Method: 6020A - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/25/14 11:40	08/25/14 12:57	1
Arsenic	0.0011		0.0010		mg/L		08/25/14 11:40	08/25/14 12:57	1
Barium	0.10		0.0025		mg/L		08/25/14 11:40	08/25/14 12:57	1
Beryllium	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 12:57	1
Boron	1.9		0.25		mg/L		08/25/14 11:40	08/26/14 16:14	5
Cadmium	0.0026		0.00050		mg/L		08/25/14 11:40	08/25/14 12:57	1
Chromium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 12:57	1
Cobalt	0.0033		0.0010		mg/L		08/25/14 11:40	08/25/14 12:57	1
Copper	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 12:57	1
Iron	2.2		0.10		mg/L		08/25/14 11:40	08/25/14 12:57	1
Lead	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 12:57	1
Manganese	0.11		0.0025		mg/L		08/25/14 11:40	08/25/14 12:57	1
Nickel	0.016		0.0020		mg/L		08/25/14 11:40	08/25/14 12:57	1
Selenium	0.0059		0.0025		mg/L		08/25/14 11:40	08/25/14 12:57	1
Silver	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 12:57	1
Thallium	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 12:57	1
Vanadium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 12:57	1
Zinc	0.14		0.020		mg/L		08/25/14 11:40	08/25/14 12:57	1

Method: 7470A - Mercury (CVAA) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/03/14 11:25	09/04/14 13:27	1

General Chemistry - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		09/03/14 12:30	09/03/14 16:39	1
Sulfate	200		50		mg/L			09/09/14 05:20	10
Chloride	410		50		mg/L			08/23/14 20:18	25
Nitrogen, Nitrate	<0.10		0.10		mg/L			08/29/14 08:53	1
Total Dissolved Solids	1100		10		mg/L			08/26/14 04:54	1
Fluoride	0.10		0.10		mg/L			08/30/14 20:34	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			08/22/14 21:07	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			08/28/14 13:21	1

TestAmerica Chicago

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Client Sample ID: ELUC MW-14

Lab Sample ID: 500-82876-15

Date Collected: 08/22/14 16:40

Matrix: Water

Date Received: 08/23/14 06:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			08/25/14 18:33	1
Toluene	<0.00050		0.00050		mg/L			08/25/14 18:33	1
Ethylbenzene	<0.00050		0.00050		mg/L			08/25/14 18:33	1
Xylenes, Total	<0.0010		0.0010		mg/L			08/25/14 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 125		08/25/14 18:33	1
Toluene-d8 (Surr)	94		75 - 120		08/25/14 18:33	1
4-Bromofluorobenzene (Surr)	95		75 - 120		08/25/14 18:33	1
Dibromofluoromethane	96		75 - 120		08/25/14 18:33	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			09/08/14 23:53	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/25/14 11:40	08/25/14 13:07	1
Arsenic	0.13		0.0010		mg/L		08/25/14 11:40	08/25/14 13:07	1
Barium	0.049		0.0025		mg/L		08/25/14 11:40	08/25/14 13:07	1
Beryllium	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 13:07	1
Boron	1.0		0.25		mg/L		08/25/14 11:40	08/26/14 16:18	5
Cadmium	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 13:07	1
Chromium	0.0060		0.0050		mg/L		08/25/14 11:40	08/25/14 13:07	1
Cobalt	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 13:07	1
Copper	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 13:07	1
Iron	2.0		0.10		mg/L		08/25/14 11:40	08/25/14 13:07	1
Lead	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 13:07	1
Manganese	0.18		0.0025		mg/L		08/25/14 11:40	08/25/14 13:07	1
Nickel	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 13:07	1
Selenium	<0.0025		0.0025		mg/L		08/25/14 11:40	08/25/14 13:07	1
Silver	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 13:07	1
Thallium	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 13:07	1
Vanadium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 13:07	1
Zinc	<0.020		0.020		mg/L		08/25/14 11:40	08/25/14 13:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/03/14 11:25	09/04/14 13:29	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		09/03/14 12:30	09/03/14 16:39	1
Sulfate	370		100		mg/L			09/09/14 05:21	20
Chloride	120		10		mg/L			08/23/14 20:02	5
Nitrogen, Nitrate	<0.10		0.10		mg/L			08/29/14 08:53	1
Total Dissolved Solids	1300		10		mg/L			08/26/14 04:56	1
Fluoride	0.14		0.10		mg/L			08/30/14 20:37	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			08/22/14 21:08	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			08/28/14 13:22	1

TestAmerica Chicago

7

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Client Sample ID: ELUC MW-15

Lab Sample ID: 500-82876-16

Date Collected: 08/22/14 12:25

Matrix: Water

Date Received: 08/23/14 06:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			08/25/14 18:58	1
Toluene	<0.00050		0.00050		mg/L			08/25/14 18:58	1
Ethylbenzene	<0.00050		0.00050		mg/L			08/25/14 18:58	1
Xylenes, Total	<0.0010		0.0010		mg/L			08/25/14 18:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 125		08/25/14 18:58	1
Toluene-d8 (Surr)	96		75 - 120		08/25/14 18:58	1
4-Bromofluorobenzene (Surr)	95		75 - 120		08/25/14 18:58	1
Dibromofluoromethane	92		75 - 120		08/25/14 18:58	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			09/09/14 00:09	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/25/14 11:40	08/25/14 13:10	1
Arsenic	0.0048		0.0010		mg/L		08/25/14 11:40	08/25/14 13:10	1
Barium	0.087		0.0025		mg/L		08/25/14 11:40	08/25/14 13:10	1
Beryllium	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 13:10	1
Boron	3.7		0.25		mg/L		08/25/14 11:40	08/26/14 16:22	5
Cadmium	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 13:10	1
Chromium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 13:10	1
Cobalt	0.0011		0.0010		mg/L		08/25/14 11:40	08/25/14 13:10	1
Copper	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 13:10	1
Iron	11		0.10		mg/L		08/25/14 11:40	08/25/14 13:10	1
Lead	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 13:10	1
Manganese	0.39		0.0025		mg/L		08/25/14 11:40	08/25/14 13:10	1
Nickel	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 13:10	1
Selenium	<0.0025		0.0025		mg/L		08/25/14 11:40	08/25/14 13:10	1
Silver	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 13:10	1
Thallium	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 13:10	1
Vanadium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 13:10	1
Zinc	<0.020		0.020		mg/L		08/25/14 11:40	08/25/14 13:10	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/03/14 11:25	09/04/14 13:31	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.17		0.010		mg/L		09/04/14 11:30	09/04/14 17:48	1
Sulfate	250		100		mg/L			09/09/14 05:22	20
Chloride	57		2.0		mg/L			08/23/14 19:32	1
Nitrogen, Nitrate	<0.10		0.10		mg/L			08/29/14 08:53	1
Total Dissolved Solids	950		10		mg/L			08/26/14 04:59	1
Fluoride	0.28		0.10		mg/L			08/30/14 20:40	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			08/22/14 21:08	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			08/28/14 13:22	1

TestAmerica Chicago

Definitions/Glossary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Glossary

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

TestAmerica Job ID: 500-82876-3

GC/MS VOA

Analysis Batch: 251395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Total/NA	Water	8260B	
500-82876-13	ELUC MW-11	Total/NA	Water	8260B	
500-82876-14	ELUC MW-12	Total/NA	Water	8260B	
500-82876-15	ELUC MW-14	Total/NA	Water	8260B	
500-82876-16	ELUC MW-15	Total/NA	Water	8260B	
LCS 500-251395/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-251395/6	Method Blank	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 51867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Total/NA	Water	314.0	
500-82876-13	ELUC MW-11	Total/NA	Water	314.0	
500-82876-14	ELUC MW-12	Total/NA	Water	314.0	
500-82876-15	ELUC MW-14	Total/NA	Water	314.0	
500-82876-16	ELUC MW-15	Total/NA	Water	314.0	
LCS 320-51867/7	Lab Control Sample	Total/NA	Water	314.0	
MB 320-51867/6	Method Blank	Total/NA	Water	314.0	
MRL 320-51867/5	Lab Control Sample	Total/NA	Water	314.0	

Metals

Prep Batch: 251456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	Soluble Metals	
500-82876-13	ELUC MW-11	Dissolved	Water	Soluble Metals	
500-82876-14	ELUC MW-12	Dissolved	Water	Soluble Metals	
500-82876-15	ELUC MW-14	Dissolved	Water	Soluble Metals	
500-82876-16	ELUC MW-15	Dissolved	Water	Soluble Metals	
LCS 500-251456/2-A	Lab Control Sample	Soluble	Water	Soluble Metals	
MB 500-251456/1-A	Method Blank	Soluble	Water	Soluble Metals	

Analysis Batch: 251478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	6020A	251456
500-82876-13	ELUC MW-11	Dissolved	Water	6020A	251456
500-82876-14	ELUC MW-12	Dissolved	Water	6020A	251456
500-82876-15	ELUC MW-14	Dissolved	Water	6020A	251456
500-82876-16	ELUC MW-15	Dissolved	Water	6020A	251456
LCS 500-251456/2-A	Lab Control Sample	Soluble	Water	6020A	251456
MB 500-251456/1-A	Method Blank	Soluble	Water	6020A	251456

Analysis Batch: 251696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-251456/2-A	Lab Control Sample	Soluble	Water	6020A	251456
MB 500-251456/1-A	Method Blank	Soluble	Water	6020A	251456

TestAmerica Chicago

QC Association Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Metals (Continued)

Analysis Batch: 251823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	6020A	251456
500-82876-13	ELUC MW-11	Dissolved	Water	6020A	251456
500-82876-14	ELUC MW-12	Dissolved	Water	6020A	251456
500-82876-15	ELUC MW-14	Dissolved	Water	6020A	251456
500-82876-16	ELUC MW-15	Dissolved	Water	6020A	251456

Prep Batch: 252739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	7470A	
500-82876-13	ELUC MW-11	Dissolved	Water	7470A	
500-82876-14	ELUC MW-12	Dissolved	Water	7470A	
500-82876-15	ELUC MW-14	Dissolved	Water	7470A	
500-82876-16	ELUC MW-15	Dissolved	Water	7470A	
LCS 500-252739/13-A	Lab Control Sample	Total/NA	Water	7470A	
MB 500-252739/12-A	Method Blank	Total/NA	Water	7470A	

9

Analysis Batch: 252986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	7470A	252739
500-82876-13	ELUC MW-11	Dissolved	Water	7470A	252739
500-82876-14	ELUC MW-12	Dissolved	Water	7470A	252739
500-82876-15	ELUC MW-14	Dissolved	Water	7470A	252739
500-82876-16	ELUC MW-15	Dissolved	Water	7470A	252739
LCS 500-252739/13-A	Lab Control Sample	Total/NA	Water	7470A	252739
MB 500-252739/12-A	Method Blank	Total/NA	Water	7470A	252739

General Chemistry

Analysis Batch: 251294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	SM 4500 NO2 B	
500-82876-13	ELUC MW-11	Dissolved	Water	SM 4500 NO2 B	
500-82876-14	ELUC MW-12	Dissolved	Water	SM 4500 NO2 B	
500-82876-15	ELUC MW-14	Dissolved	Water	SM 4500 NO2 B	
500-82876-16	ELUC MW-15	Dissolved	Water	SM 4500 NO2 B	
LCS 500-251294/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	
MB 500-251294/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	

Analysis Batch: 251311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	9251	
500-82876-13	ELUC MW-11	Dissolved	Water	9251	
500-82876-14	ELUC MW-12	Dissolved	Water	9251	
500-82876-15	ELUC MW-14	Dissolved	Water	9251	
500-82876-16	ELUC MW-15	Dissolved	Water	9251	
LCS 500-251311/5	Lab Control Sample	Total/NA	Water	9251	
MB 500-251311/4	Method Blank	Total/NA	Water	9251	

TestAmerica Chicago

QC Association Summary

Client: KPRG and Associates, Inc.
 Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

General Chemistry (Continued)

Analysis Batch: 251592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	SM 2540C	
500-82876-13	ELUC MW-11	Dissolved	Water	SM 2540C	
500-82876-14	ELUC MW-12	Dissolved	Water	SM 2540C	
500-82876-15	ELUC MW-14	Dissolved	Water	SM 2540C	
500-82876-16	ELUC MW-15	Dissolved	Water	SM 2540C	
LCS 500-251592/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 500-251592/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 252088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	SM 4500 NO3 F	
500-82876-13	ELUC MW-11	Dissolved	Water	SM 4500 NO3 F	
500-82876-14	ELUC MW-12	Dissolved	Water	SM 4500 NO3 F	
500-82876-15	ELUC MW-14	Dissolved	Water	SM 4500 NO3 F	
500-82876-16	ELUC MW-15	Dissolved	Water	SM 4500 NO3 F	
LCS 500-252088/15	Lab Control Sample	Total/NA	Water	SM 4500 NO3 F	
MB 500-252088/14	Method Blank	Total/NA	Water	SM 4500 NO3 F	

9

Analysis Batch: 252226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	Nitrate by calc	
500-82876-13	ELUC MW-11	Dissolved	Water	Nitrate by calc	
500-82876-14	ELUC MW-12	Dissolved	Water	Nitrate by calc	
500-82876-15	ELUC MW-14	Dissolved	Water	Nitrate by calc	
500-82876-16	ELUC MW-15	Dissolved	Water	Nitrate by calc	

Analysis Batch: 252442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	SM 4500 F C	
500-82876-13	ELUC MW-11	Dissolved	Water	SM 4500 F C	
500-82876-14	ELUC MW-12	Dissolved	Water	SM 4500 F C	
500-82876-15	ELUC MW-14	Dissolved	Water	SM 4500 F C	
500-82876-16	ELUC MW-15	Dissolved	Water	SM 4500 F C	
LCS 500-252442/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MB 500-252442/3	Method Blank	Total/NA	Water	SM 4500 F C	

Prep Batch: 252743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	9010B	
500-82876-13	ELUC MW-11	Dissolved	Water	9010B	
500-82876-14	ELUC MW-12	Dissolved	Water	9010B	
500-82876-15	ELUC MW-14	Dissolved	Water	9010B	
LCS 500-252743/2-A	Lab Control Sample	Total/NA	Water	9010B	
MB 500-252743/1-A	Method Blank	Total/NA	Water	9010B	

Analysis Batch: 252822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	9014	252743
500-82876-13	ELUC MW-11	Dissolved	Water	9014	252743
500-82876-14	ELUC MW-12	Dissolved	Water	9014	252743
500-82876-15	ELUC MW-14	Dissolved	Water	9014	252743

TestAmerica Chicago

MWG13-15_45578

9/9/2014

QC Association Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

General Chemistry (Continued)

Analysis Batch: 252822 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-252743/2-A	Lab Control Sample	Total/NA	Water	9014	252743
MB 500-252743/1-A	Method Blank	Total/NA	Water	9014	252743

Prep Batch: 252941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-16	ELUC MW-15	Dissolved	Water	9010B	
LCS 500-252941/2-A	Lab Control Sample	Total/NA	Water	9010B	
MB 500-252941/1-A	Method Blank	Total/NA	Water	9010B	

Analysis Batch: 253100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-16	ELUC MW-15	Dissolved	Water	9014	252941
LCS 500-252941/2-A	Lab Control Sample	Total/NA	Water	9014	252941
MB 500-252941/1-A	Method Blank	Total/NA	Water	9014	252941

Analysis Batch: 253498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-82876-12	ELUC MW-10	Dissolved	Water	9038	
500-82876-13	ELUC MW-11	Dissolved	Water	9038	
500-82876-14	ELUC MW-12	Dissolved	Water	9038	
500-82876-15	ELUC MW-14	Dissolved	Water	9038	
500-82876-16	ELUC MW-15	Dissolved	Water	9038	
LCS 500-253498/4	Lab Control Sample	Total/NA	Water	9038	
MB 500-253498/3	Method Blank	Total/NA	Water	9038	

9

Surrogate Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-125)	TOL (75-120)	BFB (75-120)	DBFM (75-120)
500-82876-12	ELUC MW-10	104	101	94	97
500-82876-13	ELUC MW-11	106	97	96	93
500-82876-14	ELUC MW-12	105	98	97	94
500-82876-15	ELUC MW-14	103	94	95	96
500-82876-16	ELUC MW-15	103	96	95	92
LCS 500-251395/4	Lab Control Sample	115	100	101	99
MB 500-251395/6	Method Blank	117	99	100	98

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

10

TestAmerica Chicago

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-251395/6
Matrix: Water
Analysis Batch: 251395

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00050		0.00050		mg/L			08/25/14 10:47	1
Toluene	<0.00050		0.00050		mg/L			08/25/14 10:47	1
Ethylbenzene	<0.00050		0.00050		mg/L			08/25/14 10:47	1
Xylenes, Total	<0.0010		0.0010		mg/L			08/25/14 10:47	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	117		75 - 125		08/25/14 10:47	1
Toluene-d8 (Surr)	99		75 - 120		08/25/14 10:47	1
4-Bromofluorobenzene (Surr)	100		75 - 120		08/25/14 10:47	1
Dibromofluoromethane	98		75 - 120		08/25/14 10:47	1

Lab Sample ID: LCS 500-251395/4
Matrix: Water
Analysis Batch: 251395

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	0.0500	0.0495		mg/L		99	75 - 120
Toluene	0.0500	0.0501		mg/L		100	75 - 120
Ethylbenzene	0.0500	0.0478		mg/L		96	75 - 120
Xylenes, Total	0.100	0.0979		mg/L		98	75 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	115		75 - 125
Toluene-d8 (Surr)	100		75 - 120
4-Bromofluorobenzene (Surr)	101		75 - 120
Dibromofluoromethane	99		75 - 120

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 320-51867/6
Matrix: Water
Analysis Batch: 51867

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perchlorate	<0.0040		0.0040		mg/L			09/08/14 16:42	1

Lab Sample ID: LCS 320-51867/7
Matrix: Water
Analysis Batch: 51867

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Perchlorate	0.0500	0.0513		mg/L		103	85 - 115

TestAmerica Chicago

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Method: 314.0 - Perchlorate (IC) (Continued)

Lab Sample ID: MRL 320-51867/5
Matrix: Water
Analysis Batch: 51867

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	4.00	<4.0		ug/L		96	75 - 125

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-251456/1-A
Matrix: Water
Analysis Batch: 251478

Client Sample ID: Method Blank
Prep Type: Soluble
Prep Batch: 251456

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/25/14 11:40	08/25/14 11:48	1
Arsenic	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 11:48	1
Barium	<0.0025		0.0025		mg/L		08/25/14 11:40	08/25/14 11:48	1
Beryllium	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 11:48	1
Cadmium	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 11:48	1
Chromium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 11:48	1
Cobalt	<0.0010		0.0010		mg/L		08/25/14 11:40	08/25/14 11:48	1
Copper	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 11:48	1
Iron	<0.10		0.10		mg/L		08/25/14 11:40	08/25/14 11:48	1
Lead	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 11:48	1
Manganese	<0.0025		0.0025		mg/L		08/25/14 11:40	08/25/14 11:48	1
Nickel	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 11:48	1
Selenium	<0.0025		0.0025		mg/L		08/25/14 11:40	08/25/14 11:48	1
Silver	<0.00050		0.00050		mg/L		08/25/14 11:40	08/25/14 11:48	1
Thallium	<0.0020		0.0020		mg/L		08/25/14 11:40	08/25/14 11:48	1
Vanadium	<0.0050		0.0050		mg/L		08/25/14 11:40	08/25/14 11:48	1
Zinc	<0.020		0.020		mg/L		08/25/14 11:40	08/25/14 11:48	1

Lab Sample ID: MB 500-251456/1-A
Matrix: Water
Analysis Batch: 251696

Client Sample ID: Method Blank
Prep Type: Soluble
Prep Batch: 251456

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		08/25/14 11:40	08/26/14 11:52	1

Lab Sample ID: LCS 500-251456/2-A
Matrix: Water
Analysis Batch: 251478

Client Sample ID: Lab Control Sample
Prep Type: Soluble
Prep Batch: 251456

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.459		mg/L		92	80 - 120
Arsenic	0.100	0.0943		mg/L		94	80 - 120
Barium	0.500	0.498		mg/L		100	80 - 120
Beryllium	0.0500	0.0488		mg/L		98	80 - 120
Cadmium	0.0500	0.0493		mg/L		99	80 - 120
Chromium	0.200	0.202		mg/L		101	80 - 120
Cobalt	0.500	0.501		mg/L		100	80 - 120
Copper	0.250	0.260		mg/L		104	80 - 120
Iron	1.00	1.14		mg/L		114	80 - 120

TestAmerica Chicago

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-251456/2-A Matrix: Water Analysis Batch: 251478			Client Sample ID: Lab Control Sample Prep Type: Soluble Prep Batch: 251456					
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Lead	0.100	0.102		mg/L		102	80 - 120	
Manganese	0.500	0.510		mg/L		102	80 - 120	
Nickel	0.500	0.508		mg/L		102	80 - 120	
Selenium	0.100	0.0934		mg/L		93	80 - 120	
Silver	0.0500	0.0503		mg/L		101	80 - 120	
Thallium	0.100	0.110		mg/L		110	80 - 120	
Vanadium	0.500	0.481		mg/L		96	80 - 120	
Zinc	0.500	0.504		mg/L		101	80 - 120	

Lab Sample ID: LCS 500-251456/2-A Matrix: Water Analysis Batch: 251696			Client Sample ID: Lab Control Sample Prep Type: Soluble Prep Batch: 251456					
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Boron	1.00	1.02		mg/L		102	80 - 120	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-252739/12-A Matrix: Water Analysis Batch: 252986			Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 252739						
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/03/14 11:25	09/04/14 12:44	1

Lab Sample ID: LCS 500-252739/13-A Matrix: Water Analysis Batch: 252986			Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 252739					
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Mercury	0.00200	0.00221		mg/L		111	80 - 120	

Method: 9014 - Cyanide

Lab Sample ID: MB 500-252743/1-A Matrix: Water Analysis Batch: 252822			Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 252743						
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		09/03/14 12:30	09/03/14 16:35	1

Lab Sample ID: LCS 500-252743/2-A Matrix: Water Analysis Batch: 252822			Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 252743					
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Cyanide, Total	0.100	0.0968		mg/L		97	80 - 120	

TestAmerica Chicago

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Method: 9014 - Cyanide (Continued)

Lab Sample ID: MB 500-252941/1-A
Matrix: Water
Analysis Batch: 253100

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 252941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		09/04/14 11:30	09/04/14 17:45	1

Lab Sample ID: LCS 500-252941/2-A
Matrix: Water
Analysis Batch: 253100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 252941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.108		mg/L		108	80 - 120

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 500-253498/3
Matrix: Water
Analysis Batch: 253498

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			09/09/14 05:14	1

Lab Sample ID: LCS 500-253498/4
Matrix: Water
Analysis Batch: 253498

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	20.2		mg/L		101	80 - 120

Method: 9251 - Chloride

Lab Sample ID: MB 500-251311/4
Matrix: Water
Analysis Batch: 251311

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			08/23/14 19:11	1

Lab Sample ID: LCS 500-251311/5
Matrix: Water
Analysis Batch: 251311

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.9		mg/L		102	80 - 120

TestAmerica Chicago

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-251592/1
Matrix: Water
Analysis Batch: 251592

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			08/26/14 04:02	1

Lab Sample ID: LCS 500-251592/2
Matrix: Water
Analysis Batch: 251592

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	294		mg/L		118	80 - 120

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-252442/3
Matrix: Water
Analysis Batch: 252442

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			08/30/14 19:24	1

Lab Sample ID: LCS 500-252442/4
Matrix: Water
Analysis Batch: 252442

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.7		mg/L		107	80 - 120

Method: SM 4500 NO2 B - Nitrogen, Nitrite

Lab Sample ID: MB 500-251294/3
Matrix: Water
Analysis Batch: 251294

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrite	<0.020		0.020		mg/L			08/22/14 21:00	1

Lab Sample ID: LCS 500-251294/4
Matrix: Water
Analysis Batch: 251294

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrite	0.100	0.102		mg/L		102	80 - 120

TestAmerica Chicago

QC Sample Results

Client: KPRG and Associates, Inc.
 Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Method: SM 4500 NO3 F - Nitrogen, Nitrate

Lab Sample ID: MB 500-252088/14
 Matrix: Water
 Analysis Batch: 252088

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			08/28/14 12:01	1

Lab Sample ID: LCS 500-252088/15
 Matrix: Water
 Analysis Batch: 252088

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	1.00	1.01		mg/L		101	80 - 120



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Chicago

2417 Bond St.
University Park, IL 60484
708-534-5200
Fax: 708-534-5211

Report To:

Contact: Rich Gnat
Company: KPRG & Associates Inc.
Address: 14665 W. Lilsbon Rd. Suite 2B
Brookfield, WI
Phone: 262-781-0475
Fax:
Email:

Bill To:

Contact:
Company:
Address:
Phone:
Fax:
PO #:

Lab Lot # **500-82876**
Package Sealed
Yes No
Samples Sealed
Yes No
Received on Ice
Yes No
Samples Intact
Yes No N/A
Temperature °C of Cooler

Sampler Name:		Client Project #		Refrg #		Within Hold Time		Preserv. Indicated				
Ian John Howleson		12313.2				Yes No		Yes No N/A				
Project Name:		TestAmerica Project Number:		Volume		pH Check OK		Res CL ₂ Check OK				
Waukegan Station Ash Ponds		50004763				Yes No		Yes No N/A				
Project Location:		Date Required		Matrix	# of Containers	Sample Labels and COC Agree						
Waukegan, IL		Hard Copy: _____				Yes No COC not present						
Lab PM:		Fax:		18 Metals + Hg, dissolved	Cl, TDS, SO ₄ , F, NO ₂ , dissolved	NO ₃ +NO ₂ , dissolved	Cyanide, dissolved	BTEX	Perchlorate	Additional Analyses / Remarks		
Bonnie Stadelmann		_____										
Laboratory ID	MS-MSD	Client Sample ID	Sampling Time	Date								
12		ELUC MW-10	8/22/2014	15:10	W	9	X	X	X	X	X	
13		ELUC MW-11	8/22/2014	17:25	W	9	X	X	X	X	X	
14		ELUC MW-12	8/22/2014	13:45	W	9	X	X	X	X	X	
15		ELUC MW-14	8/22/2014	16:40	W	9	X	X	X	X	X	
16		ELUC MW-15	8/22/2014	12:25	W	9	X	X	X	X	X	

RELINQUISHED BY: <i>[Signature]</i>	COMPANY: <i>KPRG</i>	DATE: <i>8-22-14</i>	TIME: <i>03:10pm</i>	RECEIVED BY: <i>[Signature]</i>	COMPANY: <i>TestAmerica</i>	DATE: <i>8/22/14</i>	TIME: <i>2010</i>
RELINQUISHED BY: <i>[Signature]</i>	COMPANY: <i>KPRG</i>	DATE: _____	TIME: _____	RECEIVED BY: <i>[Signature]</i>	COMPANY: <i>TA</i>	DATE: <i>8/23/14</i>	TIME: <i>0630</i>

- | | | |
|--|--|--|
| Matrix Key
WW = Wastewater
W = Water
S = Soil
SL = Sludge
MS = Miscellaneous
OL = Oil
A = Air
SE = Sediment
SO = Solid
DL = Drum Liquid
DS = Drum Solid
L = Leachate
W = Wipe
O = _____ | Container Key
1. Plastic
2. VOA Vial
3. Sorbitor Plastic
4. Amber Glass
5. Widemouth Glass
6. Other | Preservative Key
1. HCl, Cool to 4°
2. H ₂ SO ₄ , Cool to 4°
3. HNO ₃ , Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. Cool to 4°
7. None |
|--|--|--|

COMMENTS:

Date Received 8/22/14
 Courier: _____
 Hand Delivered
 Bill of Lading: _____ of _____

12

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-82876-3

Login Number: 82876

List Source: TestAmerica Chicago

List Number: 1

Creator: Lunt, Jeff T

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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	3.8,3.5,3.9,4.2
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

13

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-82876-3

Login Number: 82876

List Source: TestAmerica Sacramento

List Number: 2

List Creation: 08/26/14 11:32 AM

Creator: Edwards, Stephanie N

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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?	N/A	
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

13

Certification Summary

Client: KPRG and Associates, Inc.
 Project/Site: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-82876-3

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-15

Laboratory: TestAmerica Sacramento

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-16
Alaska (UST)	State Program	10	UST-055	12-18-13 *
Arizona	State Program	9	AZ0708	08-11-15
Arkansas DEQ	State Program	6	88-0691	06-17-15
California	State Program	9	2897	01-31-15
Colorado	State Program	8	N/A	08-31-15
Connecticut	State Program	1	PH-0691	06-30-15
Florida	NELAP	4	E87570	06-30-15
Hawaii	State Program	9	N/A	01-29-15
Illinois	NELAP	5	200060	03-17-15
Kansas	NELAP	7	E-10375	10-31-14
Michigan	State Program	5	9947	01-31-15
Nebraska	State Program	7	NE-OS-22-13	01-29-15
Nevada	State Program	9	CA44	07-31-15
New Jersey	NELAP	2	CA005	06-30-15
Oregon	NELAP	10	CA200005	01-29-15
Oregon	NELAP Secondary AB	10	E87570	06-30-15
Pennsylvania	NELAP	3	9947	03-31-15
Texas	NELAP	6	T104704399-08-TX	05-31-15
US Fish & Wildlife	Federal		LE148388-0	12-31-14
USDA	Federal		P330-11-00436	12-30-14
USEPA UCMR	Federal	1	CA00044	11-06-16
Utah	NELAP	8	QUAN1	02-28-15
Washington	State Program	10	C581	05-05-15
West Virginia (DW)	State Program	3	9930C	12-31-14
Wyoming	State Program	8	8TMS-Q	01-29-15

14

* Certification renewal pending - certification considered valid.

