

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

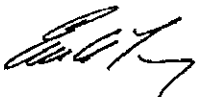
## ANALYTICAL REPORT

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

TestAmerica Job ID: 500-116286-1  
Client Project/Site: Waukegan CCR

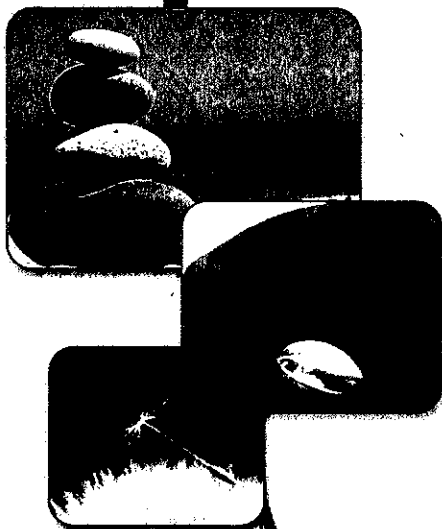
For:  
KPRG and Associates, Inc.  
14665 West Lisbon Road,  
Suite 2B  
Brookfield, Wisconsin 53005

Attn: Richard Gnat



Authorized for release by:  
9/8/2016 12:59:46 PM

Eric Lang, Manager of Project Management  
(708)534-5200  
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..... LINKS .....

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

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

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## Case Narrative

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

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**Job ID: 500-116286-1**

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**Laboratory: TestAmerica Chicago**

**Narrative**

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**Job Narrative**  
**500-116286-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 8/26/2016 5:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 4.2° C, 4.6° C and 4.8° C.

**Metals**

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.

## Method Summary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL CHI

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### Protocol References:

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

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# Sample Summary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-116286-1	MW-01	Water	08/23/16 13:52	08/26/16 17:55
500-116286-2	MW-02	Water	08/23/16 15:55	08/26/16 17:55
500-116286-3	MW-03	Water	08/24/16 09:35	08/26/16 17:55
500-116286-4	MW-04	Water	08/24/16 11:37	08/26/16 17:55
500-116286-5	MW-09	Water	08/25/16 13:29	08/26/16 17:55
500-116286-6	MW-11	Water	08/26/16 13:18	08/26/16 17:55
500-116286-7	MW-14	Water	08/26/16 11:34	08/26/16 17:55
500-116286-8	MW-16	Water	08/24/16 13:37	08/26/16 17:55
500-116286-9	Dup	Water	08/24/16 00:00	08/26/16 17:55

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# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

**Client Sample ID: MW-01**

**Lab Sample ID: 500-116286-1**

Date Collected: 08/23/16 13:52

Matrix: Water

Date Received: 08/26/16 17:55

**Method: 6010C - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/29/16 09:10	09/03/16 06:28	1

**Method: 6020A - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/29/16 09:10	08/29/16 15:56	1
Arsenic	0.074		0.0010		mg/L		08/29/16 09:10	08/29/16 15:56	1
Barium	0.012		0.0025		mg/L		08/29/16 09:10	08/29/16 15:56	1
Beryllium	<0.0010		0.0010		mg/L		08/29/16 09:10	08/31/16 13:41	1
Boron	2.0		0.25		mg/L		08/29/16 09:10	08/30/16 17:01	5
Cadmium	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 15:56	1
Calcium	42		0.20		mg/L		08/29/16 09:10	08/29/16 15:56	1
Chromium	<0.0050		0.0050		mg/L		08/29/16 09:10	08/29/16 15:56	1
Cobalt	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 15:56	1
Lead	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 15:56	1
Molybdenum	0.065		0.0050		mg/L		08/29/16 09:10	08/29/16 15:56	1
Selenium	0.0042		0.0025		mg/L		08/29/16 09:10	08/29/16 15:56	1
Thallium	<0.0020		0.0020		mg/L		08/29/16 09:10	08/29/16 15:56	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/29/16 13:30	08/30/16 12:23	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	550		10		mg/L			08/29/16 00:32	1
Chloride	60		2.0		mg/L			09/01/16 23:35	1
Fluoride	0.26		0.10		mg/L			08/29/16 15:36	1
Sulfate	240		50		mg/L			09/05/16 07:56	10

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## Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

**Client Sample ID: MW-02**

**Lab Sample ID: 500-116286-2**

Date Collected: 08/23/16 15:55

Matrix: Water

Date Received: 08/26/16 17:55

Method: 6010C - Metals (ICP) - Total Recoverable										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium	<0.010		0.010		mg/L		08/29/16 09:10	09/03/16 06:33	1	

Method: 6020A - Metals (ICP/MS) - Total Recoverable										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Antimony	<0.0030		0.0030		mg/L		08/29/16 09:10	08/29/16 16:00	1	
Arsenic	0.0082		0.0010		mg/L		08/29/16 09:10	08/29/16 16:00	1	
Barium	0.016		0.0025		mg/L		08/29/16 09:10	08/29/16 16:00	1	
Beryllium	<0.0010		0.0010		mg/L		08/29/16 09:10	08/31/16 13:45	1	
Boron	3.1		0.25		mg/L		08/29/16 09:10	08/30/16 17:05	5	
Cadmium	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:00	1	
Calcium	42		0.20		mg/L		08/29/16 09:10	08/29/16 16:00	1	
Chromium	<0.0050		0.0050		mg/L		08/29/16 09:10	08/29/16 16:00	1	
Cobalt	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 16:00	1	
Lead	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:00	1	
Molybdenum	0.056		0.0050		mg/L		08/29/16 09:10	08/29/16 16:00	1	
Selenium	<0.0025		0.0025		mg/L		08/29/16 09:10	08/29/16 16:00	1	
Thallium	<0.0020		0.0020		mg/L		08/29/16 09:10	08/29/16 16:00	1	

Method: 7470A - Mercury (CVAA)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	<0.00020		0.00020		mg/L		08/29/16 13:30	08/30/16 12:29	1	

General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	500		10		mg/L			08/29/16 00:39	1	
Chloride	59		2.0		mg/L			09/01/16 23:36	1	
Fluoride	1.3		0.10		mg/L			08/29/16 15:38	1	
Sulfate	250		50		mg/L			09/05/16 07:57	10	

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# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

**Client Sample ID: MW-03**

**Lab Sample ID: 500-116286-3**

Date Collected: 08/24/16 09:35

Matrix: Water

Date Received: 08/26/16 17:55

**Method: 6010C - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/29/16 09:10	09/03/16 06:54	1

**Method: 6020A - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/29/16 09:10	08/29/16 16:19	1
Arsenic	<b>0.010</b>		0.0010		mg/L		08/29/16 09:10	08/29/16 16:19	1
Barium	<b>0.0069</b>		0.0025		mg/L		08/29/16 09:10	08/29/16 16:19	1
Beryllium	<0.0010		0.0010		mg/L		08/29/16 09:10	08/31/16 14:03	1
Boron	<b>2.0</b>		0.25		mg/L		08/29/16 09:10	08/30/16 17:36	5
Cadmium	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:19	1
Calcium	<b>70</b>		0.20		mg/L		08/29/16 09:10	08/29/16 16:19	1
Chromium	<0.0050		0.0050		mg/L		08/29/16 09:10	08/29/16 16:19	1
Cobalt	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 16:19	1
Lead	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:19	1
Molybdenum	<b>0.042</b>		0.0050		mg/L		08/29/16 09:10	08/29/16 16:19	1
Selenium	<0.0025		0.0025		mg/L		08/29/16 09:10	08/29/16 16:19	1
Thallium	<0.0020		0.0020		mg/L		08/29/16 09:10	08/29/16 16:19	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/29/16 13:30	08/30/16 12:31	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<b>430</b>		10		mg/L			08/29/16 00:43	1
Chloride	<b>59</b>		2.0		mg/L			09/01/16 23:36	1
Fluoride	<b>0.30</b>		0.10		mg/L			08/29/16 15:45	1
Sulfate	<b>200</b>		50		mg/L			09/05/16 07:58	10

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# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

**Client Sample ID: MW-04**

**Lab Sample ID: 500-116286-4**

Date Collected: 08/24/16 11:37

Matrix: Water

Date Received: 08/26/16 17:55

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**Method: 6010C - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/29/16 09:10	09/03/16 06:58	1

**Method: 6020A - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/29/16 09:10	08/29/16 16:22	1
Arsenic	0.0099		0.0010		mg/L		08/29/16 09:10	08/29/16 16:22	1
Barium	0.019		0.0025		mg/L		08/29/16 09:10	08/29/16 16:22	1
Beryllium	<0.0010		0.0010		mg/L		08/29/16 09:10	08/31/16 14:07	1
Boron	2.0		0.25		mg/L		08/29/16 09:10	08/30/16 18:03	5
Cadmium	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:22	1
Calcium	46		0.20		mg/L		08/29/16 09:10	08/29/16 16:22	1
Chromium	<0.0050		0.0050		mg/L		08/29/16 09:10	08/29/16 16:22	1
Cobalt	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 16:22	1
Lead	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:22	1
Molybdenum	0.049		0.0050		mg/L		08/29/16 09:10	08/29/16 16:22	1
Selenium	<0.0025		0.0025		mg/L		08/29/16 09:10	08/29/16 16:22	1
Thallium	<0.0020		0.0020		mg/L		08/29/16 09:10	08/29/16 16:22	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/29/16 13:30	08/30/16 12:32	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		10		mg/L			08/29/16 00:47	1
Chloride	58		2.0		mg/L			09/01/16 23:37	1
Fluoride	0.56		0.10		mg/L			08/29/16 15:57	1
Sulfate	120		20		mg/L			09/05/16 07:59	4

TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

**Client Sample ID: MW-09**

**Lab Sample ID: 500-116286-5**

Date Collected: 08/25/16 13:29

Matrix: Water

Date Received: 08/26/16 17:55

**Method: 6010C - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.049		0.010		mg/L		08/29/16 09:10	09/03/16 07:10	1

**Method: 6020A - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0041		0.0030		mg/L		08/29/16 09:10	08/29/16 16:38	1
Arsenic	0.042		0.0010		mg/L		08/29/16 09:10	08/29/16 16:38	1
Barium	0.024		0.0025		mg/L		08/29/16 09:10	08/29/16 16:38	1
Beryllium	<0.0010		0.0010		mg/L		08/29/16 09:10	08/31/16 14:18	1
Boron	4.5		0.25		mg/L		08/29/16 09:10	08/30/16 18:10	5
Cadmium	0.0011		0.00050		mg/L		08/29/16 09:10	08/29/16 16:38	1
Calcium	130		0.20		mg/L		08/29/16 09:10	08/29/16 16:38	1
Chromium	0.056		0.0050		mg/L		08/29/16 09:10	08/29/16 16:38	1
Cobalt	0.0027		0.0010		mg/L		08/29/16 09:10	08/29/16 16:38	1
Lead	0.0012		0.00050		mg/L		08/29/16 09:10	08/29/16 16:38	1
Molybdenum	0.063		0.025		mg/L		08/29/16 09:10	08/30/16 18:10	5
Selenium	0.039		0.0025		mg/L		08/29/16 09:10	08/29/16 16:38	1
Thallium	<0.0020		0.0020		mg/L		08/29/16 09:10	08/29/16 16:38	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/29/16 13:30	08/30/16 12:34	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L			08/29/16 00:51	1
Chloride	270		10		mg/L			09/01/16 23:38	5
Fluoride	0.21		0.10		mg/L			08/29/16 16:05	1
Sulfate	190		50		mg/L			09/05/16 08:00	10

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TestAmerica Chicago

MWG13-15\_58930

9/8/2016

## Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

**Client Sample ID: MW-11**

**Lab Sample ID: 500-116286-6**

Date Collected: 08/26/16 13:18

Matrix: Water

Date Received: 08/26/16 17:55

Method: 6010C - Metals (ICP) - Total Recoverable										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium	0.055		0.010		mg/L		08/29/16 09:10	09/03/16 07:14	1	

Method: 6020A - Metals (ICP/MS) - Total Recoverable										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Antimony	<0.0030		0.0030		mg/L		08/29/16 09:10	08/29/16 16:41	1	
Arsenic	1.1		0.0010		mg/L		08/29/16 09:10	08/29/16 16:41	1	
Barium	0.050		0.0025		mg/L		08/29/16 09:10	08/29/16 16:41	1	
Beryllium	<0.0010		0.0010		mg/L		08/29/16 09:10	08/31/16 14:22	1	
Boron	3.5		0.25		mg/L		08/29/16 09:10	08/30/16 18:14	5	
Cadmium	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:41	1	
Calcium	180		0.20		mg/L		08/29/16 09:10	08/29/16 16:41	1	
Chromium	0.0055		0.0050		mg/L		08/29/16 09:10	08/29/16 16:41	1	
Cobalt	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 16:41	1	
Lead	0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:41	1	
Molybdenum	<0.0050		0.0050		mg/L		08/29/16 09:10	08/29/16 16:41	1	
Selenium	<0.0025		0.0025		mg/L		08/29/16 09:10	08/29/16 16:41	1	
Thallium	<0.0020		0.0020		mg/L		08/29/16 09:10	08/29/16 16:41	1	

Method: 7470A - Mercury (CVAA)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	<0.00020		0.00020		mg/L		08/29/16 13:30	08/30/16 12:35	1	

General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	1100		10		mg/L			08/29/16 00:55	1	
Chloride	240		10		mg/L			09/01/16 23:40	5	
Fluoride	0.13		0.10		mg/L			08/29/16 16:16	1	
Sulfate	110		20		mg/L			09/05/16 08:03	4	

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# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

**Client Sample ID: MW-14**

**Lab Sample ID: 500-116286-7**

Date Collected: 08/26/16 11:34

Matrix: Water

Date Received: 08/26/16 17:55

**Method: 6010C - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.026		0.010		mg/L		08/29/16 09:10	09/03/16 07:19	1

**Method: 6020A - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/29/16 09:10	08/29/16 16:45	1
Arsenic	1.0		0.0010		mg/L		08/29/16 09:10	08/29/16 16:45	1
Barium	0.058		0.0025		mg/L		08/29/16 09:10	08/29/16 16:45	1
Beryllium	<0.0010		0.0010		mg/L		08/29/16 09:10	08/31/16 14:26	1
Boron	1.5		0.25		mg/L		08/29/16 09:10	08/30/16 18:18	5
Cadmium	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:45	1
Calcium	200		0.20		mg/L		08/29/16 09:10	08/29/16 16:45	1
Chromium	0.021		0.0050		mg/L		08/29/16 09:10	08/29/16 16:45	1
Cobalt	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 16:45	1
Lead	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:45	1
Molybdenum	<0.0050		0.0050		mg/L		08/29/16 09:10	08/29/16 16:45	1
Selenium	<0.0025		0.0025		mg/L		08/29/16 09:10	08/29/16 16:45	1
Thallium	<0.0020		0.0020		mg/L		08/29/16 09:10	08/29/16 16:45	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/29/16 13:30	08/30/16 12:37	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			08/29/16 00:59	1
Chloride	210		10		mg/L			09/01/16 23:41	5
Fluoride	0.12		0.10		mg/L			08/29/16 16:19	1
Sulfate	190		50		mg/L			09/05/16 08:04	10

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TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

**Client Sample ID: MW-16**

**Lab Sample ID: 500-116286-8**

Date Collected: 08/24/16 13:37

Matrix: Water

Date Received: 08/26/16 17:55

Method: 6010C - Metals (ICP) - Total Recoverable									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.014		0.010		mg/L		08/29/16 09:10	09/03/16 07:23	1

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Method: 6020A - Metals (ICP/MS) - Total Recoverable									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/29/16 09:10	08/29/16 16:49	1
Arsenic	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 16:49	1
Barium	0.028		0.0025		mg/L		08/29/16 09:10	08/29/16 16:49	1
Beryllium	<0.0010		0.0010		mg/L		08/29/16 09:10	08/31/16 14:30	1
Boron	3.6		0.25		mg/L		08/29/16 09:10	08/30/16 18:22	5
Cadmium	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:49	1
Calcium	130		0.20		mg/L		08/29/16 09:10	08/29/16 16:49	1
Chromium	<0.0050		0.0050		mg/L		08/29/16 09:10	08/29/16 16:49	1
Cobalt	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 16:49	1
Lead	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:49	1
Molybdenum	0.022		0.0050		mg/L		08/29/16 09:10	08/29/16 16:49	1
Selenium	<0.0025		0.0025		mg/L		08/29/16 09:10	08/29/16 16:49	1
Thallium	<0.0020		0.0020		mg/L		08/29/16 09:10	08/29/16 16:49	1

Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/29/16 13:30	08/30/16 12:41	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	830		10		mg/L			08/29/16 01:03	1
Chloride	53		2.0		mg/L			09/02/16 00:09	1
Fluoride	0.71		0.10		mg/L			08/29/16 16:22	1
Sulfate	330		100		mg/L			09/05/16 08:07	20

TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

**Client Sample ID: Dup**

**Lab Sample ID: 500-116286-9**

Date Collected: 08/24/16 00:00

Matrix: Water

Date Received: 08/26/16 17:55

**Method: 6010C - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/29/16 09:10	09/03/16 07:27	1

**Method: 6020A - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/29/16 09:10	08/29/16 16:53	1
Arsenic	0.011		0.0010		mg/L		08/29/16 09:10	08/29/16 16:53	1
Barium	0.020		0.0025		mg/L		08/29/16 09:10	08/29/16 16:53	1
Beryllium	<0.0010		0.0010		mg/L		08/29/16 09:10	08/31/16 14:34	1
Boron	2.1		0.25		mg/L		08/29/16 09:10	08/30/16 18:25	5
Cadmium	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:53	1
Calcium	49		0.20		mg/L		08/29/16 09:10	08/29/16 16:53	1
Chromium	<0.0050		0.0050		mg/L		08/29/16 09:10	08/29/16 16:53	1
Cobalt	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 16:53	1
Lead	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 16:53	1
Molybdenum	0.052		0.0050		mg/L		08/29/16 09:10	08/29/16 16:53	1
Selenium	<0.0025		0.0025		mg/L		08/29/16 09:10	08/29/16 16:53	1
Thallium	<0.0020		0.0020		mg/L		08/29/16 09:10	08/29/16 16:53	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/29/16 13:30	08/30/16 12:43	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	350		10		mg/L			08/29/16 01:07	1
Chloride	57		2.0		mg/L			09/01/16 23:42	1
Fluoride	0.54		0.10		mg/L			08/29/16 16:24	1
Sulfate	110		25		mg/L			09/05/16 08:08	5

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TestAmerica Chicago

## Definitions/Glossary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

### 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)

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TestAmerica Chicago

## QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

### Metals

#### Prep Batch: 349588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total Recoverable	Water	3005A	
500-116286-2	MW-02	Total Recoverable	Water	3005A	
500-116286-3	MW-03	Total Recoverable	Water	3005A	
500-116286-4	MW-04	Total Recoverable	Water	3005A	
500-116286-5	MW-09	Total Recoverable	Water	3005A	
500-116286-6	MW-11	Total Recoverable	Water	3005A	
500-116286-7	MW-14	Total Recoverable	Water	3005A	
500-116286-8	MW-16	Total Recoverable	Water	3005A	
500-116286-9	Dup	Total Recoverable	Water	3005A	
MB 500-349588/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-349588/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-116286-2 MS	MW-02	Total Recoverable	Water	3005A	
500-116286-2 MSD	MW-02	Total Recoverable	Water	3005A	
500-116286-2 DU	MW-02	Total Recoverable	Water	3005A	

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#### Prep Batch: 349659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total/NA	Water	7470A	
500-116286-2	MW-02	Total/NA	Water	7470A	
500-116286-3	MW-03	Total/NA	Water	7470A	
500-116286-4	MW-04	Total/NA	Water	7470A	
500-116286-5	MW-09	Total/NA	Water	7470A	
500-116286-6	MW-11	Total/NA	Water	7470A	
500-116286-7	MW-14	Total/NA	Water	7470A	
500-116286-8	MW-16	Total/NA	Water	7470A	
500-116286-9	Dup	Total/NA	Water	7470A	
MB 500-349659/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-349659/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-116286-1 MS	MW-01	Total/NA	Water	7470A	
500-116286-1 MSD	MW-01	Total/NA	Water	7470A	
500-116286-1 DU	MW-01	Total/NA	Water	7470A	

#### Analysis Batch: 349806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total Recoverable	Water	6020A	349588
500-116286-2	MW-02	Total Recoverable	Water	6020A	349588
500-116286-3	MW-03	Total Recoverable	Water	6020A	349588
500-116286-4	MW-04	Total Recoverable	Water	6020A	349588
500-116286-5	MW-09	Total Recoverable	Water	6020A	349588
500-116286-6	MW-11	Total Recoverable	Water	6020A	349588
500-116286-7	MW-14	Total Recoverable	Water	6020A	349588
500-116286-8	MW-16	Total Recoverable	Water	6020A	349588
500-116286-9	Dup	Total Recoverable	Water	6020A	349588
MB 500-349588/1-A	Method Blank	Total Recoverable	Water	6020A	349588
LCS 500-349588/2-A	Lab Control Sample	Total Recoverable	Water	6020A	349588
500-116286-2 MS	MW-02	Total Recoverable	Water	6020A	349588
500-116286-2 MSD	MW-02	Total Recoverable	Water	6020A	349588
500-116286-2 DU	MW-02	Total Recoverable	Water	6020A	349588

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## QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

### Metals (Continued)

#### Analysis Batch: 349874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total/NA	Water	7470A	349659
500-116286-2	MW-02	Total/NA	Water	7470A	349659
500-116286-3	MW-03	Total/NA	Water	7470A	349659
500-116286-4	MW-04	Total/NA	Water	7470A	349659
500-116286-5	MW-09	Total/NA	Water	7470A	349659
500-116286-6	MW-11	Total/NA	Water	7470A	349659
500-116286-7	MW-14	Total/NA	Water	7470A	349659
500-116286-8	MW-16	Total/NA	Water	7470A	349659
500-116286-9	Dup	Total/NA	Water	7470A	349659
MB 500-349659/12-A	Method Blank	Total/NA	Water	7470A	349659
LCS 500-349659/13-A	Lab Control Sample	Total/NA	Water	7470A	349659
500-116286-1 MS	MW-01	Total/NA	Water	7470A	349659
500-116286-1 MSD	MW-01	Total/NA	Water	7470A	349659
500-116286-1 DU	MW-01	Total/NA	Water	7470A	349659

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#### Analysis Batch: 350030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total Recoverable	Water	6020A	349588
500-116286-2	MW-02	Total Recoverable	Water	6020A	349588
500-116286-3	MW-03	Total Recoverable	Water	6020A	349588
500-116286-4	MW-04	Total Recoverable	Water	6020A	349588
500-116286-5	MW-09	Total Recoverable	Water	6020A	349588
500-116286-6	MW-11	Total Recoverable	Water	6020A	349588
500-116286-7	MW-14	Total Recoverable	Water	6020A	349588
500-116286-8	MW-16	Total Recoverable	Water	6020A	349588
500-116286-9	Dup	Total Recoverable	Water	6020A	349588
MB 500-349588/1-A	Method Blank	Total Recoverable	Water	6020A	349588
LCS 500-349588/2-A	Lab Control Sample	Total Recoverable	Water	6020A	349588
500-116286-2 MS	MW-02	Total Recoverable	Water	6020A	349588
500-116286-2 MSD	MW-02	Total Recoverable	Water	6020A	349588
500-116286-2 DU	MW-02	Total Recoverable	Water	6020A	349588

#### Analysis Batch: 350113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total Recoverable	Water	6020A	349588
500-116286-2	MW-02	Total Recoverable	Water	6020A	349588
500-116286-3	MW-03	Total Recoverable	Water	6020A	349588
500-116286-4	MW-04	Total Recoverable	Water	6020A	349588
500-116286-5	MW-09	Total Recoverable	Water	6020A	349588
500-116286-6	MW-11	Total Recoverable	Water	6020A	349588
500-116286-7	MW-14	Total Recoverable	Water	6020A	349588
500-116286-8	MW-16	Total Recoverable	Water	6020A	349588
500-116286-9	Dup	Total Recoverable	Water	6020A	349588
MB 500-349588/1-A	Method Blank	Total Recoverable	Water	6020A	349588
LCS 500-349588/2-A	Lab Control Sample	Total Recoverable	Water	6020A	349588
500-116286-2 MS	MW-02	Total Recoverable	Water	6020A	349588
500-116286-2 MSD	MW-02	Total Recoverable	Water	6020A	349588
500-116286-2 DU	MW-02	Total Recoverable	Water	6020A	349588

TestAmerica Chicago

## QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

### Metals (Continued)

Analysis Batch: 350507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total Recoverable	Water	6010C	349588
500-116286-2	MW-02	Total Recoverable	Water	6010C	349588
500-116286-3	MW-03	Total Recoverable	Water	6010C	349588
500-116286-4	MW-04	Total Recoverable	Water	6010C	349588
500-116286-5	MW-09	Total Recoverable	Water	6010C	349588
500-116286-6	MW-11	Total Recoverable	Water	6010C	349588
500-116286-7	MW-14	Total Recoverable	Water	6010C	349588
500-116286-8	MW-16	Total Recoverable	Water	6010C	349588
500-116286-9	Dup	Total Recoverable	Water	6010C	349588
MB 500-349588/1-A	Method Blank	Total Recoverable	Water	6010C	349588
LCS 500-349588/2-A	Lab Control Sample	Total Recoverable	Water	6010C	349588
500-116286-2 MS	MW-02	Total Recoverable	Water	6010C	349588
500-116286-2 MSD	MW-02	Total Recoverable	Water	6010C	349588
500-116286-2 DU	MW-02	Total Recoverable	Water	6010C	349588

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### General Chemistry

Analysis Batch: 349541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total/NA	Water	SM 2540C	
500-116286-2	MW-02	Total/NA	Water	SM 2540C	
500-116286-3	MW-03	Total/NA	Water	SM 2540C	
500-116286-4	MW-04	Total/NA	Water	SM 2540C	
500-116286-5	MW-09	Total/NA	Water	SM 2540C	
500-116286-6	MW-11	Total/NA	Water	SM 2540C	
500-116286-7	MW-14	Total/NA	Water	SM 2540C	
500-116286-8	MW-16	Total/NA	Water	SM 2540C	
500-116286-9	Dup	Total/NA	Water	SM 2540C	
MB 500-349541/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-349541/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-116286-1 DU	MW-01	Total/NA	Water	SM 2540C	

Analysis Batch: 349715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total/NA	Water	SM 4500 F C	
500-116286-2	MW-02	Total/NA	Water	SM 4500 F C	
500-116286-3	MW-03	Total/NA	Water	SM 4500 F C	
500-116286-4	MW-04	Total/NA	Water	SM 4500 F C	
500-116286-5	MW-09	Total/NA	Water	SM 4500 F C	
500-116286-6	MW-11	Total/NA	Water	SM 4500 F C	
500-116286-7	MW-14	Total/NA	Water	SM 4500 F C	
500-116286-8	MW-16	Total/NA	Water	SM 4500 F C	
500-116286-9	Dup	Total/NA	Water	SM 4500 F C	
MB 500-349715/3	Method Blank	Total/NA	Water	SM 4500 F C	
MB 500-349715/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-349715/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 500-349715/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-116286-4 MS	MW-04	Total/NA	Water	SM 4500 F C	
500-116286-4 MSD	MW-04	Total/NA	Water	SM 4500 F C	

TestAmerica Chicago

## QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

### General Chemistry (Continued)

#### Analysis Batch: 350499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-116286-2	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-116286-3	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-116286-4	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-116286-5	MW-09	Total/NA	Water	SM 4500 Cl- E	
500-116286-6	MW-11	Total/NA	Water	SM 4500 Cl- E	
500-116286-7	MW-14	Total/NA	Water	SM 4500 Cl- E	
500-116286-8	MW-16	Total/NA	Water	SM 4500 Cl- E	
500-116286-9	Dup	Total/NA	Water	SM 4500 Cl- E	
MB 500-350499/4	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-350499/5	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

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#### Analysis Batch: 350566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-116286-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-116286-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-116286-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-116286-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-116286-5	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-116286-6	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-116286-7	MW-14	Total/NA	Water	SM 4500 SO4 E	
500-116286-8	MW-16	Total/NA	Water	SM 4500 SO4 E	
500-116286-9	Dup	Total/NA	Water	SM 4500 SO4 E	
MB 500-350566/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-350566/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-116286-7 MS	MW-14	Total/NA	Water	SM 4500 SO4 E	
500-116286-7 MSD	MW-14	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Chicago

# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

## Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-349588/1-A  
Matrix: Water  
Analysis Batch: 350507

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 349588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/29/16 09:10	09/03/16 06:20	1

Lab Sample ID: LCS 500-349588/2-A  
Matrix: Water  
Analysis Batch: 350507

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 349588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lithium	0.500	0.487		mg/L		97	80 - 120

Lab Sample ID: 500-116286-2 MS  
Matrix: Water  
Analysis Batch: 350507

Client Sample ID: MW-02  
Prep Type: Total Recoverable  
Prep Batch: 349588

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Lithium	<0.010		0.500	0.527		mg/L		105	75 - 125

Lab Sample ID: 500-116286-2 MSD  
Matrix: Water  
Analysis Batch: 350507

Client Sample ID: MW-02  
Prep Type: Total Recoverable  
Prep Batch: 349588

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Lithium	<0.010		0.500	0.524		mg/L		104	75 - 125	1	20

Lab Sample ID: 500-116286-2 DU  
Matrix: Water  
Analysis Batch: 350507

Client Sample ID: MW-02  
Prep Type: Total Recoverable  
Prep Batch: 349588

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Lithium	<0.010		<0.010		mg/L		NC	20

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

Lab Sample ID: MB 500-349588/1-A  
Matrix: Water  
Analysis Batch: 349806

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 349588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/29/16 09:10	08/29/16 15:48	1
Arsenic	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 15:48	1
Barium	<0.0025		0.0025		mg/L		08/29/16 09:10	08/29/16 15:48	1
Cadmium	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 15:48	1
Calcium	<0.20		0.20		mg/L		08/29/16 09:10	08/29/16 15:48	1
Chromium	<0.0050		0.0050		mg/L		08/29/16 09:10	08/29/16 15:48	1
Cobalt	<0.0010		0.0010		mg/L		08/29/16 09:10	08/29/16 15:48	1
Lead	<0.00050		0.00050		mg/L		08/29/16 09:10	08/29/16 15:48	1
Molybdenum	<0.0050		0.0050		mg/L		08/29/16 09:10	08/29/16 15:48	1
Selenium	<0.0025		0.0025		mg/L		08/29/16 09:10	08/29/16 15:48	1
Thallium	<0.0020		0.0020		mg/L		08/29/16 09:10	08/29/16 15:48	1

TestAmerica Chicago

MWG13-15\_58940

9/8/2016

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# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

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

<b>Lab Sample ID: MB 500-349588/1-A</b> <b>Matrix: Water</b> <b>Analysis Batch: 350030</b>						<b>Client Sample ID: Method Blank</b> <b>Prep Type: Total Recoverable</b> <b>Prep Batch: 349588</b>			
Analyte	Result	MB MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		08/29/16 09:10	08/30/16 16:21	1

<b>Lab Sample ID: MB 500-349588/1-A</b> <b>Matrix: Water</b> <b>Analysis Batch: 350113</b>						<b>Client Sample ID: Method Blank</b> <b>Prep Type: Total Recoverable</b> <b>Prep Batch: 349588</b>			
Analyte	Result	MB MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0010		0.0010		mg/L		08/29/16 09:10	08/31/16 13:33	1

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<b>Lab Sample ID: LCS 500-349588/2-A</b> <b>Matrix: Water</b> <b>Analysis Batch: 349806</b>						<b>Client Sample ID: Lab Control Sample</b> <b>Prep Type: Total Recoverable</b> <b>Prep Batch: 349588</b>			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony	0.500	0.468		mg/L		94	80 - 120		
Arsenic	0.100	0.0929		mg/L		93	80 - 120		
Barium	2.00	1.90		mg/L		95	80 - 120		
Cadmium	0.0500	0.0487		mg/L		97	80 - 120		
Calcium	10.0	11.7		mg/L		117	80 - 120		
Chromium	0.200	0.192		mg/L		96	80 - 120		
Cobalt	0.500	0.494		mg/L		99	80 - 120		
Lead	0.100	0.102		mg/L		102	80 - 120		
Molybdenum	1.00	0.934		mg/L		93	80 - 120		
Selenium	0.100	0.0936		mg/L		94	80 - 120		
Thallium	0.100	0.103		mg/L		103	80 - 120		

<b>Lab Sample ID: LCS 500-349588/2-A</b> <b>Matrix: Water</b> <b>Analysis Batch: 350030</b>						<b>Client Sample ID: Lab Control Sample</b> <b>Prep Type: Total Recoverable</b> <b>Prep Batch: 349588</b>			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron	1.00	1.01		mg/L		101	80 - 120		

<b>Lab Sample ID: LCS 500-349588/2-A</b> <b>Matrix: Water</b> <b>Analysis Batch: 350113</b>						<b>Client Sample ID: Lab Control Sample</b> <b>Prep Type: Total Recoverable</b> <b>Prep Batch: 349588</b>			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Beryllium	0.0500	0.0504		mg/L		101	80 - 120		

<b>Lab Sample ID: 500-116286-2 MS</b> <b>Matrix: Water</b> <b>Analysis Batch: 349806</b>						<b>Client Sample ID: MW-02</b> <b>Prep Type: Total Recoverable</b> <b>Prep Batch: 349588</b>			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0030		0.500	0.515		mg/L		103	75 - 125
Arsenic	0.0082		0.100	0.113		mg/L		105	75 - 125
Barium	0.016		2.00	2.07		mg/L		103	75 - 125
Cadmium	<0.00050		0.0500	0.0528		mg/L		106	75 - 125

TestAmerica Chicago

## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

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

Lab Sample ID: 500-116286-2 MS Matrix: Water Analysis Batch: 349806				Client Sample ID: MW-02 Prep Type: Total Recoverable Prep Batch: 349588 %Rec.					
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Calcium	42		10.0	59.0	4	mg/L		165	75 - 125
Chromium	<0.0050		0.200	0.204		mg/L		102	75 - 125
Cobalt	<0.0010		0.500	0.528		mg/L		106	75 - 125
Lead	0.00050		0.100	0.107		mg/L		107	75 - 125
Molybdenum	0.056		1.00	1.06		mg/L		100	75 - 125
Selenium	<0.0025		0.100	0.104		mg/L		104	75 - 125
Thallium	<0.0020		0.100	0.107		mg/L		107	75 - 125

Lab Sample ID: 500-116286-2 MS Matrix: Water Analysis Batch: 350030				Client Sample ID: MW-02 Prep Type: Total Recoverable Prep Batch: 349588 %Rec.					
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Boron	3.1		1.00	4.19		mg/L		113	75 - 125

Lab Sample ID: 500-116286-2 MS Matrix: Water Analysis Batch: 350113				Client Sample ID: MW-02 Prep Type: Total Recoverable Prep Batch: 349588 %Rec.					
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Beryllium	<0.0010		0.0500	0.0558		mg/L		112	75 - 125

Lab Sample ID: 500-116286-2 MSD Matrix: Water Analysis Batch: 349806				Client Sample ID: MW-02 Prep Type: Total Recoverable Prep Batch: 349588 %Rec.							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.0030		0.500	0.541		mg/L		108	75 - 125	5	20
Arsenic	0.0082		0.100	0.119		mg/L		111	75 - 125	5	20
Barium	0.016		2.00	2.15		mg/L		107	75 - 125	4	20
Cadmium	<0.00050		0.0500	0.0546		mg/L		109	75 - 125	3	20
Calcium	42		10.0	62.5	4	mg/L		200	75 - 125	6	20
Chromium	<0.0050		0.200	0.214		mg/L		107	75 - 125	5	20
Cobalt	<0.0010		0.500	0.550		mg/L		110	75 - 125	4	20
Lead	<0.00050		0.100	0.112		mg/L		112	75 - 125	4	20
Molybdenum	0.056		1.00	1.11		mg/L		106	75 - 125	5	20
Selenium	<0.0025		0.100	0.110		mg/L		110	75 - 125	6	20
Thallium	<0.0020		0.100	0.112		mg/L		112	75 - 125	4	20

Lab Sample ID: 500-116286-2 MSD Matrix: Water Analysis Batch: 350030				Client Sample ID: MW-02 Prep Type: Total Recoverable Prep Batch: 349588 %Rec.							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	3.1		1.00	4.25		mg/L		119	75 - 125	1	20

TestAmerica Chicago

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## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

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

Lab Sample ID: 500-116286-2 MSD Matrix: Water Analysis Batch: 350113						Client Sample ID: MW-02 Prep Type: Total Recoverable Prep Batch: 349588					
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Beryllium	<0.0010		0.0500	0.0495		mg/L		99	75-125	12	20

Lab Sample ID: 500-116286-2 DU Matrix: Water Analysis Batch: 349806						Client Sample ID: MW-02 Prep Type: Total Recoverable Prep Batch: 349588					
Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit			
Antimony	<0.0030		<0.0030		mg/L		NC	20			
Arsenic	0.0082		0.00859		mg/L		5	20			
Barium	0.016		0.0163		mg/L		5	20			
Cadmium	<0.00050		<0.00050		mg/L		NC	20			
Calcium	42		43.4		mg/L		2	20			
Chromium	<0.0050		<0.0050		mg/L		NC	20			
Cobalt	<0.0010		<0.0010		mg/L		NC	20			
Lead	<0.00050		<0.00050		mg/L		NC	20			
Molybdenum	0.056		0.0596		mg/L		6	20			
Selenium	<0.0025		<0.0025		mg/L		NC	20			
Thallium	<0.0020		<0.0020		mg/L		NC	20			

Lab Sample ID: 500-116286-2 DU Matrix: Water Analysis Batch: 350030						Client Sample ID: MW-02 Prep Type: Total Recoverable Prep Batch: 349588					
Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit			
Boron	3.1		3.02		mg/L		1	20			

Lab Sample ID: 500-116286-2 DU Matrix: Water Analysis Batch: 350113						Client Sample ID: MW-02 Prep Type: Total Recoverable Prep Batch: 349588					
Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit			
Beryllium	<0.0010		<0.0010		mg/L		NC	20			

### Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-349659/12-A Matrix: Water Analysis Batch: 349874						Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 349659					
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Mercury	<0.00020		0.00020		mg/L		08/29/16 13:30	08/30/16 11:52	1		

Lab Sample ID: LCS 500-349659/13-A Matrix: Water Analysis Batch: 349874						Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 349659					
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits				
Mercury	0.00200	0.00173		mg/L		87	80-120				

TestAmerica Chicago

MWG13-15\_58943

9/8/2016

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## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

### Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 500-116286-1 MS Matrix: Water Analysis Batch: 349874			Client Sample ID: MW-01 Prep Type: Total/NA Prep Batch: 349659 %Rec. Limits						
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000956		mg/L		96	75 - 125

Lab Sample ID: 500-116286-1 MSD Matrix: Water Analysis Batch: 349874			Client Sample ID: MW-01 Prep Type: Total/NA Prep Batch: 349659 %Rec. Limits RPD RPD Limit								
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.00020		0.00100	0.000794		mg/L		79	75 - 125	18	20

Lab Sample ID: 500-116286-1 DU Matrix: Water Analysis Batch: 349874			Client Sample ID: MW-01 Prep Type: Total/NA Prep Batch: 349659 RPD Limit							
Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D			RPD	Limit
Mercury	<0.00020		<0.00020		mg/L				NC	20

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

Lab Sample ID: MB 500-349541/1 Matrix: Water Analysis Batch: 349541			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			08/29/16 00:12	1

Lab Sample ID: LCS 500-349541/2 Matrix: Water Analysis Batch: 349541			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	286		mg/L		114	80 - 120		

Lab Sample ID: 500-116286-1 DU Matrix: Water Analysis Batch: 349541			Client Sample ID: MW-01 Prep Type: Total/NA						
Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D		RPD	Limit
Total Dissolved Solids	550		548		mg/L			0.4	5

### Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-350499/4 Matrix: Water Analysis Batch: 350499			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			09/01/16 23:25	1

TestAmerica Chicago

MWG13-15\_58944

9/8/2016

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## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

### Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: LCS 500-350499/5				Client Sample ID: Lab Control Sample					
Matrix: Water				Prep Type: Total/NA					
Analysis Batch: 350499									
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	50.0	51.4		mg/L		103	80 - 120		

### Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-349715/3				Client Sample ID: Method Blank					
Matrix: Water				Prep Type: Total/NA					
Analysis Batch: 349715									
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			08/29/16 14:17	1

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Lab Sample ID: MB 500-349715/31				Client Sample ID: Method Blank					
Matrix: Water				Prep Type: Total/NA					
Analysis Batch: 349715									
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			08/29/16 15:52	1

Lab Sample ID: LCS 500-349715/32				Client Sample ID: Lab Control Sample					
Matrix: Water				Prep Type: Total/NA					
Analysis Batch: 349715									
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	10.0	11.0		mg/L		110	80 - 120		

Lab Sample ID: LCS 500-349715/4				Client Sample ID: Lab Control Sample					
Matrix: Water				Prep Type: Total/NA					
Analysis Batch: 349715									
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	10.0	10.4		mg/L		104	80 - 120		

Lab Sample ID: 500-116286-4 MS				Client Sample ID: MW-04					
Matrix: Water				Prep Type: Total/NA					
Analysis Batch: 349715									
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.56		5.00	6.03		mg/L		109	75 - 125

Lab Sample ID: 500-116286-4 MSD				Client Sample ID: MW-04							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 349715											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.56		5.00	6.00		mg/L		109	75 - 125	0	20

TestAmerica Chicago

# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

## Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-350566/3  
Matrix: Water  
Analysis Batch: 350566

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			09/05/16 07:51	1

Lab Sample ID: LCS 500-350566/4  
Matrix: Water  
Analysis Batch: 350566

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	19.0		mg/L		95	80 - 120

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Lab Sample ID: 500-116286-7 MS  
Matrix: Water  
Analysis Batch: 350566

Client Sample ID: MW-14  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	190		400	609		mg/L		105	75 - 125

Lab Sample ID: 500-116286-7 MSD  
Matrix: Water  
Analysis Batch: 350566

Client Sample ID: MW-14  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	190		400	627		mg/L		110	75 - 125	3	20



## Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-116286-1

Login Number: 116286

List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

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.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2,4.6,4.8
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 (excluding tests with immediate HTs)	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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Certification Summary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR

TestAmerica Job ID: 500-116286-1

## Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	100201	04-30-17

