



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

**QUARTERLY GROUNDWATER MONITORING REPORT**  
**JOLIET #29 GENERATING STATION**

July 22, 2013

Ms. Andrea Rhodes  
Illinois Environmental Protection Agency  
Division of Public Water Supplies  
MC#19  
1021 North Grand Avenue East  
Springfield, IL 62794-9276

**VIA FEDERAL EXPRESS**

KPRG Project No. 12313.0

Re: Quarterly Groundwater Monitoring Results – Second Quarter 2013  
Joliet #29 Generating Station – Ash Impoundments  
Compliance Commitment Agreement VN W-2012-00059; ID# 6284

Dear Ms. Rhodes:

The second quarterly groundwater sampling for 2013 has been completed for the ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Joliet #29 Generating Station in accordance with the signed Compliance Commitment Agreement (CCA) with Illinois Environmental Protection Agency (IEPA) dated October 24, 2012. This quarterly monitoring report is being submitted by KPRG and Associates, Inc. (KPRG), on behalf of Midwest Generation, summarizing the results of the monitoring event.

**Well Inspection and Sampling Procedures**

The groundwater monitoring network around the ash ponds at this facility consists of eleven wells (MW-1 through MW-11) as shown on Figure 1. As part of sampling procedures, the integrity of all monitoring wells was inspected and water levels obtained using an electronic water level meter (see summary of water level discussion below). All wells were in good condition with locked protector casings and the concrete surface seals were intact.

Prior to initiating sampling, KPRG installed dedicated QED bladder pump sampling systems into monitoring wells MW-3 through MW-11. Groundwater samples at well locations MW-3 through MW-11 were collected using the low-flow sampling technique.

Based on an evaluation of historical water levels at monitoring well locations MW-1 and MW-2, it was determined that there was not enough water column within these wells (generally less than two feet of water column within each well) to allow for the placement of dedicated pumping systems. Instead, at these two locations, dedicated PVC bailers were used to collect groundwater samples and the bailers were left suspended within each well casing for subsequent use.

Groundwater samples at well locations MW-1 and MW-2 were collected with dedicated bailers. Because the volume of water and recharge within monitoring well MW-1 were minimal, no field parameters were collected or recorded in order to preserve sufficient sample volume for chemical analysis. At well MW-2, the recharge was sufficient to allow for the collection of field parameter readings prior to sampling.

One duplicate sample was collected at well MW-11. In addition, a deionized water trip blank accompanied the groundwater samples bottles from and back to the laboratory. The groundwater monitoring samples and the duplicate sample were analyzed for the compounds listed in Illinois Administrative Code (IAC) 620.410(a), 620.410(d) and 620.410(e), excluding radium 226/228. The trip blank was analyzed for the volatile organic compounds (VOCs) listed in IAC 620.410(d).

#### Groundwater Flow Evaluation

Water level data from the most recent round of sampling along with historical water levels obtained from each well are summarized in Table 1. The water levels were used to generate a groundwater flow map which is provided on Figure 2. The water level from monitoring well MW-4 was anomalously low. At the time of sampling, construction activities associated with pond lining were occurring in the vicinity of this well. Localized dewatering associated with the construction work in the area may account for the low water level. This water level was not used in generating the groundwater flow map. The water elevation data indicates a general southerly flow. The flow conditions observed during this sampling are consistent with historical conditions reported for the site.

#### Analytical Data

A copy of the analytical data package is provided in Attachment 1. The field parameter and analytical data from the most recent sampling, along with the previous eight quarters of data, are summarized in Table 2. The data are generally consistent with previous data generated for the site. All wells for which the sampling data reports a value above one or more groundwater standards are located within the area of the proposed Groundwater Management Zone (GMZ). Midwest Generation's proposed GMZ application was submitted to IEPA on January 18, 2013 and is awaiting the Agency's approval.

If there are any questions, please contact either Maria Race of Midwest Generation at 630-771-7862 or Richard Gnat of KPRG at 262-781-0475.

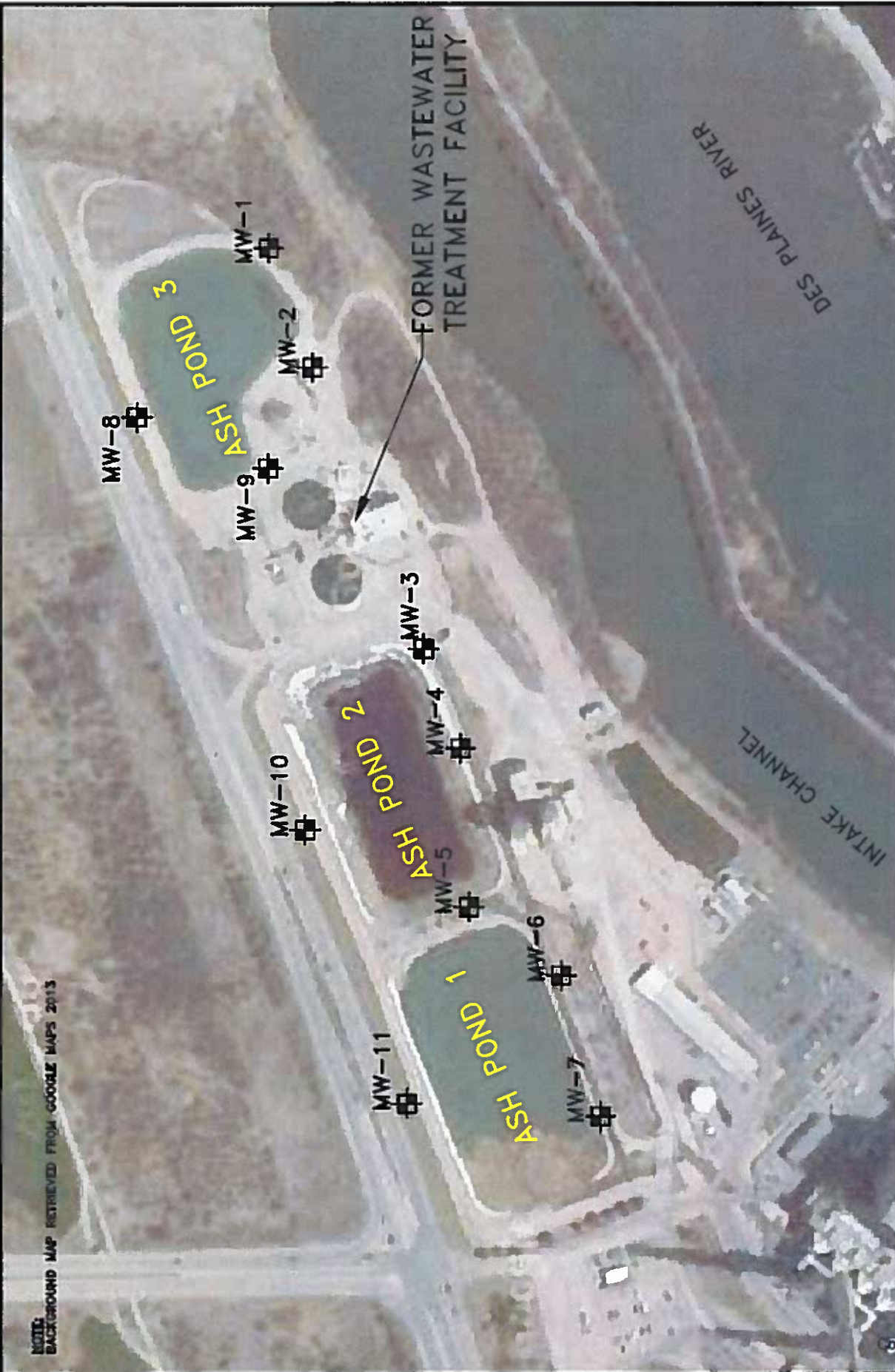
Sincerely,  
KPRG and Associates, Inc.



Richard R. Gnat, P.G.  
Principal

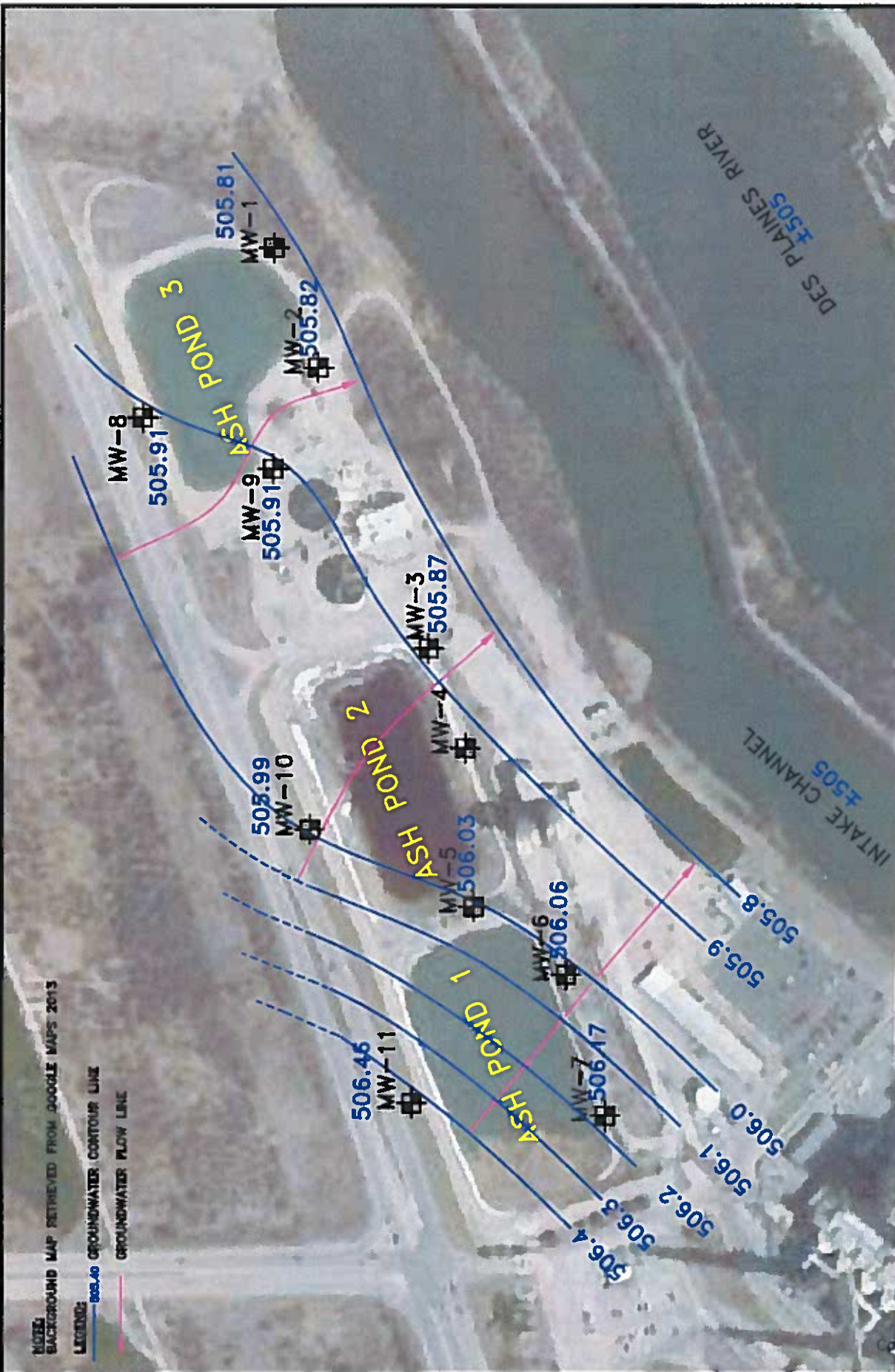
cc: William Buscher, IEPA  
Maria Race, Midwest Generation  
Susan Franzetti, Nijman Franzetti, LLP

## **FIGURES**



Comp 002479

ENVIRONMENTAL CONSULTATION & REMEDIATION		SITE MAP	
<p>K P R R G</p> <p>KPRRG and Associates, Inc.</p> <p>414 Plaza Drive, Suite 908 Westmont, Illinois 60559 Telephone 630-335-1300 Facsimile 630-335-1593</p> <p>14665 West Lisbon Road, 5th Flr 28 Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478</p>		JOLIET #29 GENERATING STATION JOLIET, ILLINOIS	
		Scale: 1" = 500'	Date: June 28, 2013
<p>0 500'</p> <p>APPROXIMATE SCALE</p>		KPRG Project No. 12313.0	
		FIGURE 1	



Comp 002480

**ENVIRONMENTAL CONSULTATION & REMEDIATION**

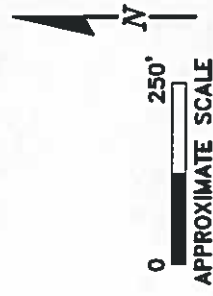
**K P R R G**  
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 14665 West 181st Road, Suite 28 Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

**GROUNDWATER CONTOUR MAP—JUNE 2013**

**JOLIET #29 GENERATING STATION**  
**JOLIET, ILLINOIS**

**Scale: 1" = 250'**    **Date: June 28, 2013**

**KPRG Project No. 12313.0**    **FIGURE 2**



## **TABLES**

Table 1. Groundwater Elevations - Midwest Generation, LLC, Joliet Station #29, Joliet, IL

Well ID	Date	Top of Casing (TOC) Elevation (ft above MSL)	Ground Elevation (ft above MSL)	Groundwater Elevation (ft above MSL)	Sampling Groundwater Elevation (ft above MSL)	Bottom of Well Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Sampling Depth to Groundwater (ft below TOC)	Depth to Bottom of Well (ft below TOC)
MW-1	06/14/11	534.76	531.46	507.69	507.39	504.91	27.07	27.37	29.85
	09/14/11	534.76	531.46	505.21	NM	504.91	29.55	NM	29.85
	12/07/11	534.76	531.46	505.39	NM	504.91	29.37	NM	29.85
	03/15/12	534.76	531.46	505.47	NM	504.91	29.29	NM	29.85
	06/19/12	534.76	531.46	505.23	NM	504.91	29.53	NM	29.85
	09/19/12	534.76	531.46	510.52	510.52	504.91	24.24	24.24	29.85
	12/20/12	534.76	531.46	505.42	NM	504.91	29.34	NM	29.85
	03/05/13	534.76	531.46	505.30	NM	504.91	29.46	NM	29.85
	05/23/13	534.76	531.46	505.81	505.25	504.91	28.95	29.51	29.85
MW-2	06/14/11	534.28	531.19	507.62	507.62	504.06	26.66	26.66	30.22
	09/14/11	534.28	531.19	505.13	505.17	504.06	29.15	29.11	30.22
	12/07/11	534.28	531.19	505.36	505.34	504.06	28.92	28.94	30.22
	03/15/12	534.28	531.19	505.43	505.43	504.06	28.85	28.85	30.22
	06/19/12	534.28	531.19	505.18	NM	504.06	29.10	NM	30.22
	09/19/12	534.28	531.19	512.33	505.31	504.06	21.95	28.97	30.22
	12/20/12	534.28	531.19	505.33	505.33	504.06	28.95	28.95	30.22
	03/05/13	534.28	531.19	505.31	505.31	504.06	28.97	28.97	30.22
	05/23/13	534.28	531.19	505.82	504.28	504.06	28.46	30.00	30.22
MW-3	06/14/11	538.78	535.54	507.97	506.89	494.68	30.81	31.89	44.10
	09/14/11	538.78	535.54	505.17	505.15	494.68	33.61	33.63	44.10
	12/07/11	538.78	535.54	505.38	505.35	494.68	33.40	33.43	44.10
	03/15/12	538.78	535.54	505.45	505.45	494.68	33.33	33.33	44.10
	06/19/12	538.78	535.54	505.23	505.23	494.68	33.55	33.55	44.10
	09/19/12	538.78	535.54	505.12	505.12	494.68	33.66	33.66	44.10
	12/20/12	538.78	535.54	505.25	505.25	494.68	33.53	33.53	44.10
	03/05/13	538.78	535.54	505.38	505.38	494.68	33.40	33.40	44.10
	05/23/13	538.78	535.54	505.87	506.03	494.68	32.91	32.75	44.10
MW-4	06/14/11	539.03	535.80	507.93	507.93	496.13	31.10	31.10	42.90
	09/14/11	539.03	535.80	505.15	505.15	496.13	33.88	33.88	42.90
	12/07/11	539.03	535.80	505.34	505.34	496.13	33.69	33.69	42.90
	03/15/12	539.03	535.80	505.43	505.43	496.13	33.60	33.60	42.90
	06/19/12	539.03	535.80	505.21	505.21	496.13	33.82	33.82	42.90
	09/19/12	539.03	535.80	505.11	505.11	496.13	33.92	33.92	42.90
	12/20/12	539.03	535.80	505.25	505.25	496.13	33.78	33.78	42.90
	03/05/13	539.03	535.80	505.39	505.39	496.13	33.64	33.64	42.90
	05/23/13	539.03	535.80	503.94	505.93	496.13	35.09	33.10	42.90
MW-5	06/14/11	539.69	536.43	507.87	507.86	494.64	31.82	31.83	45.05
	09/14/11	539.69	536.43	505.05	505.06	494.64	34.64	34.63	45.05
	12/07/11	539.69	536.43	505.23	505.23	494.64	34.46	34.46	45.05
	03/15/12	539.69	536.43	505.32	505.32	494.64	34.37	34.37	45.05
	06/19/12	539.69	536.43	505.11	505.11	494.64	34.58	34.58	45.05
	09/19/12	539.69	536.43	505.06	505.05	494.64	34.63	34.64	45.05
	12/20/12	539.69	536.43	505.22	505.22	494.64	34.47	34.47	45.05
	03/05/13	539.69	536.43	505.24	505.24	494.64	34.45	34.45	45.05
	06/05/13	539.69	536.43	506.03	506.06	494.64	33.66	33.63	45.05
MW-6	06/14/11	539.06	535.86	507.83	507.83	496.86	31.23	31.23	42.20
	09/14/11	539.06	535.86	505.19	505.24	496.86	33.87	33.82	42.20
	12/07/11	539.06	535.86	505.36	505.33	496.86	33.70	33.73	42.20
	03/15/12	539.06	535.86	505.45	505.46	496.86	33.61	33.60	42.20
	06/19/12	539.06	535.86	505.26	505.26	496.86	33.80	33.80	42.20
	09/19/12	539.06	535.86	505.26	505.24	496.86	33.80	33.82	42.20
	12/20/12	539.06	535.86	505.25	505.25	496.86	33.81	33.81	42.20
	03/05/13	539.06	535.86	505.37	505.37	496.86	33.69	33.69	42.20
	05/23/13	539.06	535.86	506.06	506.06	496.86	33.00	33.00	42.20



Table 1. Groundwater Elevations - Midwest Generation, LLC, Joliet Station #29, Joliet, IL

Well ID	Date	Top of Casing (TOC) Elevation (ft above MSL)	Ground Elevation (ft above MSL)*	Groundwater Elevation (ft above MSL)	Sampling Groundwater Elevation (ft above MSL)	Bottom of Well Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Sampling Depth to Groundwater (ft below TOC)	Depth to Bottom of Well (ft below TOC)
MW-7	06/14/11	539.35	535.86	507.83	507.83	496.11	31.52	31.52	43.24
	09/14/11	539.35	535.86	505.21	505.21	496.11	34.14	34.14	43.24
	12/07/11	539.35	535.86	505.37	505.37	496.11	33.98	33.98	43.24
	03/15/12	539.35	535.86	505.46	505.46	496.11	33.89	33.89	43.24
	06/19/12	539.35	535.86	505.28	500.70	496.11	34.07	38.65	43.24
	09/19/12	539.35	535.86	505.26	505.26	496.11	34.09	34.09	43.24
	12/20/12	539.35	535.86	505.24	505.24	496.11	34.11	34.11	43.24
	03/05/13	539.35	535.86	505.40	505.40	496.11	33.95	33.95	43.24
05/22/13	539.35	535.86	506.17	506.17	496.11	33.18	33.18	43.24	
MW-8	06/14/11	536.87	533.72	507.91	507.89	498.81	28.96	28.98	38.06
	09/14/11	536.87	533.72	505.25	505.25	498.81	31.62	31.62	38.06
	12/07/11	536.87	533.72	505.49	505.49	498.81	31.38	31.38	38.06
	03/15/12	536.87	533.72	505.57	505.57	498.81	31.30	31.30	38.06
	06/19/12	536.87	533.72	505.32	505.32	498.81	31.55	31.55	38.06
	09/19/12	536.87	533.72	505.22	505.22	498.81	31.65	31.65	38.06
	12/20/12	536.87	533.72	505.40	505.40	498.81	31.47	31.47	38.06
	03/05/13	536.87	533.72	505.45	505.45	498.81	31.42	31.42	38.06
05/23/13	536.87	533.72	505.91	505.91	498.81	30.96	30.96	38.06	
MW-9	06/14/11	534.44	531.13	507.88	505.84	496.29	26.56	28.60	38.15
	09/14/11	534.44	531.13	505.22	504.81	496.29	29.22	29.63	38.15
	12/07/11	534.44	531.13	505.46	505.03	496.29	28.98	29.41	38.15
	03/15/12	534.44	531.13	505.53	500.37	496.29	28.91	34.07	38.15
	06/19/12	534.44	531.13	505.29	501.20	496.29	29.15	33.24	38.15
	09/19/12	534.44	531.13	505.66	504.91	496.29	28.78	29.53	38.15
	12/20/12	534.44	531.13	505.36	505.36	496.29	29.08	29.08	38.15
	03/05/13	534.44	531.13	505.50	505.50	496.29	28.94	28.94	38.15
05/23/13	534.44	531.13	505.91	505.63	496.29	28.53	28.81	38.15	
MW-10	06/14/11	540.03	536.95	508.19	508.17	496.10	31.84	31.86	43.93
	09/14/11	540.03	536.95	505.23	505.23	496.10	34.80	34.80	43.93
	12/07/11	540.03	536.95	505.43	505.43	496.10	34.60	34.60	43.93
	03/15/12	540.03	536.95	505.51	505.51	496.10	34.52	34.52	43.93
	06/19/12	540.03	536.95	505.28	505.28	496.10	34.75	34.75	43.93
	09/19/12	540.03	536.95	505.16	505.19	496.10	34.87	34.84	43.93
	12/20/12	540.03	536.95	505.30	505.30	496.10	34.73	34.73	43.93
	03/05/13	540.03	536.95	505.41	505.41	496.10	34.62	34.62	43.93
05/22/13	540.03	536.95	505.99	505.99	496.10	34.04	34.04	43.93	
MW-11	06/14/11	539.47	536.52	509.29	509.30	497.14	30.18	30.17	42.33
	09/14/11	539.47	536.52	505.49	505.49	497.14	33.98	33.98	42.33
	12/07/11	539.47	536.52	505.77	505.77	497.14	33.70	33.70	42.33
	03/15/12	539.47	536.52	505.80	505.80	497.14	33.67	33.67	42.33
	06/19/12	539.47	536.52	505.51	505.51	497.14	33.96	33.96	42.33
	09/19/12	539.47	536.52	505.35	505.35	497.14	34.12	34.12	42.33
	12/20/12	539.47	536.52	505.44	505.44	497.14	34.03	34.03	42.33
	03/05/13	539.47	536.52	505.66	505.66	497.14	33.81	33.81	42.33
05/23/13	539.47	536.52	506.46	506.37	497.14	33.01	33.10	42.33	

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	6/14/2011		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		5/23/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.006	0.0030	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0030	0.0052
Arsenic	0.010	0.0010	0.0014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0010	0.0011
Barium	2.0	0.0025	0.14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0025	0.15
Beryllium	0.004	0.0010	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0010	ND
Boron	2.0	0.050	0.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.050	0.33
Cadmium	0.005	0.00050	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00050	ND
Chloride	200.0	10	170	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	210
Chromium	0.1	0.0050	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0050	ND
Cobalt	1.0	0.0010	0.0010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0010	ND
Copper	0.65	0.0020	0.0025	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0020	ND
Cyanide	0.2	0.010	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.010	ND
Fluoride	4.0	0.10	0.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.10	0.42
Iron	5.0	0.10	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.10	ND
Lead	0.0075	0.00050	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00050	ND
Manganese	0.15	0.0025	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0025	ND
Mercury	0.002	0.00020	ND <sup>c</sup>	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00020	ND
Nickel	0.1	0.0020	0.0029	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0020	ND
Nitrogen/Nitrate	10.0	0.10	2.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.10	3.7
Nitrogen/Nitrite, Nitrate	NA	0.20	2.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.20	3.7
Nitrogen/Nitrite	NA	0.020	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.020	ND
Perchlorate	0.0049	NR	NR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NR	NR
pH	6.5 - 9.0	NA	7.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	7.46
Selenium	0.05	0.0025	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0025	0.0040
Silver	0.05	0.00050	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00050	ND
Sulfate	400.0	25	81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25	140
Thallium	0.002	0.0020	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0020	ND
Total Dissolved Solids	1,200	10	670	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	700
Vanadium	0.049	NR	NR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NR	NR
Zinc	5.0	0.020	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.020	0.0001
Benzene	0.005	NR	NR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NR	NR
BTEX	11.705	NR	NR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NR	NR
Temperature	NA	NA	13.92	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NA
Conductivity	NA	NA	1.28	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NA
Dissolved Oxygen	NA	NA	4.19	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NA
Oxidation-Reduction Potential	NA	NA	210.6	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NM	NA	NA

Notes: Standards obtained from IAC, Title 35, Chapter 1, Part 620, Subpart D, Sections 620.410 - Groundwater Quality Standards for Class I Possible Resource Groundwater  
 All values are in mg/L (ppm)  
 DL - Detection Limit  
 NA - Not Applicable  
 ND - Not Detected  
 NM - Not Measured  
 NR - Not Required  
 NS - Not Sampled  
 \*\* - Denotes instrument related QC exceeds the control limits  
 °C - Degrees Celsius  
 ms, cm<sup>2</sup> - Milliseconds, Centimeters  
 mg/L - Milligrams, Liter  
 mV - millivolts  
 ORP -

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	Date		6/14/2011		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		5/23/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Aluminum	0.006	0.0030	0.0042	0.0030	0.0032	0.0030	ND	0.0030	ND	0.0030	NS	NS	NS	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND
Arsenic	0.010	0.0050	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	NS	NS	NS	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Barium	2.0	0.0025	0.081	0.0025	0.10	0.0025	0.12	0.0025	0.12	0.0025	NS	NS	NS	0.0025	0.12	0.0025	0.13	0.0025	0.12	0.0025	0.11
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	NS	NS	NS	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	0.050	0.35	0.050	0.44	0.050	0.74	0.050	0.22	0.050	NS	NS	NS	0.050	0.35	0.050	0.42	0.050	0.41	0.050	0.35
Cadmium	0.005	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	NS	NS	NS	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Chloride	200.0	10	230	10	140	10	140	10	200	10	NS	NS	NS	10	120	10	150	10	260	10	250
Chromium	0.1	0.025	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	NS	NS	NS	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Cobalt	1.0	0.0050	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	NS	NS	NS	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Copper	0.65	0.010	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	NS	NS	NS	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Cyanide	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	NS	NS	NS	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.58	0.10	0.54	0.10	0.51	0.10	0.53	0.10	NS	NS	NS	0.10	0.64	0.10	0.59	0.10	0.59	0.10	0.54
Iron	5.0	0.50	ND	0.10	ND	0.10	ND	0.10	ND	0.10	NS	NS	NS	0.10	ND	0.10	ND	0.10	ND	0.10	ND
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	NS	NS	NS	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.013	ND	0.0025	0.0025	0.0025	ND	0.0025	ND	0.0025	NS	NS	NS	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	NS	NS	NS	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.010	1.8	0.010	2.2	0.010	2.9	0.010	6.4	0.010	NS	NS	NS	0.010	4.7	0.010	7.5	0.010	4.4	0.010	3.7
Nitrogen/Nitrate	10.0	0.10	1.8	0.10	2.2	0.10	2.9	0.10	6.4	0.10	NS	NS	NS	0.10	4.7	0.10	7.5	0.10	4.4	0.10	3.7
Nitrogen Nitrate, Nitrite	NA	0.10	1.8	0.20	2.2	0.10	2.9	0.10	6.4	0.10	NS	NS	NS	0.10	4.7	0.10	7.5	0.10	4.4	0.10	3.7
Nitrogen/Nitrite	NA	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	NS	NS	NS	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Perchlorate	0.0049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NS	NS	NS	NR	NR	0.0040	ND	0.0040	ND	0.0040	ND
pH	6.5 - 9.0	NA	7.30	NA	7.37	NA	7.37	NA	7.37	NA	NS	NS	NS	NA	7.39	NA	7.39	NA	7.52	NA	7.44
Selenium	0.05	0.013	ND	0.0025	0.0038	0.0025	0.0055	0.0025	0.0048	0.0025	NS	NS	NS	0.0025	ND	0.0025	ND	0.0025	0.0034	0.0025	0.0027
Silver	0.05	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	NS	NS	NS	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Sulfate	400.0	25	67	25	110	50	150	50	110	50	NS	NS	NS	50	190	50	140	50	130	25	150
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	NS	NS	NS	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	720	10	690	10	750	10	800	10	NS	NS	NS	10	580	10	720	10	840	10	860
Vanadium	0.049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NS	NS	NS	NR	NR	0.0050	ND	0.0050	ND	0.0050	ND
Zinc	5.0	0.10	ND	0.020	ND	0.020	ND	0.020	ND	0.020	NS	NS	NS	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Benzene	0.005	NR	NR	NR	NR	NR	NR	NR	NR	NR	NS	NS	NS	NR	NR	0.00050	ND	0.00050	ND	0.00050	ND
BETX	11.705	NR	NR	NR	NR	NR	NR	NR	NR	NR	NS	NS	NS	NR	NR	0.0025	ND	0.0025	ND	0.0025	ND
Temperature	NA	NA	15.57	NA	18.72	NA	13.04	NA	22.02	NA	NS	NS	NS	NA	22.02	NA	14.4	NA	9.5	NA	12.82
Conductivity	NA	NA	1.30	NA	0.98	NA	0.90	NA	0.90	NA	NS	NS	NS	NA	0.90	NA	0.91	NA	1.02	NA	1.008
Dissolved Oxygen	NA	NA	6.45	NA	5.21	NA	5.91	NA	6.02	NA	NS	NS	NS	NA	6.02	NA	9.91	NA	7.79	NA	7.65
Oxidation-Reduction Potential	NA	NA	227.3	NA	-36.0	NA	81.0	NA	81.0	NA	NS	NS	NS	NA	158.0	NA	-41.0	NA	58.1	NA	178.0

Notes: Standards obtained from IAC, Title 35, Chapter 1, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Failable Resource Groundwater. All values are in mg/L (ppm).  
 DL - Detection limit  
 NA - Not Applicable  
 ND - Not Detected  
 NM - Not Measured  
 NR - Not Required  
 NS - Not Sampled  
 \* - Denotes instrument related QC exceeds the control limits

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	Date		6/14/2011		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		5/22/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Ammonium	0.006	0.0030	ND	0.0030	0.0065	0.0030	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
Arsenic	0.010	0.0050	ND	0.0050	0.0012	0.0010	0.0016	0.0016	0.0016	0.0014	0.0010	0.0011	0.0010	0.0010	0.0012	0.0010	0.0010	0.0010	0.0010	0.0010	0.0013
Barium	2.0	0.0025	0.092	0.0025	0.081	0.0025	0.084	0.084	0.084	0.081	0.0025	0.088	0.0025	0.097	0.0025	0.099	0.0025	0.099	0.0025	0.089	0.13
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	0.050	0.46	0.050	0.24	0.050	0.23	0.23	0.23	0.26	0.050	0.31	0.050	0.22	0.050	0.28	0.050	0.29	0.050	0.29	0.74 V
Cadmium	0.005	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND
Chloride	200.0	10	300	10	160	10	260	260	260	250	10	260	10	330	10	290	10	260	10	260	380
Chromium	0.1	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND
Cobalt	1.0	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Copper	0.65	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Cyanide	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.41	0.10	0.31	0.10	0.40	0.40	0.40	0.39	0.10	0.43	0.10	0.43	0.10	0.38	0.10	0.42	0.10	0.42	0.44
Iron	5.0	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND	0.50	ND
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.013	ND	0.013	0.0076	0.0025	0.0080	0.0080	0.0080	0.0095	0.0025	0.014	0.0025	0.011	0.0025	0.0076	0.0025	0.0068	0.0025	0.0068	ND
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.010	ND	0.010	0.0041	0.010	0.0040	0.0040	0.0040	0.0040	0.010	0.0044	0.010	0.0044	0.010	0.0044	0.010	0.0044	0.010	0.0044	0.0042
Nitrogen/Nitrate	10.0	0.10	2.1	0.10	1.1	0.10	0.79	0.79	0.79	0.10	1.3	0.10	1.3	0.10	0.88	0.10	0.77	0.10	0.86	0.10	3.6
Nitrogen/Nitrite, Nitrate	NA	0.20	2.1	0.10	1.1	0.10	0.79	0.79	0.79	0.10	1.3	0.10	1.3	0.10	0.88	0.10	0.77	0.10	0.86	0.10	3.6
Nitrogen/Nitrite	NA	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Perchlorate	0.0049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH	6.5 - 9.0	NA	7.41	NA	7.37	NA	7.48	7.48	7.48	7.34	NA	7.21	NA	7.40	NA	7.42	NA	7.66	NA	7.66	7.00
Selenium	0.05	0.013	ND	0.013	ND	0.013	ND	0.013	ND	0.013	ND	0.013	ND	0.013	ND	0.013	ND	0.013	ND	0.013	0.022
Silver	0.05	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND
Sulfate	400.0	50	120	50	120	50	160	160	160	190	25	160	50	150	50	110	50	140	50	140	250
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	1000	10	930	10	1100	1100	1100	1000	10	1100	10	1000	10	1100	10	950	10	950	1300
Vanadium	0.049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zinc	5.0	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND
Benzene	0.005	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
BTEX	11.705	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	NA	NA	13.04	NA	11.90	NA	10.94	10.94	10.94	13.73	NA	14.01	NA	13.35	NA	12.40	NA	11.20	NA	11.20	13.45
Conductivity	NA	NA	1.74	NA	1.15	NA	1.19	1.19	1.19	1.21	NA	1.33	NA	1.41	NA	1.28	NA	1.18	NA	1.18	1.55
Dissolved Oxygen	NA	NA	7.78	NA	6.03	NA	6.07	6.07	6.07	6.07	NA	6.47	NA	6.35	NA	6.30	NA	7.03	NA	7.03	5.31
Oxidation-Reduction Potential	NA	NA	223.5	NA	-51.0	NA	145.0	145.0	145.0	193.0	NA	114.0	NA	134.0	NA	130.0	NA	196.6	NA	196.6	-20.4

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Durable Resource Groundwater. All values are in mg/L (ppm).  
 DL - Detection limit  
 NA - Not Applicable  
 ND - Not Detected  
 NM - Not Measured  
 NR - Not Required  
 NS - Not Sampled  
 \* - Denotes instrument related QC exceeds the control limits

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	Date		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		5/22/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.006	0.0030	ND	0.0030	0.0067	0.0030	0.0057	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	0.012
Arsenic	0.010	0.0050	ND	0.0050	0.0011	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.0013	0.0010	0.0014
Barium	2.0	0.0025	0.009	0.0025	0.009	0.0025	0.0070	0.0025	0.068	0.0025	0.068	0.0025	0.092	0.0025	0.87	0.0025	0.080	0.0025	0.084
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	0.050	0.38	0.050	0.34	0.050	0.29	0.050	0.48	0.050	0.48	0.050	0.34	0.050	0.38	0.050	0.40	0.050	0.40
Cadmium	0.005	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND
Chloride	200.0	10	250	10	200	10	200	2.0	210	10	270	10	260	10	250	10	230	10	270
Chromium	0.1	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND	0.025	ND
Cobalt	1.0	0.0050	ND	0.0050	0.0018	0.0010	0.0028	0.0010	0.0042	0.0010	0.0042	0.0010	0.0059	0.0010	0.0049	0.0010	0.0057	0.0010	0.0012
Copper	0.65	0.010	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Cyanide	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.44	0.10	0.37	0.10	0.44	0.10	0.41	0.10	0.46	0.10	0.47	0.10	0.41	0.10	0.47	0.10	0.49
Iron	5.0	0.50	ND	0.10	0.22	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	0.46	0.10	0.17
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	0.00077	0.00050	ND
Manganese	0.15	0.013	0.018	0.0025	0.066	0.0025	0.029	0.0025	0.082	0.0025	0.082	0.0025	0.043	0.0025	0.029	0.0025	0.067	0.0025	0.081
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.010	ND	0.0020	0.0029	0.0020	0.0038	0.0020	0.0036	0.0020	0.0036	0.0020	0.0043	0.0020	0.0042	0.0020	0.0051	0.0020	0.0034
Nitrogen/Nitrate	10.0	0.10	2.7	0.10	1.6	0.10	1.4	0.10	0.62	0.10	1.4	0.10	1.3	0.10	0.91	0.10	1.3	0.10	2.9
Nitrogen/Nitrate, Nitrite	NA	0.20	2.7	0.10	1.6	0.10	1.4	0.10	0.62	0.10	1.4	0.10	1.3	0.10	0.91	0.10	1.3	0.20	2.9
Nitrogen/Nitrite	NA	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Perchlorate	0.0049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.0040	NR
pH	6.5 - 9.0	NA	7.48	NA	7.42	NA	7.56	NA	7.40	NA	7.31	NA	7.37	NA	7.38	NA	7.44	NA	7.18
Selenium	0.05	0.013	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	0.0047	0.0025	0.0033	0.0025	ND	0.0025	0.0025
Silver	0.05	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Sulfate	400.0	2.5	84	2.5	74	50	170	50	210	25	110	50	180	50	130	50	110	25	120
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	890	10	770	10	970	10	930	10	1100	10	980	10	1000	10	880	10	900
Vanadium	0.049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zinc	5.0	0.10	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Benzene	0.005	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
BTEX	11.705	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	NA	NA	12.59	NA	11.78	NA	9.67	NA	12.52	NA	13.59	NA	14.52	NA	12.98	NA	9.90	NA	14.25
Conductivity	NA	NA	1.50	NA	0.94	NA	1.04	NA	1.06	NA	1.28	NA	1.33	NA	1.24	NA	1.05	NA	1.06
Dissolved Oxygen	NA	NA	8.20	NA	7.17	NA	6.95	NA	6.95	NA	6.51	NA	6.26	NA	8.19	NA	7.6	NA	6.47
Oxidation-Reduction Potential	NA	NA	217.5	NA	-43.0	NA	135.0	NA	177.0	NA	86.0	NA	155.0	NA	132.0	NA	140.9	NA	-6.4

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Possible Resource Groundwater. All values are in mg/L, ppm.

DL - Detection limit  
 NA - Not Applicable  
 ND - Not Detected  
 NSM - Not Measured

NR - Not Required  
 NS - Not Sampled  
 -- Denotes instrument related QC exceeds the control limits

Temperature °C  
 Conductivity µmS/cm  
 Dissolved Oxygen mg/L  
 ORP mV

Degrees Celsius  
 Milligrams/Liter  
 millivolt

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	Date		6/14/2011		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		6/5/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.006	0.0030	ND	0.0030	0.0040	0.0035	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
Arsenic	0.010	0.0050	ND	0.0010	0.0011	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Barium	2.0	0.0025	0.053	0.0025	0.062	0.0025	0.062	0.0025	0.062	0.0025	0.069	0.0025	0.056	0.0025	0.071	0.0025	0.078	0.0025	0.076	0.0025	0.060
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	0.050	0.47	0.050	0.57	0.050	0.49	0.050	0.49	0.050	0.54	0.050	0.44	0.050	0.55	0.050	0.65	0.050	0.59	0.050	0.69
Cadmium	0.005	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	0.0016	0.0025	ND	0.0025	0.00091	0.0025	0.0076	0.0025	0.0025	0.0025	0.0025
Chloride	200.0	10	220	10	190	10	190	10	190	2.0	210	10	220	10	240	10	210	10	220	10	180
Chromium	0.1	0.025	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Cobalt	1.0	0.0050	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.0040	0.0010	0.006	0.0010	0.0010	0.0010	0.0010
Copper	0.65	0.010	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	0.019	0.0020	0.017	0.0020	0.0065	0.0020	0.0020
Cyanide	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.39	0.10	0.28	0.10	0.34	0.10	0.34	0.10	0.32	0.10	0.38	0.10	0.39	0.10	0.35	0.10	0.35	0.10	0.39
Iron	5.0	0.50	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	0.00062	0.00050	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.013	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	0.0040	0.0025	0.001	0.0025	ND	0.0025	0.0037	0.0025	ND
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.010	ND	0.010	0.0021	0.010	0.010	0.010	1.5	0.10	0.33	0.10	1.0	0.10	0.10	0.10	0.21	0.10	0.16	0.10	1.7
Nitrogen/Nitrate	10.0	0.10	1.3	0.10	1.1	0.10	1.5	0.10	1.5	0.10	0.33	0.10	1.0	0.10	0.10	0.21	0.10	0.16	0.10	1.7	
Nitrogen/Nitrate, Nitrite	NA	0.10	1.3	0.10	1.1	0.10	1.5	0.10	1.5	0.10	0.33	0.10	1.0	0.10	0.10	0.21	0.10	0.16	0.10	1.7	
Nitrogen/Nitrite	NA	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Perchlorate	0.0049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.004	NR	0.0040	NR	0.0040
pH	6.5 - 9.0	NA	7.44	NA	7.25	NA	7.44	NA	7.44	NA	7.30	NA	7.18	NA	7.32	NA	7.36	NA	7.34	NA	6.92
Selenium	0.05	0.013	ND	0.0025	ND	0.0025	0.0030	0.0025	0.0030	0.0025	ND	0.0025	0.0057	0.0025	ND	0.0034	0.0025	0.0025	0.0025	0.0025	0.025
Silver	0.05	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Sulfate	400.0	25	100	50	140	50	140	50	140	50	190	25	130	50	210	50	210	50	150	50	200
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	850	10	800	10	900	10	900	10	930	10	1000	10	990	10	1000	10	960	10	1,100
Vanadium	0.049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.0050	NR	0.0050	NR	0.0050
Zinc	5.0	0.10	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Benzene	0.005	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.0005	NR	0.00050	NR	0.00050
BETX	11.705	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.0025	NR	0.0025	NR	0.0025
Temperature	NA	NA	13.37	NA	12.15	NA	11.23	NA	11.23	NA	13.52	NA	16.19	NA	14.23	NA	13.64	NA	10.90	NA	14.95
Conductivity	NA	NA	1.38	NA	0.92	NA	1.02	NA	1.02	NA	1.19	NA	1.56	NA	1.29	NA	1.25	NA	1.08	NA	1.067
Dissolved Oxygen	NA	NA	7.16	NA	6.43	NA	6.07	NA	6.07	NA	6.24	NA	6.36	NA	3.68	NA	4.27	NA	4.49	NA	4.01
Oxidation-Reduction Potential	NA	NA	210.0	NA	-26.0	NA	125.0	NA	125.0	NA	228.0	NA	176.0	NA	155.0	NA	112.0	NA	160.5	NA	-1.7

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Public Resource Groundwater  
 All values are in mg/L (ppm)  
 DL - Detection limit  
 NA - Not Applicable  
 ND - Not Detected  
 NM - Not Measured  
 NR - Not Required  
 NS - Not Sampled  
 \* - Denotes instrument related QC exceeds the control limits

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	Date		6/14/2011		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		5/22/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.006	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	0.0016	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	0.0045
Arsenic	0.010	0.0050	ND	0.0010	ND	0.0010	0.0018	0.0010	0.0018	0.0010	0.0010	0.0014	0.0010	0.0010	0.0010	0.0010	0.0014	0.0010	0.0010	0.0010	0.0018
Barium	2.0	0.0025	0.082	0.0025	0.094	0.0025	0.11	0.0025	0.13	0.0025	0.13	0.0025	0.11	0.0025	0.14	0.0025	0.12	0.0025	0.12	0.0025	0.097
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	0.050	0.32	0.050	0.27	0.050	0.30	0.050	0.25	0.050	0.25	0.050	0.26	0.050	0.25	0.050	0.31	0.050	0.33	0.050	0.23
Cadmium	0.005	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Chloride	200.0	10	140	10	140	10	130	10	140	10	140	10	140	10	140	10	150	10	160	10	170
Chromium	0.1	0.025	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Cobalt	1.0	0.0050	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Copper	0.65	0.010	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Cyanide	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.44	0.10	0.29	0.10	0.44	0.10	0.36	0.10	0.36	0.10	0.36	0.10	0.36	0.10	0.38	0.10	0.40	0.10	0.43
Iron	5.0	0.50	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.013	ND	0.0025	0.036	0.0025	0.024	0.0025	0.015	0.0025	0.0180	0.0025	0.0080	0.0025	0.0087	0.0025	0.0076	0.0025	0.0047	0.0025	ND
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.010	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Nitrogen/Nitrate	10.0	0.10	0.91	0.10	0.31	0.10	0.36	0.10	0.36	0.10	0.65	0.10	0.65	0.10	0.55	0.10	0.47	0.10	1.0	0.10	1.7
Nitrogen Nitrate, Nitrite	N/A	0.10	0.91	0.10	0.31	0.10	0.36	0.10	0.36	0.10	0.65	0.10	0.65	0.10	0.55	0.10	0.47	0.10	1.0	0.10	1.7
Nitrogen/Nitrite	N/A	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Perchlorate	0.0049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH	6.5 - 9.0	N/A	7.71	N/A	7.53	N/A	7.71	N/A	7.57	N/A	7.42	N/A	7.46	N/A	7.46	N/A	7.66	N/A	8.05	N/A	7.35
Selenium	0.05	0.043	ND	0.0025	ND	0.0025	0.0054	0.0025	0.0051	0.0025	0.0069	0.0025	0.0073	0.0025	0.0073	0.0025	0.0059	0.0025	0.013	0.0025	0.0032
Silver	0.05	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Sulfate	400.0	25	87	25	100	50	130	50	110	25	91	25	85	25	85	25	120	25	120	25	96
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	650	10	620	10	710	10	800	10	860	10	760	10	760	10	710	10	690	10	690
Vanadium	0.049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zinc	5.0	0.10	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Benzene	0.005	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
BITX	11.705	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	N/A	N/A	14.26	N/A	12.73	N/A	13.70	N/A	14.45	N/A	19.31	N/A	14.51	N/A	14.51	N/A	13.45	N/A	0.94	N/A	14.48
Conductivity	N/A	N/A	1.05	N/A	0.77	N/A	0.87	N/A	1.06	N/A	1.23	N/A	1.02	N/A	1.02	N/A	0.93	N/A	0.94	N/A	0.855
Dissolved Oxygen	N/A	N/A	6.82	N/A	6.74	N/A	7.05	N/A	7.47	N/A	7.21	N/A	6.27	N/A	6.27	N/A	7.20	N/A	8.70	N/A	4.77
Oxidation-Reduction Potential	N/A	N/A	203.8	N/A	-65.0	N/A	113.0	N/A	210.0	N/A	153.0	N/A	162.0	N/A	162.0	N/A	135.0	N/A	186.4	N/A	18.1

Notes: Standards obtained from IAC, Title 35, Chapter 1, Part 630, Subpart D, Section 620-410 - Groundwater Quality Standards for Class I Potable Resource Groundwater. All values are in mg/L (ppm).  
 DL - Detection limit  
 NA - Not Applicable  
 ND - Not Detected  
 NM - Not Measured  
 NR - Not Required  
 NS - Not Sampled  
 \* - Denotes instrument related QC exceeds the control limits

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	6/14/2011		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		5/22/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.006	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND
Arsenic	0.010	0.0050	ND	0.0010	0.0014	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0015
Barium	2.0	0.0025	0.072	0.0025	0.092	0.0025	0.11	0.0025	0.13	0.0025	0.092	0.0025	0.12	0.0025	0.11	0.0025	0.12	0.0025	0.11
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	0.050	0.25	0.050	0.29	0.050	0.35	0.050	0.30	0.050	0.25	0.050	0.31	0.050	0.41	0.050	0.39	0.050	0.21
Cadmium	0.005	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Chloride	200.0	10	140	10	99	10	140	200	300	10	170	10	170	10	140	10	190	10	170
Chromium	0.1	0.025	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Cobalt	1.0	0.0050	ND	0.0010	0.011	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Copper	0.65	0.010	ND	0.0020	0.0025	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Cyanide	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.35	0.10	0.27	0.10	0.35	0.10	0.31	0.10	0.37	0.10	0.32	0.10	0.31	0.10	0.30	0.10	0.38
Iron	5.0	0.50	ND	0.10	3.8	0.10	ND	0.10	ND	0.10	0.13	0.10	ND	0.10	ND	0.10	ND	0.10	0.41
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.013	ND	0.0025	0.080	0.0025	0.0073	0.0025	0.015	0.0025	0.069	0.0025	0.0041	0.0025	0.0063	0.0025	0.0044	0.0025	0.012
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.010	ND	0.0020	0.014	0.0020	ND	0.0020	ND	0.0020	0.0032	0.0020	0.0020	0.0020	0.0024	0.0020	0.0024	0.0020	0.0020
Nitrogen/Nitrate	10.0	0.10	0.76	0.10	0.27	0.10	0.60	0.10	ND	0.10	0.65	0.10	0.61	0.10	0.73	0.10	1.4	0.10	1.7
Nitrogen/Nitrate, Nitrite	NA	0.10	0.76	0.10	0.27	0.10	0.60	0.10	ND	0.10	0.65	0.10	0.61	0.10	0.73	0.10	1.4	0.10	1.7
Nitrogen/Nitrite	NA	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Perchlorate	0.0049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH	6.5 - 9.0	NA	7.61	NA	7.65	NA	7.63	NA	7.53	NA	7.59	NA	7.45	NA	7.52	NA	7.99	NA	7.34
Selenium	0.05	0.013	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	0.0031	0.0025	0.0041	0.0025	0.0026
Silver	0.05	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Sulfate	400.0	25	85	25	110	50	160	50	140	50	190	50	130	25	90	25	150	50	150
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	580	10	650	10	780	10	870	10	760	10	760	10	760	10	720	10	740
Vanadium	0.049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zinc	5.0	0.10	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Benzene	0.005	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
BETX	11.705	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	NA	NA	12.92	NA	12.50	NA	13.07	NA	15.40	NA	16.33	NA	13.97	NA	12.88	NA	12.30	NA	14.15
Conductivity	NA	NA	1.02	NA	0.78	NA	0.89	NA	1.18	NA	0.99	NA	1.00	NA	0.91	NA	0.99	NA	0.818
Dissolved Oxygen	NA	NA	8.10	NA	7.70	NA	6.74	NA	7.23	NA	7.29	NA	7.16	NA	8.51	NA	8.38	NA	4.29
Oxidation-Reduction Potential	NA	NA	202.8	NA	-82.0	NA	113.0	NA	175.0	NA	148.0	NA	199.0	NA	152.0	NA	154.3	NA	17.0

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Potable Resources Groundwater  
All values are in mg/L, ppm

DL - Detection limit  
NA - Not Applicable  
ND - Not Detected  
NM - Not Measured

NR - Not Required  
NS - Not Sampled  
-- Denotes instrument related QC exceeds the control limits

Temperature °C  
Conductivity mg/L  
Dissolved Oxygen ORP  
pH



Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	Date		9/14/2011		6/14/2011		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		5/23/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.006	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND
Arsenic	0.010	0.0050	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Barium	2.0	0.0025	0.026	0.0025	0.048	0.0025	0.057	0.0025	0.049	0.0025	0.029	0.0025	0.059	0.0025	0.058	0.0025	0.059	0.0025	0.058	0.0025	0.069	0.0025	0.057
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	0.050	0.12	0.050	0.20	0.050	0.16	0.050	0.13	0.050	0.20	0.050	0.46	0.050	0.33	0.050	0.46	0.050	0.33	0.050	0.25	0.050	0.16
Cadmium	0.005	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Chloride	200.0	10	150	10	79	10	120	10	410	10	190	10	130	10	130	10	130	10	130	10	200	10	300
Chromium	0.1	0.025	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Cobalt	1.0	0.0050	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Copper	0.65	0.010	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Cyanide	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.45	0.10	0.25	0.10	0.31	0.10	0.38	0.10	0.41	0.10	0.40	0.10	0.33	0.10	0.40	0.10	0.33	0.10	0.29	0.10	0.34
Iron	5.0	0.50	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	0.24	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.23
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.013	0.017	0.0025	ND	0.0025	ND	0.0025	0.0042	0.0025	0.016	0.0025	0.023	0.0025	0.0044	0.0025	0.023	0.0025	0.0044	0.0025	0.025	0.0025	0.0065
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.010	ND	0.0020	0.012	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Nitrogen/Nitrate	10.0	0.10	1.9	0.10	0.95	0.10	0.86	0.10	0.86	0.10	0.86	0.10	0.44	0.10	0.44	0.10	0.40	0.10	0.40	0.10	0.20	0.10	0.28
Nitrogen/Nitrite, Nitrite	NA	0.10	1.9	0.10	0.95	0.10	0.86	0.10	0.86	0.10	0.86	0.10	0.44	0.10	0.44	0.10	0.40	0.10	0.40	0.10	0.20	0.10	0.28
Nitrogen/Nitrite	NA	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Perchlorate	0.0040	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH	6.5-9.0	NA	7.70	NA	7.32	NA	7.38	NA	7.49	NA	7.64	NA	6.80	NA	7.40	NA	6.80	NA	7.40	NA	7.46	NA	7.17
Selenium	0.05	0.013	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND
Silver	0.05	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Sulfate	400.0	10	52	50	120	50	170	25	130	20	110	50	180	50	130	50	180	50	130	50	150	25	99
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	580	10	690	10	800	10	1000	10	740	10	710	10	730	10	710	10	730	10	830	10	860
Vanadium	0.049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zinc	5.0	0.10	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Benzene	0.005	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
BTEX	11.705	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	NA	NA	13.15	NA	12.20	NA	12.71	NA	14.64	NA	16.68	NA	15.09	NA	12.82	NA	15.09	NA	12.82	NA	11.10	NA	11.95
Conductivity	NA	NA	0.99	NA	0.80	NA	0.88	NA	1.40	NA	1.05	NA	0.95	NA	0.91	NA	0.95	NA	0.91	NA	1.05	NA	1.031
Dissolved Oxygen	NA	NA	8.00	NA	6.06	NA	6.57	NA	7.68	NA	7.22	NA	8.19	NA	9.83	NA	8.19	NA	9.83	NA	7.73	NA	5.33
Oxidation-Reduction Potential	NA	NA	196.0	NA	-47.0	NA	119.0	NA	130.0	NA	132.0	NA	211.0	NA	301.0	NA	211.0	NA	301.0	NA	136.1	NA	6.2

Scores: Standards obtained from IAC Title 35, Chapter I, Part 620; Schardt D, Section 620.410 - Groundwater Quality Standards for Class I Porewater Resource Groundwater. All values are in mg/L (ppm).

DL - Detection limit  
 NA - Not Applicable  
 ND - Not Detected  
 NM - Not Measured

NR - Not Required  
 NS - Not Sampled  
 \* - Detection instrument related QC exceeds the control limits

Temperature °C  
 Conductivity mcsm  
 Dissolved Oxygen mg/L  
 ORP mV

Degrees Celsius  
 Milliequivalents/Liter  
 milligrams/Liter  
 millivolt

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	6/14/2011		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		5/23/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.006	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND
Arsenic	0.010	0.0050	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Barium	2.0	0.0025	0.032	0.0025	0.029	0.0025	0.030	0.0025	0.021	0.0025	0.022	0.0025	0.021	0.0025	0.021	0.0025	0.016	0.0025	0.017
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	0.050	0.29	0.050	0.35	0.050	0.31	0.050	0.38	0.050	0.34	0.050	0.59	0.050	0.44	0.050	0.36	0.050	0.30
Cadmium	0.005	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	0.00059	0.00050	ND	0.00050	0.00065	0.00050	ND	0.00050	ND	0.00050	ND
Chloride	200.0	10	290	10	190	10	190	10	170	10	250	10	160	10	150	10	190	10	290
Chromium	0.1	0.025	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Cobalt	1.0	0.0050	0.0062	0.0010	0.011	0.0010	0.0075	0.0010	0.0021	0.0010	0.0022	0.0010	0.0022	0.0010	0.002	0.0010	0.0024	0.0010	0.0076
Copper	0.65	0.010	ND	0.0020	0.0026	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Cyanide	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.47	0.10	0.39	0.10	0.50	0.10	0.45	0.10	0.48	0.10	0.48	0.10	0.45	0.10	0.46	0.10	0.40
Iron	5.0	0.50	2.2	0.10	3.8	0.10	1.5	0.10	5.5	0.10	4.0	0.10	4.7	0.10	3.3	0.10	1.5	0.10	1.60
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.013	0.95	0.0025	0.82	0.0025	0.66	0.0025	1.2	0.0025	1.2	0.0025	0.68	0.0025	0.44	0.0025	0.43	0.0025	1.6
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.010	0.013	0.0020	0.014	0.0020	0.011	0.0020	0.0054	0.0020	0.0070	0.0020	0.010	0.0020	0.0059	0.0020	0.0065	0.0020	0.014
Nitrogen/Nitrate	10.0	0.10	0.97	0.10	0.36	0.10	0.22	0.10	ND	0.10	ND	0.10	0.22	0.10	0.22	0.10	0.75	0.10	ND
Nitrogen/Nitrite	NA	0.10	0.97	0.10	0.36	0.10	0.22	0.10	ND	0.10	ND	0.10	0.22	0.10	0.22	0.10	0.75	0.10	ND
Nitrogen/Nitrate	NA	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Perchlorate	0.0049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH	6.5 - 9.0	NA	7.01	NA	6.90	NA	7.19	NA	6.86	NA	6.85	NA	6.82	NA	6.80	NA	7.05	NA	6.34
Selenium	0.05	0.013	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND
Silver	0.05	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Sulfate	400.0	100	580	130	250	50	130	500	1600	500	1500	250	1600	250	1100	250	200	500	1300
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	1500	10	1700	10	2400	10	2600	10	2800	10	2900	10	2000	10	1700	13	3000
Vanadium	0.049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zinc	5.0	0.10	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	0.023	0.020	0.049
Benzene	0.005	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
BTEX	11.705	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	NA	NA	15.68	NA	15.90	NA	11.94	NA	14.29	NA	15.10	NA	16.23	NA	15.41	NA	12.30	NA	12.19
Conductivity	NA	NA	2.25	NA	1.88	NA	1.54	NA	2.31	NA	2.50	NA	2.56	NA	1.93	NA	1.59	NA	2.52
Dissolved Oxygen	NA	NA	0.49	NA	0.33	NA	0.43	NA	2.22	NA	1.71	NA	6.15	NA	4.26	NA	4.86	NA	0.40
Oxidation-Reduction Potential	NA	NA	-43.5	NA	-114.0	NA	-40.0	NA	2.0	NA	-32.0	NA	-22.0	NA	-39.0	NA	-30.3	NA	-85.9

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Possible Resource Groundwater  
 All values are in mg/L (ppm)  
 DL - Detection Limit  
 NA - Not Applicable  
 ND - Not Detected  
 NR - Not Measured  
 NR - Not Required  
 NS - Not Sampled  
 NS - Not Saturated  
 -- Denotes instrument related QC exceeds the control limits  
 °C - Temperature  
 mg/cm<sup>3</sup> - Conductivity  
 mg/L - Dissolved Oxygen  
 mV - ORP  
 Degrees Celsius  
 Milligrams per Liter  
 millivolt

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	6/14/2011		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		5/22/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Ammonia	0.006	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND
Aspic	0.010	0.0050	ND	0.0010	0.0012	0.0010	0.0012	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Barium	± 0	0.0025	0.039	0.0025	0.036	0.0025	0.036	0.0025	0.040	0.0025	0.043	0.0025	0.040	0.0025	0.041	0.0025	0.040	0.0025	0.041
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	0.050	0.54	0.050	0.41	0.050	0.52	0.050	0.52	0.050	0.53	0.050	0.43	0.050	0.49	0.050	0.49	0.050	0.25
Cadmium	0.005	0.0025	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Chloride	200.0	± 0	7.1	10	170	10	180	10	180	10	200	10	200	10	200	10	210	10	240
Chromium	0.1	0.025	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Cobalt	1.0	0.0050	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Copper	0.65	0.010	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Cyanide	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.42	0.10	0.41	0.10	0.45	0.10	0.41	0.10	0.46	0.10	0.47	0.10	0.47	0.10	0.49	0.10	0.50
Iron	5.0	0.50	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	0.32
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.013	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	0.010
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.010	ND	0.0020	0.0087	0.0020	0.0024	0.0020	0.0020	0.0020	ND	0.0020	0.0021	0.0020	0.0024	0.0020	0.0022	0.0020	ND
Nitrogen/Nitrate	10.0	0.10	2.7	0.10	2.6	0.10	1.4	0.10	1.4	0.10	1.8	0.10	1.5	0.10	1.5	0.10	1.6	0.10	2.8
Nitrogen/Nitrite	NA	0.20	2.7	0.20	2.6	0.10	1.4	0.10	1.4	0.10	1.8	0.10	1.5	0.10	1.5	0.10	1.6	0.20	2.8
Nitrogen/Nitrite	NA	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Perchlorate	0.0049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH	6.5 - 9.0	NA	7.40	NA	7.34	NA	7.51	NA	7.35	NA	7.20	NA	7.38	NA	7.38	NA	7.55	NA	7.11
Selenium	0.05	0.013	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND
Silver	0.05	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Sulfate	400.0	± 5	89	± 5	100	50	190	50	250	50	170	50	110	25	120	25	84	25	120
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	980	10	730	10	890	10	890	10	1100	10	870	10	860	10	830	10	850
Vanadium	0.049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zinc	5.0	0.10	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Benzene	0.005	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
BTEX	11,705	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	NA	NA	12.03	NA	11.23	NA	11.26	NA	13.08	NA	14.44	NA	13.53	NA	12.60	NA	10.40	NA	12.70
Conductivity	NA	NA	1.58	NA	0.98	NA	0.99	NA	1.04	NA	1.35	NA	1.13	NA	1.07	NA	1.04	NA	0.964
Dissolved Oxygen	NA	NA	8.70	NA	7.42	NA	7.12	NA	7.08	NA	7.13	NA	6.93	NA	8.74	NA	9.16	NA	6.14
Oxidation-Reduction Potential	NA	NA	210.0	NA	-37.0	NA	143.0	NA	210.0	NA	147.0	NA	146.0	NA	112.0	NA	129.5	NA	35.6

Notes: Standards obtained from IAC, Title 35, Chapter 1, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Possible Resource Groundwater  
 All values are in mg/L, except

DL - Detection limit  
 NA - Not Applicable  
 ND - Not Detected  
 NM - Not Measured

NR - Not Required  
 NS - Not Sampled  
 -- Denotes instrument related QC exceeds the control limits

Temperature °C  
 Conductivity ms/cm  
 Dissolved Oxygen mg/L  
 ORP mV

Degrees Celcius  
 Millimhos/cm  
 milligrams/Liter  
 millivolts

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Joliet Station #29, Joliet, IL

Parameter	Standards	Date		9/14/2011		9/14/2011		12/7/2011		3/15/2012		6/19/2012		9/19/2012		12/20/2012		3/5/2013		5/23/2013	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.006	0.015	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND
Arsenic	0.010	0.0050	ND	0.0010	0.0016	0.0010	0.0019	0.0010	0.0017	0.0010	0.0017	0.0010	0.0018	0.0010	0.0018	0.0010	0.0018	0.0010	0.0018	0.0010	0.0017
Barium	2.0	0.013	0.051	0.0025	0.054	0.0025	0.057	0.0025	0.067	0.0025	0.046	0.0025	0.060	0.0025	0.063	0.0025	0.063	0.0025	0.060	0.0025	0.045
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	0.050	2.2	0.050	1.1	0.050	1.2	0.25	1.4	0.050	0.85	0.050	0.68	0.050	0.57	0.050	0.57	0.50	1.1	0.050	0.34
Cadmium	0.005	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Chloride	200.0	10	200	10	86	10	140	10	240	10	150	10	150	10	140	10	140	10	190	10	160
Chromatium	0.1	0.025	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Cobalt	1.0	0.0050	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Copper	0.65	0.010	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Cyanide	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.36	0.10	0.32	0.10	0.31	0.10	0.30	0.10	0.37	0.10	0.32	0.10	0.34	0.10	0.34	0.10	0.29	0.10	0.38
Iron	5.0	0.50	ND	0.10	ND	0.10	ND	0.10	ND	0.10	0.23	0.10	ND	0.10	0.42	0.10	0.42	0.10	0.15	0.10	ND
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	0.0008	0.00050	0.0008	0.00050	ND	0.00050	ND
Manganese	0.15	0.013	ND	0.0025	0.0053	0.0025	0.0047	0.0025	ND	0.0025	0.014	0.0025	ND	0.0025	0.042	0.0025	0.042	0.0025	0.016	0.0025	ND
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.010	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Nitrogen/Nitrate	10.0	0.10	0.92	0.10	0.31	0.10	0.60	0.10	0.30	0.10	0.10	0.10	0.36	0.10	0.46	0.10	0.46	0.10	1.1	0.10	1.4
Nitrogen Nitrate, Nitrite	NA	0.10	0.92	0.10	0.31	0.10	0.60	0.10	0.30	0.10	0.10	0.10	0.36	0.10	0.46	0.10	0.46	0.10	1.1	0.10	1.4
Nitrogen Nitrite	NA	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Perchlorate	0.0049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH	6.5-9.0	NA	7.60	NA	7.38	NA	7.46	NA	7.38	NA	7.37	NA	7.36	NA	7.36	NA	7.36	NA	7.60	NA	7.11
Selenium	0.05	0.013	ND	0.0025	0.0026	0.0025	0.0033	0.0025	0.0043	0.0025	0.0028	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	0.0043	0.0025	0.0034
Silver	0.05	0.0025	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Sulfate	400.0	25	110	25	110	50	160	25	140	50	100	50	100	50	150	50	150	50	110	25	100
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	710	10	590	10	790	10	850	10	760	10	740	10	730	10	730	10	770	10	670
Vanadium	0.049	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zinc	5.0	0.10	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Benzene	0.005	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
BETX	11.705	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	NA	NA	11.69	NA	12.18	NA	13.15	NA	14.22	NA	13.30	NA	13.23	NA	12.83	NA	12.83	NA	10.60	NA	12.10
Conductivity	NA	NA	1.14	NA	0.79	NA	0.92	NA	1.12	NA	0.97	NA	0.97	NA	0.89	NA	0.89	NA	0.96	NA	0.774
Dissolved Oxygen	NA	NA	8.65	NA	6.28	NA	6.74	NA	7.37	NA	7.09	NA	6.71	NA	8.66	NA	8.66	NA	7.99	NA	5.38
Oxidation-Reduction Potential	NA	NA	200.8	NA	-31.0	NA	136.0	NA	208.0	NA	172.0	NA	172.0	NA	113.0	NA	113.0	NA	167.1	NA	2.4

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Potable Resource Groundwater. All values are in mg/L, ppm.

DL - Detection limit  
 NA - Not Applicable  
 ND - Not Detected  
 NM - Not Measured

NR - Not Required  
 NS - Not Sampled  
 \* - Denotes instrument related QC exceeds the control limits

Temperature °C  
 Conductivity µmhos/cm  
 Dissolved Oxygen mg/L  
 ORP mV

Acres Centimeters  
 Milligrams per Liter  
 millivolt

**ATTACHMENT 1**  
**Analytical Data Package(s)**

# 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: 500-57389-1  
Client Project/Site: Joliet #29 Ash Ponds

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

Attn: Richard Gnat



Authorized for release by:  
6/10/2013 11:20:11 AM

Bonnie Stadelmann, Project Manager II  
[bonnie.stadelmann@testamericainc.com](mailto:bonnie.stadelmann@testamericainc.com)

### 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.*

Comp. 002496

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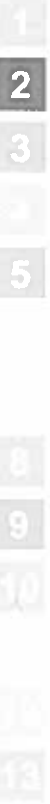
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# Case Narrative

TestAmerica Job ID: 500-57389-1

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

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**Job ID: 500-57389-1**

**Laboratory: TestAmerica Chicago**

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**Narrative**

**Job Narrative**  
**500-57389-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 5/24/2013 11:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.3° C, 3.4° C and 3.7° C.

**GC/MS VOA**

No analytical or quality issues were noted.

**Metals**

Method(s) 6020, 6020A: The internal standard Y was used in reporting Ag and Cu.

No other analytical or quality issues were noted.

**Field Service / Mobile Lab**

No analytical or quality issues were noted.

**General Chemistry**

No analytical or quality issues were noted.



## Method Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

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

#### 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

Comp. 002499

6/10/2013

# Sample Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-57389-1	MW-1	Water	05/23/13 12 40	05/24/13 11:05
500-57389-2	MW-2	Water	05/23/13 11 25	05/24/13 11:05
500-57389-3	MW-3	Water	05/22/13 12 55	05/24/13 11:05
500-57389-4	MW-4	Water	05/22/13 15 03	05/24/13 11:05
500-57389-5	MW-6	Water	05/22/13 16 41	05/24/13 11:05
500-57389-6	MW-7	Water	05/22/13 17 30	05/24/13 11:05
500-57389-7	MW-8	Water	05/23/13 09 17	05/24/13 11:05
500-57389-8	MW-9	Water	05/23/13 10 23	05/24/13 11:05
500-57389-9	MW-10	Water	05/22/13 18 36	05/24/13 11:05
500-57389-10	MW-11	Water	05/23/13 15 08	05/24/13 11:05
500-57389-11	Duplicate	Water	05/23/13 00 00	05/24/13 11:05

TestAmerica Chicago

Comp. 002500  
6/10/2013

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: MW-1**

**Lab Sample ID: 500-57389-1**

**Date Collected: 05/23/13 12:40**

**Matrix: Water**

**Date Received: 05/24/13 11:05**

### 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			05/30/13 04:52	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 04:52	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 04:52	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 04:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	88		75 - 125					05/30/13 04:52	1
Toluene-d8 (Surr)	102		75 - 120					05/30/13 04:52	1
4-Bromofluorobenzene (Surr)	110		75 - 120					05/30/13 04:52	1
Dibromofluoromethane	88		75 - 120					05/30/13 04:52	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/05/13 19:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0052</b>		0.0030		mg/L		05/28/13 09:21	06/07/13 11:57	1
<b>Arsenic</b>	<b>0.0011</b>		0.0010		mg/L		05/28/13 09:21	06/04/13 17:55	1
<b>Barium</b>	<b>0.15</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 17:55	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:42	1
<b>Boron</b>	<b>0.33</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:42	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 17:55	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 17:55	1
Cobalt	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 17:55	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 17:55	1
Iron	<0.10		0.10		mg/L		05/28/13 09:21	06/04/13 17:55	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 17:55	1
Manganese	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 17:55	1
Nickel	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 17:55	1
<b>Selenium</b>	<b>0.0040</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 17:55	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 17:55	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 17:55	1
<b>Vanadium</b>	<b>0.0081</b>		0.0050		mg/L		05/28/13 09:21	06/04/13 17:55	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 17:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:08	1

### General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/29/13 11:40	05/29/13 15:20	1
<b>Sulfate</b>	<b>140</b>		25		mg/L			06/05/13 08:42	5
<b>Chloride</b>	<b>210</b>		10		mg/L			05/25/13 14:21	5
<b>Nitrogen, Nitrate</b>	<b>3.7</b>		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>700</b>		10		mg/L			05/27/13 18:30	1
<b>Fluoride</b>	<b>0.42</b>		0.10		mg/L			05/25/13 15:08	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:35	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>3.7</b>		0.50		mg/L			06/04/13 17:51	5

TestAmerica Chicago

Comp 002501

6/10/2013

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: MW-2**

**Lab Sample ID: 500-57389-2**

**Date Collected: 05/23/13 11:25**

**Matrix: Water**

**Date Received: 05/24/13 11:05**

### 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			05/30/13 05:17	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 05:17	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 05:17	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 05:17	1
<b>Surrogate</b>									
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	88		75 - 125					05/30/13 05:17	1
Toluene-d8 (Surr)	102		75 - 120					05/30/13 05:17	1
4-Bromofluorobenzene (Surr)	110		75 - 120					05/30/13 05:17	1
Dibromofluoromethane	87		75 - 120					05/30/13 05:17	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/05/13 20:02	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		05/28/13 09:21	06/07/13 11:59	1
Arsenic	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 17:57	1
<b>Barium</b>	<b>0.11</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 17:57	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:43	1
<b>Boron</b>	<b>0.35</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:43	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 17:57	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 17:57	1
Cobalt	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 17:57	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 17:57	1
Iron	<0.10		0.10		mg/L		05/28/13 09:21	06/04/13 17:57	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 17:57	1
Manganese	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 17:57	1
<b>Nickel</b>	<b>0.0022</b>		0.0020		mg/L		05/28/13 09:21	06/04/13 17:57	1
<b>Selenium</b>	<b>0.0027</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 17:57	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 17:57	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 17:57	1
Vanadium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 17:57	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 17:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:38	1

### General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/25/13 13:30	05/25/13 16:45	1
<b>Sulfate</b>	<b>150</b>		25		mg/L			06/05/13 08:43	5
<b>Chloride</b>	<b>250</b>		10		mg/L			05/25/13 14:21	5
<b>Nitrogen, Nitrate</b>	<b>3.7</b>		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>860</b>		10		mg/L			05/27/13 18:32	1
<b>Fluoride</b>	<b>0.54</b>		0.10		mg/L			05/25/13 15:11	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:35	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>3.7</b>		0.50		mg/L			06/04/13 17:53	5

TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: MW-3**

**Lab Sample ID: 500-57389-3**

**Date Collected: 05/22/13 12:55**

**Matrix: Water**

**Date Received: 05/24/13 11:05**

### 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			05/30/13 12:37	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 12:37	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 12:37	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 12:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	86		75 - 125					05/30/13 12:37	1
Toluene-d8 (Surr)	99		75 - 120					05/30/13 12:37	1
4-Bromofluorobenzene (Surr)	107		75 - 120					05/30/13 12:37	1
Dibromofluoromethane	90		75 - 120					05/30/13 12:37	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/05/13 20:17	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		05/28/13 09:21	06/07/13 12:03	1
<b>Arsenic</b>	<b>0.0013</b>		0.0010		mg/L		05/28/13 09:21	06/04/13 18:00	1
<b>Barium</b>	<b>0.13</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:00	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:44	1
<b>Boron</b>	<b>0.74 V</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:44	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:00	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:00	1
Cobalt	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 18:00	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:00	1
Iron	<0.10		0.10		mg/L		05/28/13 09:21	06/04/13 18:00	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:00	1
Manganese	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 18:00	1
<b>Nickel</b>	<b>0.0042</b>		0.0020		mg/L		05/28/13 09:21	06/04/13 18:00	1
<b>Selenium</b>	<b>0.022</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:00	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:00	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:00	1
Vanadium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:00	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 18:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:40	1

### General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/25/13 13:30	05/25/13 16:45	1
<b>Sulfate</b>	<b>250</b>		50		mg/L			06/05/13 08:44	10
<b>Chloride</b>	<b>380</b>		50		mg/L			05/25/13 14:38	25
<b>Nitrogen, Nitrate</b>	<b>3.8</b>		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>1300</b>		10		mg/L			05/27/13 18:35	1
<b>Fluoride</b>	<b>0.44</b>		0.10		mg/L			05/25/13 15:14	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:36	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>3.6</b>		0.50		mg/L			06/04/13 17:55	5

TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: MW-4**

**Lab Sample ID: 500-57389-4**

Date Collected: 05/22/13 15:03

Matrix: Water

Date Received: 05/24/13 11:05

### 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			05/30/13 13:02	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 13:02	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 13:02	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 13:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		75 - 125					05/30/13 13:02	1
Toluene-d8 (Surr)	97		75 - 120					05/30/13 13:02	1
4-Bromofluorobenzene (Surr)	106		75 - 120					05/30/13 13:02	1
Dibromofluoromethane	91		75 - 120					05/30/13 13:02	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/05/13 20:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.012</b>		0.0030		mg/L		05/28/13 09:21	06/07/13 12:09	1
<b>Arsenic</b>	<b>0.0014</b>		0.0010		mg/L		05/28/13 09:21	06/04/13 18:12	1
<b>Barium</b>	<b>0.084</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:12	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:51	1
<b>Boron</b>	<b>0.40</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:51	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:12	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:12	1
<b>Cobalt</b>	<b>0.0012</b>		0.0010		mg/L		05/28/13 09:21	06/04/13 18:12	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:12	1
<b>Iron</b>	<b>0.17</b>		0.10		mg/L		05/28/13 09:21	06/04/13 18:12	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:12	1
<b>Manganese</b>	<b>0.0081</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:12	1
<b>Nickel</b>	<b>0.0034</b>		0.0020		mg/L		05/28/13 09:21	06/04/13 18:12	1
<b>Selenium</b>	<b>0.0025</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:12	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:12	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:12	1
Vanadium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:12	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 18:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:42	1

### General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/25/13 13:30	05/25/13 16:45	1
<b>Sulfate</b>	<b>120</b>		25		mg/L			06/05/13 08:45	5
<b>Chloride</b>	<b>270</b>		10		mg/L			05/25/13 14:22	5
<b>Nitrogen, Nitrate</b>	<b>2.9</b>		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>900</b>		10		mg/L			05/27/13 18:37	1
<b>Fluoride</b>	<b>0.49</b>		0.10		mg/L			05/25/13 15:17	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:36	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>2.9</b>		0.20		mg/L			06/04/13 17:57	2

TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: MW-6**

**Lab Sample ID: 500-57389-5**

Date Collected: 05/22/13 16:41

Matrix: Water

Date Received: 05/24/13 11:05

### 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			05/30/13 13:26	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 13:26	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 13:26	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 13:26	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	91		75 - 125					05/30/13 13:26	1
Toluene-d8 (Surr)	96		75 - 120					05/30/13 13:26	1
4-Bromofluorobenzene (Surr)	107		75 - 120					05/30/13 13:26	1
Dibromofluoromethane	91		75 - 120					05/30/13 13:26	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/05/13 21:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0045</b>		0.0030		mg/L		05/28/13 09:21	06/07/13 12:10	1
<b>Arsenic</b>	<b>0.0018</b>		0.0010		mg/L		05/28/13 09:21	06/04/13 18:20	1
<b>Barium</b>	<b>0.097</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:20	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:52	1
<b>Boron</b>	<b>0.23</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:52	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:20	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:20	1
Cobalt	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 18:20	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:20	1
Iron	<0.10		0.10		mg/L		05/28/13 09:21	06/04/13 18:20	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:20	1
Manganese	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 18:20	1
Nickel	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:20	1
<b>Selenium</b>	<b>0.0032</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:20	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:20	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:20	1
<b>Vanadium</b>	<b>0.0056</b>		0.0050		mg/L		05/28/13 09:21	06/04/13 18:20	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 18:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:44	1

### General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/25/13 13:30	05/25/13 16:46	1
<b>Sulfate</b>	<b>96</b>		25		mg/L			06/05/13 08:46	5
<b>Chloride</b>	<b>170</b>		10		mg/L			05/25/13 14:23	5
<b>Nitrogen, Nitrate</b>	<b>1.7</b>		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>690</b>		10		mg/L			05/27/13 18:40	1
<b>Fluoride</b>	<b>0.43</b>		0.10		mg/L			05/25/13 15:20	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:36	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>1.7</b>		0.10		mg/L			06/04/13 16:07	1

TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: MW-7**

**Lab Sample ID: 500-57389-6**

Date Collected: 05/22/13 17:30

Matrix: Water

Date Received: 05/24/13 11:05

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			05/30/13 13:51	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 13:51	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 13:51	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 13:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		75 - 125					05/30/13 13:51	1
Toluene-d8 (Surr)	96		75 - 120					05/30/13 13:51	1
4-Bromofluorobenzene (Surr)	108		75 - 120					05/30/13 13:51	1
Dibromofluoromethane	92		75 - 120					05/30/13 13:51	1

Method: 314.0 - Perchlorate (IC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/05/13 21:34	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		05/28/13 09:21	06/07/13 12:12	1
<b>Arsenic</b>	<b>0.0015</b>		0.0010		mg/L		05/28/13 09:21	06/04/13 18:23	1
<b>Barium</b>	<b>0.11</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:23	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:53	1
<b>Boron</b>	<b>0.21</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:53	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:23	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:23	1
Cobalt	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 18:23	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:23	1
<b>Iron</b>	<b>0.41</b>		0.10		mg/L		05/28/13 09:21	06/04/13 18:23	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:23	1
<b>Manganese</b>	<b>0.012</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:23	1
<b>Nickel</b>	<b>0.0020</b>		0.0020		mg/L		05/28/13 09:21	06/04/13 18:23	1
<b>Selenium</b>	<b>0.0028</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:23	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:23	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:23	1
<b>Vanadium</b>	<b>0.0053</b>		0.0050		mg/L		05/28/13 09:21	06/04/13 18:23	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 18:23	1

Method: 7470A - Mercury (CVAA) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:46	1

General Chemistry - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/25/13 13:30	05/25/13 16:46	1
<b>Sulfate</b>	<b>150</b>		50		mg/L			06/05/13 08:47	10
<b>Chloride</b>	<b>170</b>		10		mg/L			05/25/13 14:23	5
<b>Nitrogen, Nitrate</b>	<b>1.7</b>		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>740</b>		10		mg/L			05/27/13 18:42	1
<b>Fluoride</b>	<b>0.38</b>		0.10		mg/L			05/25/13 15:22	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:36	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>1.7</b>		0.10		mg/L			06/04/13 16:10	1

TestAmerica Chicago



# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: MW-8**

**Lab Sample ID: 500-57389-7**

Date Collected: 05/23/13 09:17

Matrix: Water

Date Received: 05/24/13 11:05

### 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			05/30/13 14:15	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 14:15	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 14:15	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 14:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	84		75 - 125					05/30/13 14:15	1
Toluene-d8 (Surr)	99		75 - 120					05/30/13 14:15	1
4-Bromofluorobenzene (Surr)	107		75 - 120					05/30/13 14:15	1
Dibromofluoromethane	87		75 - 120					05/30/13 14:15	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/05/13 21:50	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		05/28/13 09:21	06/07/13 12:13	1
Arsenic	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 18:25	1
<b>Barium</b>	<b>0.057</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:25	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:54	1
<b>Boron</b>	<b>0.16</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:54	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:25	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:25	1
Cobalt	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 18:25	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:25	1
<b>Iron</b>	<b>0.23</b>		0.10		mg/L		05/28/13 09:21	06/04/13 18:25	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:25	1
<b>Manganese</b>	<b>0.0065</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:25	1
<b>Nickel</b>	<b>0.0034</b>		0.0020		mg/L		05/28/13 09:21	06/04/13 18:25	1
Selenium	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 18:25	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:25	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:25	1
Vanadium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:25	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 18:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:48	1

### General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/25/13 13:30	05/25/13 16:46	1
<b>Sulfate</b>	<b>99</b>		25		mg/L			06/06/13 05:25	5
<b>Chloride</b>	<b>300</b>		10		mg/L			05/25/13 14:24	5
<b>Nitrogen, Nitrate</b>	<b>2.8</b>		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>860</b>		10		mg/L			05/27/13 18:45	1
<b>Fluoride</b>	<b>0.34</b>		0.10		mg/L			05/25/13 15:34	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:37	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>2.8</b>		0.20		mg/L			06/04/13 17:59	2

TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: MW-9**

**Lab Sample ID: 500-57389-8**

Date Collected: 05/23/13 10:23

Matrix: Water

Date Received: 05/24/13 11:05

### 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			05/30/13 14:40	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 14:40	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 14:40	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 14:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		75 - 125					05/30/13 14:40	1
Toluene-d8 (Surr)	97		75 - 120					05/30/13 14:40	1
4-Bromofluorobenzene (Surr)	109		75 - 120					05/30/13 14:40	1
Dibromofluoromethane	91		75 - 120					05/30/13 14:40	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/05/13 22:05	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		05/28/13 09:21	06/07/13 12:14	1
Arsenic	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 18:28	1
<b>Barium</b>	<b>0.017</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:28	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:55	1
<b>Boron</b>	<b>0.30</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:55	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:28	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:28	1
<b>Cobalt</b>	<b>0.0078</b>		0.0010		mg/L		05/28/13 09:21	06/04/13 18:28	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:28	1
<b>Iron</b>	<b>160</b>		0.10		mg/L		05/28/13 09:21	06/04/13 18:28	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:28	1
<b>Manganese</b>	<b>1.8</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:28	1
<b>Nickel</b>	<b>0.014</b>		0.0020		mg/L		05/28/13 09:21	06/04/13 18:28	1
Selenium	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 18:28	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:28	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:28	1
Vanadium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:28	1
<b>Zinc</b>	<b>0.049</b>		0.020		mg/L		05/28/13 09:21	06/04/13 18:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:53	1

### General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/25/13 13:30	05/25/13 16:47	1
<b>Sulfate</b>	<b>1300</b>		500		mg/L			06/06/13 05:26	100
<b>Chloride</b>	<b>290</b>		10		mg/L			05/25/13 15:47	5
Nitrogen, Nitrate	<0.10		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>3000</b>		13		mg/L			05/27/13 18:47	1
<b>Fluoride</b>	<b>0.40</b>		0.10		mg/L			05/25/13 15:37	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:37	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			06/04/13 16:14	1

TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: MW-10**

**Lab Sample ID: 500-57389-9**

Date Collected: 05/22/13 18:36

Matrix: Water

Date Received: 05/24/13 11:05

### 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			05/30/13 15:04	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 15:04	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 15:04	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 15:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	89		75 - 125					05/30/13 15:04	1
Toluene-d8 (Surr)	98		75 - 120					05/30/13 15:04	1
4-Bromofluorobenzene (Surr)	109		75 - 120					05/30/13 15:04	1
Dibromofluoromethane	91		75 - 120					05/30/13 15:04	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/06/13 21:20	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		05/28/13 09:21	06/07/13 12:18	1
<b>Arsenic</b>	<b>0.0011</b>		0.0010		mg/L		05/28/13 09:21	06/04/13 18:30	1
<b>Barium</b>	<b>0.041</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:30	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:56	1
<b>Boron</b>	<b>0.25</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:56	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:30	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:30	1
Cobalt	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 18:30	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:30	1
<b>Iron</b>	<b>0.32</b>		0.10		mg/L		05/28/13 09:21	06/04/13 18:30	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:30	1
<b>Manganese</b>	<b>0.010</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:30	1
Nickel	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:30	1
Selenium	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 18:30	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:30	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:30	1
Vanadium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:30	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 18:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:55	1

### General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/25/13 13:30	05/25/13 16:47	1
<b>Sulfate</b>	<b>120</b>		25		mg/L			06/06/13 05:27	5
<b>Chloride</b>	<b>240</b>		10		mg/L			05/25/13 15:47	5
<b>Nitrogen, Nitrate</b>	<b>2.8</b>		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>850</b>		10		mg/L			05/27/13 18:50	1
<b>Fluoride</b>	<b>0.50</b>		0.10		mg/L			05/25/13 15:40	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:38	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>2.8</b>		0.20		mg/L			06/04/13 18:00	2

TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: MW-11**

**Lab Sample ID: 500-57389-10**

**Date Collected: 05/23/13 15:08**

**Matrix: Water**

**Date Received: 05/24/13 11:05**

### 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			05/30/13 15:29	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 15:29	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 15:29	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 15:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		75 - 125					05/30/13 15:29	1
Toluene-d8 (Surr)	99		75 - 120					05/30/13 15:29	1
4-Bromofluorobenzene (Surr)	105		75 - 120					05/30/13 15:29	1
Dibromofluoromethane	91		75 - 120					05/30/13 15:29	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/06/13 21:35	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		05/28/13 09:21	06/07/13 12:19	1
<b>Arsenic</b>	<b>0.0017</b>		0.0010		mg/L		05/28/13 09:21	06/04/13 18:33	1
<b>Barium</b>	<b>0.045</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:33	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:56	1
<b>Boron</b>	<b>0.34</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:56	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:33	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:33	1
Cobalt	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 18:33	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:33	1
Iron	<0.10		0.10		mg/L		05/28/13 09:21	06/04/13 18:33	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:33	1
Manganese	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 18:33	1
Nickel	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:33	1
<b>Selenium</b>	<b>0.0034</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:33	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:33	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:33	1
Vanadium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:33	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 18:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:57	1

### General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/29/13 11:40	05/29/13 15:20	1
<b>Sulfate</b>	<b>100</b>		25		mg/L			06/06/13 05:28	5
<b>Chloride</b>	<b>160</b>		10		mg/L			05/25/13 15:48	5
<b>Nitrogen, Nitrate</b>	<b>1.4</b>		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>670</b>		10		mg/L			05/27/13 18:52	1
<b>Fluoride</b>	<b>0.38</b>		0.10		mg/L			05/25/13 15:43	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:38	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>1.4</b>		0.10		mg/L			06/04/13 16:18	1

TestAmerica Chicago

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

**Client Sample ID: Duplicate**

**Lab Sample ID: 500-57389-11**

Date Collected: 05/23/13 00:00

Matrix: Water

Date Received: 05/24/13 11:05

**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			05/30/13 15:53	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 15:53	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 15:53	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 15:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	86		75 - 125					05/30/13 15:53	1
Toluene-d8 (Surr)	98		75 - 120					05/30/13 15:53	1
4-Bromofluorobenzene (Surr)	110		75 - 120					05/30/13 15:53	1
Dibromofluoromethane	87		75 - 120					05/30/13 15:53	1

**Method: 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/06/13 21:51	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		05/28/13 09:21	06/07/13 12:21	1
<b>Arsenic</b>	<b>0.0016</b>		0.0010		mg/L		05/28/13 09:21	06/04/13 18:35	1
<b>Barium</b>	<b>0.045</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:35	1
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:57	1
<b>Boron</b>	<b>0.32</b>		0.050		mg/L		05/28/13 09:21	06/07/13 15:57	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:35	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:35	1
Cobalt	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 18:35	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:35	1
Iron	<0.10		0.10		mg/L		05/28/13 09:21	06/04/13 18:35	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:35	1
Manganese	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 18:35	1
Nickel	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:35	1
<b>Selenium</b>	<b>0.0032</b>		0.0025		mg/L		05/28/13 09:21	06/04/13 18:35	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 18:35	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 18:35	1
Vanadium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 18:35	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 18:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:59	1

**General Chemistry - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/29/13 11:40	05/29/13 15:21	1
<b>Sulfate</b>	<b>100</b>		25		mg/L			06/06/13 05:29	5
<b>Chloride</b>	<b>170</b>		10		mg/L			05/25/13 15:48	5
<b>Nitrogen, Nitrate</b>	<b>1.4</b>		0.10		mg/L			06/05/13 18:20	1
<b>Total Dissolved Solids</b>	<b>650</b>		10		mg/L			05/27/13 18:55	1
<b>Fluoride</b>	<b>0.38</b>		0.10		mg/L			05/25/13 15:45	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			05/24/13 12:38	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>1.4</b>		0.10		mg/L			06/04/13 16:21	1

TestAmerica Chicago

Comp. 002511  
6/10/2013

## Definitions/Glossary

TestAmerica Job ID: 500-57389-1

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

### Qualifiers

#### Metals

Qualifier	Qualifier Description
V	Serial Dilution exceeds the control limits

#### General Chemistry

Qualifier	Qualifier Description
4	MS, MSD The analyte present in the original sample is 4 times greater than 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Chicago

## QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

### GC/MS VOA

#### Analysis Batch: 187836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Total/NA	Water	8260B	
500-57389-1 MS	MW-1	Total/NA	Water	8260B	
500-57389-1 MSD	MW-1	Total/NA	Water	8260B	
500-57389-2	MW-2	Total/NA	Water	8260B	
LCS 500-187836/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-187836/6	Method Blank	Total/NA	Water	8260B	

#### Analysis Batch: 187907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-3	MW-3	Total/NA	Water	8260B	
500-57389-4	MW-4	Total/NA	Water	8260B	
500-57389-5	MW-6	Total/NA	Water	8260B	
500-57389-6	MW-7	Total/NA	Water	8260B	
500-57389-7	MW-8	Total/NA	Water	8260B	
500-57389-8	MW-9	Total/NA	Water	8260B	
500-57389-9	MW-10	Total/NA	Water	8260B	
500-57389-10	MW-11	Total/NA	Water	8260B	
500-57389-11	Duplicate	Total/NA	Water	8260B	
LCS 500-187907/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-187907/6	Method Blank	Total/NA	Water	8260B	

### HPLC/IC

#### Analysis Batch: 17771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Total/NA	Water	314 0	
500-57389-2	MW-2	Total/NA	Water	314 0	
500-57389-3	MW-3	Total/NA	Water	314 0	
500-57389-4	MW-4	Total/NA	Water	314 0	
500-57389-5	MW-6	Total/NA	Water	314 0	
500-57389-6	MW-7	Total/NA	Water	314 0	
500-57389-7	MW-8	Total/NA	Water	314 0	
500-57389-8	MW-9	Total/NA	Water	314 0	
LCS 320-17771/8	Lab Control Sample	Total/NA	Water	314 0	
MB 320-17771/7	Method Blank	Total/NA	Water	314 0	
MRL 320-17771/6 MRL	Lab Control Sample	Total/NA	Water	314 0	

#### Analysis Batch: 17834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-9	MW-10	Total/NA	Water	314 0	
500-57389-10	MW-11	Total/NA	Water	314 0	
500-57389-11	Duplicate	Total/NA	Water	314 0	
LCS 320-17834/8	Lab Control Sample	Total/NA	Water	314 0	
MB 320-17834/7	Method Blank	Total/NA	Water	314 0	
MRL 320-17834/6 MRL	Lab Control Sample	Total/NA	Water	314 0	

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## QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

### Metals

#### Prep Batch: 187641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	Soluble Metals	
500-57389-2	MW-2	Dissolved	Water	Soluble Metals	
500-57389-3	MW-3	Dissolved	Water	Soluble Metals	
500-57389-3 DU	MW-3	Dissolved	Water	Soluble Metals	
500-57389-3 MS	MW-3	Dissolved	Water	Soluble Metals	
500-57389-3 MSD	MW-3	Dissolved	Water	Soluble Metals	
500-57389-4	MW-4	Dissolved	Water	Soluble Metals	
500-57389-5	MW-6	Dissolved	Water	Soluble Metals	
500-57389-6	MW-7	Dissolved	Water	Soluble Metals	
500-57389-7	MW-8	Dissolved	Water	Soluble Metals	
500-57389-8	MW-9	Dissolved	Water	Soluble Metals	
500-57389-9	MW-10	Dissolved	Water	Soluble Metals	
500-57389-10	MW-11	Dissolved	Water	Soluble Metals	
500-57389-11	Duplicate	Dissolved	Water	Soluble Metals	
LCS 500-187641/2-A	Lab Control Sample	Soluble	Water	Soluble Metals	
MB 500-187641/1-A	Method Blank	Soluble	Water	Soluble Metals	

#### Prep Batch: 187673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	7470A	
LCS 500-187673/8-A	Lab Control Sample	Total/NA	Water	7470A	
MB 500-187673/7-A	Method Blank	Total/NA	Water	7470A	

#### Prep Batch: 187674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-2	MW-2	Dissolved	Water	7470A	
500-57389-3	MW-3	Dissolved	Water	7470A	
500-57389-4	MW-4	Dissolved	Water	7470A	
500-57389-5	MW-6	Dissolved	Water	7470A	
500-57389-6	MW-7	Dissolved	Water	7470A	
500-57389-7	MW-8	Dissolved	Water	7470A	
500-57389-8	MW-9	Dissolved	Water	7470A	
500-57389-9	MW-10	Dissolved	Water	7470A	
500-57389-10	MW-11	Dissolved	Water	7470A	
500-57389-11	Duplicate	Dissolved	Water	7470A	
LCS 500-187674/8-A	Lab Control Sample	Total/NA	Water	7470A	
MB 500-187674/7-A	Method Blank	Total/NA	Water	7470A	

#### Analysis Batch: 187831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	7470A	187673
500-57389-2	MW-2	Dissolved	Water	7470A	187674
500-57389-3	MW-3	Dissolved	Water	7470A	187674
500-57389-4	MW-4	Dissolved	Water	7470A	187674
500-57389-5	MW-6	Dissolved	Water	7470A	187674
500-57389-6	MW-7	Dissolved	Water	7470A	187674
500-57389-7	MW-8	Dissolved	Water	7470A	187674
500-57389-8	MW-9	Dissolved	Water	7470A	187674
500-57389-9	MW-10	Dissolved	Water	7470A	187674
500-57389-10	MW-11	Dissolved	Water	7470A	187674
500-57389-11	Duplicate	Dissolved	Water	7470A	187674

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# QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1



## Metals (Continued)

### Analysis Batch: 187831 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-187673/8-A	Lab Control Sample	Total/NA	Water	7470A	187673
LCS 500-187674/8-A	Lab Control Sample	Total/NA	Water	7470A	187674
MB 500-187673/7-A	Method Blank	Total/NA	Water	7470A	187673
MB 500-187674/7-A	Method Blank	Total/NA	Water	7470A	187674

### Analysis Batch: 188650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	6020A	187641
500-57389-2	MW-2	Dissolved	Water	6020A	187641
500-57389-3	MW-3	Dissolved	Water	6020A	187641
500-57389-3 DU	MW-3	Dissolved	Water	6020A	187641
500-57389-3 MS	MW-3	Dissolved	Water	6020A	187641
500-57389-3 MSD	MW-3	Dissolved	Water	6020A	187641
500-57389-4	MW-4	Dissolved	Water	6020A	187641
500-57389-5	MW-6	Dissolved	Water	6020A	187641
500-57389-6	MW-7	Dissolved	Water	6020A	187641
500-57389-7	MW-8	Dissolved	Water	6020A	187641
500-57389-8	MW-9	Dissolved	Water	6020A	187641
500-57389-9	MW-10	Dissolved	Water	6020A	187641
500-57389-10	MW-11	Dissolved	Water	6020A	187641
500-57389-11	Duplicate	Dissolved	Water	6020A	187641
LCS 500-187641/2-A	Lab Control Sample	Soluble	Water	6020A	187641
MB 500-187641/1-A	Method Blank	Soluble	Water	6020A	187641

### Analysis Batch: 189019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	6020A	187641
500-57389-2	MW-2	Dissolved	Water	6020A	187641
500-57389-3	MW-3	Dissolved	Water	6020A	187641
500-57389-3 DU	MW-3	Dissolved	Water	6020A	187641
500-57389-3 MS	MW-3	Dissolved	Water	6020A	187641
500-57389-3 MSD	MW-3	Dissolved	Water	6020A	187641
500-57389-4	MW-4	Dissolved	Water	6020A	187641
500-57389-5	MW-6	Dissolved	Water	6020A	187641
500-57389-6	MW-7	Dissolved	Water	6020A	187641
500-57389-7	MW-8	Dissolved	Water	6020A	187641
500-57389-8	MW-9	Dissolved	Water	6020A	187641
500-57389-9	MW-10	Dissolved	Water	6020A	187641
500-57389-10	MW-11	Dissolved	Water	6020A	187641
500-57389-11	Duplicate	Dissolved	Water	6020A	187641
LCS 500-187641/2-A	Lab Control Sample	Soluble	Water	6020A	187641
MB 500-187641/1-A	Method Blank	Soluble	Water	6020A	187641

### Analysis Batch: 189119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	6020A	187641
500-57389-2	MW-2	Dissolved	Water	6020A	187641
500-57389-3	MW-3	Dissolved	Water	6020A	187641
500-57389-3 DU	MW-3	Dissolved	Water	6020A	187641
500-57389-3 MS	MW-3	Dissolved	Water	6020A	187641
500-57389-3 MSD	MW-3	Dissolved	Water	6020A	187641

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Comp. 002515  
6/10/2013

## QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

### Metals (Continued)

#### Analysis Batch: 189119 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-4	MW-4	Dissolved	Water	6020A	187641
500-57389-5	MW-6	Dissolved	Water	6020A	187641
500-57389-6	MW-7	Dissolved	Water	6020A	187641
500-57389-7	MW-8	Dissolved	Water	6020A	187641
500-57389-8	MW-9	Dissolved	Water	6020A	187641
500-57389-9	MW-10	Dissolved	Water	6020A	187641
500-57389-10	MW-11	Dissolved	Water	6020A	187641
500-57389-11	Duplicate	Dissolved	Water	6020A	187641
LCS 500-187641/2-A	Lab Control Sample	Soluble	Water	6020A	187641
MB 500-187641/1-A	Method Blank	Soluble	Water	6020A	187641

### General Chemistry

#### Prep Batch: 187501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-2	MW-2	Dissolved	Water	9010B	
500-57389-3	MW-3	Dissolved	Water	9010B	
500-57389-4	MW-4	Dissolved	Water	9010B	
500-57389-5	MW-6	Dissolved	Water	9010B	
500-57389-6	MW-7	Dissolved	Water	9010B	
500-57389-7	MW-8	Dissolved	Water	9010B	
500-57389-8	MW-9	Dissolved	Water	9010B	
500-57389-9	MW-10	Dissolved	Water	9010B	
LCS 500-187501/2-A	Lab Control Sample	Total/NA	Water	9010B	
MB 500-187501/1-A	Method Blank	Total/NA	Water	9010B	

#### Analysis Batch: 187514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	9251	
500-57389-2	MW-2	Dissolved	Water	9251	
500-57389-3	MW-3	Dissolved	Water	9251	
500-57389-4	MW-4	Dissolved	Water	9251	
500-57389-5	MW-6	Dissolved	Water	9251	
500-57389-6	MW-7	Dissolved	Water	9251	
500-57389-7	MW-8	Dissolved	Water	9251	
500-57389-7 MS	MW-8	Dissolved	Water	9251	
500-57389-7 MSD	MW-8	Dissolved	Water	9251	
LCS 500-187514/5	Lab Control Sample	Total/NA	Water	9251	
MB 500-187514/4	Method Blank	Total/NA	Water	9251	

#### Analysis Batch: 187526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-8	MW-9	Dissolved	Water	9251	
500-57389-9	MW-10	Dissolved	Water	9251	
500-57389-10	MW-11	Dissolved	Water	9251	
500-57389-11	Duplicate	Dissolved	Water	9251	
LCS 500-187526/41	Lab Control Sample	Total/NA	Water	9251	
MB 500-187526/40	Method Blank	Total/NA	Water	9251	

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# QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1



## General Chemistry (Continued)

### Analysis Batch: 187533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	SM 4500 F C	
500-57389-2	MW-2	Dissolved	Water	SM 4500 F C	
500-57389-3	MW-3	Dissolved	Water	SM 4500 F C	
500-57389-4	MW-4	Dissolved	Water	SM 4500 F C	
500-57389-5	MW-6	Dissolved	Water	SM 4500 F C	
500-57389-6	MW-7	Dissolved	Water	SM 4500 F C	
500-57389-7	MW-8	Dissolved	Water	SM 4500 F C	
500-57389-8	MW-9	Dissolved	Water	SM 4500 F C	
500-57389-9	MW-10	Dissolved	Water	SM 4500 F C	
500-57389-10	MW-11	Dissolved	Water	SM 4500 F C	
500-57389-11	Duplicate	Dissolved	Water	SM 4500 F C	
LCS 500-187533/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MB 500-187533/3	Method Blank	Total/NA	Water	SM 4500 F C	

### Analysis Batch: 187534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-2	MW-2	Dissolved	Water	9014	187501
500-57389-3	MW-3	Dissolved	Water	9014	187501
500-57389-4	MW-4	Dissolved	Water	9014	187501
500-57389-5	MW-6	Dissolved	Water	9014	187501
500-57389-6	MW-7	Dissolved	Water	9014	187501
500-57389-7	MW-8	Dissolved	Water	9014	187501
500-57389-8	MW-9	Dissolved	Water	9014	187501
500-57389-9	MW-10	Dissolved	Water	9014	187501
LCS 500-187501/2-A	Lab Control Sample	Total/NA	Water	9014	187501
MB 500-187501/1-A	Method Blank	Total/NA	Water	9014	187501

### Analysis Batch: 187594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	SM 2540C	
500-57389-2	MW-2	Dissolved	Water	SM 2540C	
500-57389-3	MW-3	Dissolved	Water	SM 2540C	
500-57389-4	MW-4	Dissolved	Water	SM 2540C	
500-57389-5	MW-6	Dissolved	Water	SM 2540C	
500-57389-6	MW-7	Dissolved	Water	SM 2540C	
500-57389-7	MW-8	Dissolved	Water	SM 2540C	
500-57389-8	MW-9	Dissolved	Water	SM 2540C	
500-57389-9	MW-10	Dissolved	Water	SM 2540C	
500-57389-10	MW-11	Dissolved	Water	SM 2540C	
500-57389-11	Duplicate	Dissolved	Water	SM 2540C	
LCS 500-187594/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 500-187594/1	Method Blank	Total/NA	Water	SM 2540C	

### Prep Batch: 187787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	9010B	
500-57389-10	MW-11	Dissolved	Water	9010B	
500-57389-11	Duplicate	Dissolved	Water	9010B	
LCS 500-187787/15-A	Lab Control Sample	Total/NA	Water	9010B	
MB 500-187787/14-A	Method Blank	Total/NA	Water	9010B	

TestAmerica Chicago

## QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

### General Chemistry (Continued)

#### Analysis Batch: 187866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	9014	187787
500-57389-10	MW-11	Dissolved	Water	9014	187787
500-57389-11	Duplicate	Dissolved	Water	9014	187787
LCS 500-187787/15-A	Lab Control Sample	Total/NA	Water	9014	187787
MB 500-187787/14-A	Method Blank	Total/NA	Water	9014	187787

#### Analysis Batch: 187894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	SM 4500 NO2 B	
500-57389-1 MS	MW-1	Dissolved	Water	SM 4500 NO2 B	
500-57389-1 MSD	MW-1	Dissolved	Water	SM 4500 NO2 B	
500-57389-2	MW-2	Dissolved	Water	SM 4500 NO2 B	
500-57389-3	MW-3	Dissolved	Water	SM 4500 NO2 B	
500-57389-4	MW-4	Dissolved	Water	SM 4500 NO2 B	
500-57389-5	MW-6	Dissolved	Water	SM 4500 NO2 B	
500-57389-6	MW-7	Dissolved	Water	SM 4500 NO2 B	
500-57389-7	MW-8	Dissolved	Water	SM 4500 NO2 B	
500-57389-8	MW-9	Dissolved	Water	SM 4500 NO2 B	
500-57389-9	MW-10	Dissolved	Water	SM 4500 NO2 B	
500-57389-10	MW-11	Dissolved	Water	SM 4500 NO2 B	
500-57389-11	Duplicate	Dissolved	Water	SM 4500 NO2 B	
LCS 500-187894/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	
MB 500-187894/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	

#### Analysis Batch: 188540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	SM 4500 NO3 F	
500-57389-2	MW-2	Dissolved	Water	SM 4500 NO3 F	
500-57389-3	MW-3	Dissolved	Water	SM 4500 NO3 F	
500-57389-4	MW-4	Dissolved	Water	SM 4500 NO3 F	
500-57389-5	MW-6	Dissolved	Water	SM 4500 NO3 F	
500-57389-6	MW-7	Dissolved	Water	SM 4500 NO3 F	
500-57389-7	MW-8	Dissolved	Water	SM 4500 NO3 F	
500-57389-8	MW-9	Dissolved	Water	SM 4500 NO3 F	
500-57389-9	MW-10	Dissolved	Water	SM 4500 NO3 F	
500-57389-10	MW-11	Dissolved	Water	SM 4500 NO3 F	
500-57389-11	Duplicate	Dissolved	Water	SM 4500 NO3 F	
500-57389-11 MS	Duplicate	Dissolved	Water	SM 4500 NO3 F	
500-57389-11 MSD	Duplicate	Dissolved	Water	SM 4500 NO3 F	
LCS 500-188540/13	Lab Control Sample	Total/NA	Water	SM 4500 NO3 F	
MB 500-188540/12	Method Blank	Total/NA	Water	SM 4500 NO3 F	

#### Analysis Batch: 188731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	Nitrate by calc	
500-57389-2	MW-2	Dissolved	Water	Nitrate by calc	
500-57389-3	MW-3	Dissolved	Water	Nitrate by calc	
500-57389-4	MW-4	Dissolved	Water	Nitrate by calc	
500-57389-5	MW-6	Dissolved	Water	Nitrate by calc	
500-57389-6	MW-7	Dissolved	Water	Nitrate by calc	
500-57389-7	MW-8	Dissolved	Water	Nitrate by calc	

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## QC Association Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

### General Chemistry (Continued)

#### Analysis Batch: 188731 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-8	MW-9	Dissolved	Water	Nitrate by calc	
500-57389-9	MW-10	Dissolved	Water	Nitrate by calc	
500-57389-10	MW-11	Dissolved	Water	Nitrate by calc	
500-57389-11	Duplicate	Dissolved	Water	Nitrate by calc	

#### Analysis Batch: 188748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-1	MW-1	Dissolved	Water	9038	
500-57389-2	MW-2	Dissolved	Water	9038	
500-57389-3	MW-3	Dissolved	Water	9038	
500-57389-4	MW-4	Dissolved	Water	9038	
500-57389-5	MW-6	Dissolved	Water	9038	
500-57389-6	MW-7	Dissolved	Water	9038	
LCS 500-188748/4	Lab Control Sample	Total/NA	Water	9038	
MB 500-188748/3	Method Blank	Total/NA	Water	9038	

#### Analysis Batch: 188905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57389-7	MW-8	Dissolved	Water	9038	
500-57389-8	MW-9	Dissolved	Water	9038	
500-57389-9	MW-10	Dissolved	Water	9038	
500-57389-10	MW-11	Dissolved	Water	9038	
500-57389-11	Duplicate	Dissolved	Water	9038	
LCS 500-188905/4	Lab Control Sample	Total/NA	Water	9038	
MB 500-188905/3	Method Blank	Total/NA	Water	9038	

TestAmerica Chicago

Comp. 002519  
6/10/2013

## Surrogate Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

### 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)
500-57389-1	MW-1	88	102	110	88
500-57389-1 MS	MW-1	85	96	105	93
500-57389-1 MSD	MW-1	87	97	103	94
500-57389-2	MW-2	88	102	110	87
500-57389-3	MW-3	86	99	107	90
500-57389-4	MW-4	90	97	106	91
500-57389-5	MW-6	91	96	107	91
500-57389-6	MW-7	88	96	108	92
500-57389-7	MW-8	84	99	107	87
500-57389-8	MW-9	90	97	109	91
500-57389-9	MW-10	89	98	109	91
500-57389-10	MW-11	90	99	105	91
500-57389-11	Duplicate	86	98	110	87
LCS 500-187836/4	Lab Control Sample	85	100	106	92
LCS 500-187907/4	Lab Control Sample	85	97	103	90
MB 500-187836/6	Method Blank	93	102	116	92
MB 500-187907/6	Method Blank	86	96	104	88

**Surrogate Legend**

- 12DCE = 1,2-Dichloroethane-d4 (Surr)
- TOL = Toluene-d8 (Surr)
- BFB = 4-Bromofluorobenzene (Surr)
- DBFM = Dibromofluoromethane



# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

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

**Lab Sample ID: MB 500-187836/6**  
**Matrix: Water**  
**Analysis Batch: 187836**

**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			05/29/13 23:57	1
Toluene	<0.00050		0.00050		mg/L			05/29/13 23:57	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/29/13 23:57	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/29/13 23:57	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	93		75 - 125		05/29/13 23:57	1
Toluene-d8 (Surr)	102		75 - 120		05/29/13 23:57	1
4-Bromofluorobenzene (Surr)	116		75 - 120		05/29/13 23:57	1
Dibromofluoromethane	92		75 - 120		05/29/13 23:57	1

**Lab Sample ID: LCS 500-187836/4**  
**Matrix: Water**  
**Analysis Batch: 187836**

**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	0.0456		mg/L		91	70 - 120
Toluene	0.0500	0.0508		mg/L		102	70 - 120
Ethylbenzene	0.0500	0.0479		mg/L		96	75 - 120
Xylenes, Total	0.100	0.0922		mg/L		92	70 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	85		75 - 125
Toluene-d8 (Surr)	100		75 - 120
4-Bromofluorobenzene (Surr)	106		75 - 120
Dibromofluoromethane	92		75 - 120

**Lab Sample ID: 500-57389-1 MS**  
**Matrix: Water**  
**Analysis Batch: 187836**

**Client Sample ID: MW-1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Benzene	<0.00050		0.0500	0.0462		mg/L		92	70 - 120
Toluene	<0.00050		0.0500	0.0494		mg/L		99	70 - 120
Ethylbenzene	<0.00050		0.0500	0.0477		mg/L		95	75 - 120
Xylenes, Total	<0.0010		0.100	0.0920		mg/L		92	70 - 120

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	85		75 - 125
Toluene-d8 (Surr)	96		75 - 120
4-Bromofluorobenzene (Surr)	105		75 - 120
Dibromofluoromethane	93		75 - 120

TestAmerica Chicago

## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

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

**Lab Sample ID: 500-57389-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 187836**

**Client Sample ID: MW-1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00050		0.0500	0.0467		mg/L		93	70 - 120	1	20
Toluene	<0.00050		0.0500	0.0492		mg/L		98	70 - 120	0	20
Ethylbenzene	<0.00050		0.0500	0.0487		mg/L		97	75 - 120	2	20
Xylenes, Total	<0.0010		0.100	0.0938		mg/L		94	70 - 120	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	87		75 - 125
Toluene-d8 (Surr)	97		75 - 120
4-Bromofluorobenzene (Surr)	103		75 - 120
Dibromofluoromethane	94		75 - 120

**Lab Sample ID: MB 500-187907/6**  
**Matrix: Water**  
**Analysis Batch: 187907**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			05/30/13 10 21	1
Toluene	<0.00050		0.00050		mg/L			05/30/13 10 21	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/30/13 10 21	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/30/13 10 21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		75 - 125		05/30/13 10 21	1
Toluene-d8 (Surr)	96		75 - 120		05/30/13 10 21	1
4-Bromofluorobenzene (Surr)	104		75 - 120		05/30/13 10 21	1
Dibromofluoromethane	88		75 - 120		05/30/13 10 21	1

**Lab Sample ID: LCS 500-187907/4**  
**Matrix: Water**  
**Analysis Batch: 187907**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0484		mg/L		97	70 - 120
Toluene	0.0500	0.0524		mg/L		105	70 - 120
Ethylbenzene	0.0500	0.0511		mg/L		102	75 - 120
Xylenes, Total	0.100	0.0989		mg/L		99	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		75 - 125
Toluene-d8 (Surr)	97		75 - 120
4-Bromofluorobenzene (Surr)	103		75 - 120
Dibromofluoromethane	90		75 - 120

TestAmerica Chicago

Comp. 002522  
6/10/2013



# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

## Method: 314.0 - Perchlorate (IC)

**Lab Sample ID: MB 320-17771/7**  
**Matrix: Water**  
**Analysis Batch: 17771**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/05/13 15:09	1

**Lab Sample ID: LCS 320-17771/8**  
**Matrix: Water**  
**Analysis Batch: 17771**

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

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

**Lab Sample ID: MRL 320-17771/6 MRL**  
**Matrix: Water**  
**Analysis Batch: 17771**

**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		99	75 - 125

**Lab Sample ID: MB 320-17834/7**  
**Matrix: Water**  
**Analysis Batch: 17834**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/06/13 14:24	1

**Lab Sample ID: LCS 320-17834/8**  
**Matrix: Water**  
**Analysis Batch: 17834**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	0.0500	0.0504		mg/L		101	85 - 115

**Lab Sample ID: MRL 320-17834/6 MRL**  
**Matrix: Water**  
**Analysis Batch: 17834**

**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	4.08		ug/L		102	75 - 125

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

**Lab Sample ID: 500-57389-3 MS**  
**Matrix: Water**  
**Analysis Batch: 188650**

**Client Sample ID: MW-3**  
**Prep Type: Dissolved**  
**Prep Batch: 187641**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.0013		0.100	0.115		mg/L		114	75 - 125
Barium	0.13		0.500	0.618		mg/L		98	75 - 125
Cadmium	<0.00050		0.0500	0.0490		mg/L		98	75 - 125
Chromium	<0.0050		0.200	0.204		mg/L		100	75 - 125
Cobalt	<0.0010		0.500	0.487		mg/L		97	75 - 125

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Comp. 002523  
6/10/2013

## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

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

Lab Sample ID: 500-57389-3 MS										Client Sample ID: MW-3		
Matrix: Water										Prep Type: Dissolved		
Analysis Batch: 188650										Prep Batch: 187641		
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits			
Copper	<0.0020		0.250	0.252		mg/L		101	75 - 125			
Iron	<0.10		1.00	0.998		mg/L		100	75 - 125			
Lead	<0.00050		0.100	0.102		mg/L		102	75 - 125			
Manganese	<0.0025		0.500	0.497		mg/L		99	75 - 125			
Nickel	0.0042		0.500	0.487		mg/L		96	75 - 125			
Selenium	0.022		0.100	0.142		mg/L		120	75 - 125			
Silver	<0.00050		0.0500	0.0407		mg/L		81	75 - 125			
Thallium	<0.0020		0.100	0.104		mg/L		104	75 - 125			
Vanadium	<0.0050		0.500	0.517		mg/L		103	75 - 125			
Zinc	<0.020		0.500	0.518		mg/L		104	75 - 125			

Lab Sample ID: 500-57389-3 MS										Client Sample ID: MW-3		
Matrix: Water										Prep Type: Dissolved		
Analysis Batch: 189019										Prep Batch: 187641		
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits			
Antimony	<0.0030		0.500	0.443		mg/L		89	75 - 125			

Lab Sample ID: 500-57389-3 MS										Client Sample ID: MW-3		
Matrix: Water										Prep Type: Dissolved		
Analysis Batch: 189119										Prep Batch: 187641		
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits			
Beryllium	<0.0010		0.0500	0.0494		mg/L		99	75 - 125			
Boron	0.74	V	1.00	1.78		mg/L		104	75 - 125			

Lab Sample ID: 500-57389-3 MSD										Client Sample ID: MW-3		
Matrix: Water										Prep Type: Dissolved		
Analysis Batch: 188650										Prep Batch: 187641		
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Arsenic	0.0013		0.100	0.119		mg/L		118	75 - 125	3	20	
Barium	0.13		0.500	0.636		mg/L		101	75 - 125	3	20	
Cadmium	<0.00050		0.0500	0.0520		mg/L		104	75 - 125	6	20	
Chromium	<0.0050		0.200	0.208		mg/L		103	75 - 125	2	20	
Cobalt	<0.0010		0.500	0.496		mg/L		99	75 - 125	2	20	
Copper	<0.0020		0.250	0.260		mg/L		103	75 - 125	3	20	
Iron	<0.10		1.00	1.02		mg/L		102	75 - 125	2	20	
Lead	<0.00050		0.100	0.105		mg/L		105	75 - 125	3	20	
Manganese	<0.0025		0.500	0.512		mg/L		102	75 - 125	3	20	
Nickel	0.0042		0.500	0.497		mg/L		99	75 - 125	2	20	
Selenium	0.022		0.100	0.144		mg/L		121	75 - 125	1	20	
Silver	<0.00050		0.0500	0.0414		mg/L		83	75 - 125	2	20	
Thallium	<0.0020		0.100	0.107		mg/L		107	75 - 125	2	20	
Vanadium	<0.0050		0.500	0.528		mg/L		105	75 - 125	2	20	
Zinc	<0.020		0.500	0.535		mg/L		107	75 - 125	3	20	

TestAmerica Chicago

# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

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

Lab Sample ID: 500-57389-3 MSD										Client Sample ID: MW-3		
Matrix: Water										Prep Type: Dissolved		
Analysis Batch: 189019										Prep Batch: 187641		
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Antimony	<0.0030		0.500	0.470		mg/L		94	75 - 125	6	20	

Lab Sample ID: 500-57389-3 MSD										Client Sample ID: MW-3		
Matrix: Water										Prep Type: Dissolved		
Analysis Batch: 189119										Prep Batch: 187641		
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Beryllium	<0.0010		0.0500	0.0487		mg/L		97	75 - 125	1	20	
Boron	0.74	V	1.00	1.80		mg/L		106	75 - 125	1	20	

Lab Sample ID: 500-57389-3 DU										Client Sample ID: MW-3		
Matrix: Water										Prep Type: Dissolved		
Analysis Batch: 188650										Prep Batch: 187641		
Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit	
Arsenic	0.0013			0.00132		mg/L				4	20	
Barium	0.13			0.129		mg/L				1	20	
Cadmium	<0.00050			<0.00050		mg/L				NC	20	
Chromium	<0.0050			<0.0050		mg/L				NC	20	
Cobalt	<0.0010			<0.0010		mg/L				NC	20	
Copper	<0.0020			<0.0020		mg/L				NC	20	
Iron	<0.10			<0.10		mg/L				NC	20	
Lead	<0.00050			<0.00050		mg/L				NC	20	
Manganese	<0.0025			<0.0025		mg/L				NC	20	
Nickel	0.0042			0.00403		mg/L				4	20	
Selenium	0.022			0.0214		mg/L				3	20	
Silver	<0.00050			<0.00050		mg/L				NC	20	
Thallium	<0.0020			<0.0020		mg/L				NC	20	
Vanadium	<0.0050			<0.0050		mg/L				NC	20	
Zinc	<0.020			<0.020		mg/L				NC	20	

Lab Sample ID: 500-57389-3 DU										Client Sample ID: MW-3		
Matrix: Water										Prep Type: Dissolved		
Analysis Batch: 189019										Prep Batch: 187641		
Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit	
Antimony	<0.0030			<0.0030		mg/L				NC	20	

Lab Sample ID: 500-57389-3 DU										Client Sample ID: MW-3		
Matrix: Water										Prep Type: Dissolved		
Analysis Batch: 189119										Prep Batch: 187641		
Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit	
Beryllium	<0.0010			<0.0010		mg/L				NC	20	
Boron	0.74	V		0.738		mg/L				0.8	20	

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# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

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

Lab Sample ID: MB 500-187641/1-A			Client Sample ID: Method Blank						
Matrix: Water			Prep Type: Soluble						
Analysis Batch: 188650			Prep Batch: 187641						
Analyte	Result	MB MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 17:50	1
Barium	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 17:50	1
Cadmium	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 17:50	1
Chromium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 17:50	1
Cobalt	<0.0010		0.0010		mg/L		05/28/13 09:21	06/04/13 17:50	1
Copper	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 17:50	1
Iron	<0.10		0.10		mg/L		05/28/13 09:21	06/04/13 17:50	1
Lead	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 17:50	1
Manganese	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 17:50	1
Nickel	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 17:50	1
Selenium	<0.0025		0.0025		mg/L		05/28/13 09:21	06/04/13 17:50	1
Silver	<0.00050		0.00050		mg/L		05/28/13 09:21	06/04/13 17:50	1
Thallium	<0.0020		0.0020		mg/L		05/28/13 09:21	06/04/13 17:50	1
Vanadium	<0.0050		0.0050		mg/L		05/28/13 09:21	06/04/13 17:50	1
Zinc	<0.020		0.020		mg/L		05/28/13 09:21	06/04/13 17:50	1

Lab Sample ID: MB 500-187641/1-A			Client Sample ID: Method Blank						
Matrix: Water			Prep Type: Soluble						
Analysis Batch: 189019			Prep Batch: 187641						
Analyte	Result	MB MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/28/13 09:21	06/07/13 11:55	1

Lab Sample ID: MB 500-187641/1-A			Client Sample ID: Method Blank						
Matrix: Water			Prep Type: Soluble						
Analysis Batch: 189119			Prep Batch: 187641						
Analyte	Result	MB MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0010		0.0010		mg/L		05/28/13 09:21	06/07/13 15:40	1
Boron	<0.050		0.050		mg/L		05/28/13 09:21	06/07/13 15:40	1

Lab Sample ID: LCS 500-187641/2-A			Client Sample ID: Lab Control Sample						
Matrix: Water			Prep Type: Soluble						
Analysis Batch: 188650			Prep Batch: 187641						
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	0.100	0.0991		mg/L		99	80 - 120		
Barium	0.500	0.504		mg/L		101	80 - 120		
Cadmium	0.0500	0.0516		mg/L		103	80 - 120		
Chromium	0.200	0.196		mg/L		98	80 - 120		
Cobalt	0.500	0.488		mg/L		98	80 - 120		
Copper	0.250	0.253		mg/L		101	80 - 120		
Iron	1.00	0.960		mg/L		96	80 - 120		
Lead	0.100	0.0987		mg/L		99	80 - 120		
Manganese	0.500	0.491		mg/L		98	80 - 120		
Nickel	0.500	0.498		mg/L		100	80 - 120		
Selenium	0.100	0.101		mg/L		101	80 - 120		
Silver	0.0500	0.0501		mg/L		100	80 - 120		
Thallium	0.100	0.0994		mg/L		99	80 - 120		

TestAmerica Chicago

Comp. 002526  
6/10/2013

# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

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

Lab Sample ID: LCS 500-187641/2-A  
Matrix: Water  
Analysis Batch: 188650

Client Sample ID: Lab Control Sample  
Prep Type: Soluble  
Prep Batch: 187641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Vanadium	0.500	0.484		mg/L		97	80 - 120	
Zinc	0.500	0.511		mg/L		102	80 - 120	

Lab Sample ID: LCS 500-187641/2-A  
Matrix: Water  
Analysis Batch: 189019

Client Sample ID: Lab Control Sample  
Prep Type: Soluble  
Prep Batch: 187641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Antimony	0.500	0.451		mg/L		90	80 - 120	

Lab Sample ID: LCS 500-187641/2-A  
Matrix: Water  
Analysis Batch: 189119

Client Sample ID: Lab Control Sample  
Prep Type: Soluble  
Prep Batch: 187641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Beryllium	0.0500	0.0463		mg/L		93	80 - 120	
Boron	1.00	0.998		mg/L		100	80 - 120	

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-187673/7-A  
Matrix: Water  
Analysis Batch: 187831

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 187673

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 11:13	1

Lab Sample ID: LCS 500-187673/8-A  
Matrix: Water  
Analysis Batch: 187831

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 187673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Mercury	0.00200	0.00206		mg/L		103	80 - 120	

Lab Sample ID: MB 500-187674/7-A  
Matrix: Water  
Analysis Batch: 187831

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 187674

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020		mg/L		05/28/13 16:45	05/29/13 12:12	1

Lab Sample ID: LCS 500-187674/8-A  
Matrix: Water  
Analysis Batch: 187831

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 187674

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Mercury	0.00200	0.00204		mg/L		102	80 - 120	

TestAmerica Chicago

# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

## Method: 9014 - Cyanide

<b>Lab Sample ID: MB 500-187501/1-A</b>						<b>Client Sample ID: Method Blank</b>			
<b>Matrix: Water</b>						<b>Prep Type: Total/NA</b>			
<b>Analysis Batch: 187534</b>						<b>Prep Batch: 187501</b>			
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/25/13 13:30	05/25/13 16:40	1

<b>Lab Sample ID: LCS 500-187501/2-A</b>						<b>Client Sample ID: Lab Control Sample</b>			
<b>Matrix: Water</b>						<b>Prep Type: Total/NA</b>			
<b>Analysis Batch: 187534</b>						<b>Prep Batch: 187501</b>			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.100	0.105		mg/L		105	80 - 120		

<b>Lab Sample ID: MB 500-187787/14-A</b>						<b>Client Sample ID: Method Blank</b>			
<b>Matrix: Water</b>						<b>Prep Type: Total/NA</b>			
<b>Analysis Batch: 187866</b>						<b>Prep Batch: 187787</b>			
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/29/13 11:40	05/29/13 15:18	1

<b>Lab Sample ID: LCS 500-187787/15-A</b>						<b>Client Sample ID: Lab Control Sample</b>			
<b>Matrix: Water</b>						<b>Prep Type: Total/NA</b>			
<b>Analysis Batch: 187866</b>						<b>Prep Batch: 187787</b>			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.100	0.0973		mg/L		97	80 - 120		

## Method: 9038 - Sulfate, Turbidimetric

<b>Lab Sample ID: MB 500-188748/3</b>						<b>Client Sample ID: Method Blank</b>			
<b>Matrix: Water</b>						<b>Prep Type: Total/NA</b>			
<b>Analysis Batch: 188748</b>									
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			06/05/13 08:26	1

<b>Lab Sample ID: LCS 500-188748/4</b>						<b>Client Sample ID: Lab Control Sample</b>			
<b>Matrix: Water</b>						<b>Prep Type: Total/NA</b>			
<b>Analysis Batch: 188748</b>									
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	20.0	19.8		mg/L		99	80 - 120		

<b>Lab Sample ID: MB 500-188905/3</b>						<b>Client Sample ID: Method Blank</b>			
<b>Matrix: Water</b>						<b>Prep Type: Total/NA</b>			
<b>Analysis Batch: 188905</b>									
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			06/06/13 05:23	1

TestAmerica Chicago

# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

## Method: 9038 - Sulfate, Turbidimetric (Continued)

Lab Sample ID: LCS 500-188905/4  
Matrix: Water  
Analysis Batch: 188905

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	20.0		mg/L		100	80 - 120

## Method: 9251 - Chloride

Lab Sample ID: MB 500-187514/4  
Matrix: Water  
Analysis Batch: 187514

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			05/25/13 13:42	1

Lab Sample ID: LCS 500-187514/5  
Matrix: Water  
Analysis Batch: 187514

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	53.4		mg/L		107	80 - 120

Lab Sample ID: MB 500-187526/40  
Matrix: Water  
Analysis Batch: 187526

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			05/25/13 15:46	1

Lab Sample ID: LCS 500-187526/41  
Matrix: Water  
Analysis Batch: 187526

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	56.7		mg/L		113	80 - 120

Lab Sample ID: 500-57389-7 MS  
Matrix: Water  
Analysis Batch: 187514

Client Sample ID: MW-8  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	300		50.0	318	4	mg/L		44	75 - 125

Lab Sample ID: 500-57389-7 MSD  
Matrix: Water  
Analysis Batch: 187514

Client Sample ID: MW-8  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	300		50.0	323	4	mg/L		53	75 - 125	1	20

TestAmerica Chicago

# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

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

Lab Sample ID: MB 500-187594/1  
Matrix: Water  
Analysis Batch: 187594

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			05/27/13 18:00	1

Lab Sample ID: LCS 500-187594/2  
Matrix: Water  
Analysis Batch: 187594

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	238		mg/L		95	80 - 120

## Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-187533/3  
Matrix: Water  
Analysis Batch: 187533

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			05/25/13 14:57	1

Lab Sample ID: LCS 500-187533/4  
Matrix: Water  
Analysis Batch: 187533

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	9.97		mg/L		100	80 - 120

## Method: SM 4500 NO2 B - Nitrogen, Nitrite

Lab Sample ID: MB 500-187894/3  
Matrix: Water  
Analysis Batch: 187894

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			05/24/13 12:34	1

Lab Sample ID: LCS 500-187894/4  
Matrix: Water  
Analysis Batch: 187894

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

Lab Sample ID: 500-57389-1 MS  
Matrix: Water  
Analysis Batch: 187894

Client Sample ID: MW-1  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrite	<0.020		0.100	0.0993		mg/L		99	75 - 125

TestAmerica Chicago



# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

## Method: SM 4500 NO2 B - Nitrogen, Nitrite (Continued)

Lab Sample ID: 500-57389-1 MSD  
Matrix: Water  
Analysis Batch: 187894

Client Sample ID: MW-1  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrite	<0.020		0.100	0.0963		mg/L		96	75 - 125	3	20

## Method: SM 4500 NO3 F - Nitrogen, Nitrate

Lab Sample ID: MB 500-188540/12  
Matrix: Water  
Analysis Batch: 188540

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			06/04/13 15:33	1

Lab Sample ID: LCS 500-188540/13  
Matrix: Water  
Analysis Batch: 188540

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

Lab Sample ID: 500-57389-11 MS  
Matrix: Water  
Analysis Batch: 188540

Client Sample ID: Duplicate  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	1.4		1.00	2.56		mg/L		117	75 - 125

Lab Sample ID: 500-57389-11 MSD  
Matrix: Water  
Analysis Batch: 188540

Client Sample ID: Duplicate  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate Nitrite	1.4		1.00	2.42		mg/L		104	75 - 125	5	20

TestAmerica Chicago



**TestAmerica Chicago**

2417 Bond Street  
 University Park IL 60484  
 Phone (708) 534-5200 Fax (708) 534-5211

**Chain of Custody Record**

**TestAmerica**

**Client Information (Sub Contract Lab)**

Company: TestAmerica Laboratories, Inc.  
 Address: 880 Riverside Parkway,  
 West Sacramento  
 State ZP: CA, 95695  
 Phone: 916-373-5600(Tel) 916-372-1059(Fax)  
 Email:

Sample:   
 Date Requested: 6/7/2013  
 TAT Requested (days):

Lab By: Stadelmann, Bonnie M  
 E-Mail: bonnie.stadelmann@testamericainc.com

Carrier Time (hrs/days):

FOC No: 500-35265.1  
 Page: Page 1 of 1

Comp 002633  
 6/10/2013

**Analysis Requested**



500-57389 Chain of Custody

Project Name	Jobet #29 Ash Found	Prog. #	50005078
Site		USCWA	
City	West Sacramento	Due Date Requested	6/7/2013
State ZP	CA, 95695	TAT Requested (days)	
Phone	916-373-5600(Tel) 916-372-1059(Fax)	PO #	
Email		NC #	

**Sample Identification - Client ID (Lab ID)**

Sample ID	Sample Date	Sample Time	Sample Type (Comp, Grab)	Matrix (Preservative, Sample, Other)	Field Filtered Sample (Yes or No)	314 B/ Porphyrin	Total Number of Containers	Special Instructions/Notes
MWV-1 (500-57389-1)	5/23/13	12:40 Central	Water	Water	X		1	
MWV-2 (500-57389-2)	5/23/13	11:25 Central	Water	Water	X		1	
MWV-3 (500-57389-3)	5/22/13	12:55 Central	Water	Water	X		1	
MWV-4 (500-57389-4)	5/22/13	15:03 Central	Water	Water	X		1	
MWV-6 (500-57389-5)	5/22/13	16:41 Central	Water	Water	X		1	
MWV-7 (500-57389-6)	5/22/13	17:30 Central	Water	Water	X		1	
MWV-8 (500-57389-7)	5/23/13	09:17 Central	Water	Water	X		1	
MWV-9 (500-57389-8)	5/23/13	10:23 Central	Water	Water	X		1	
MWV-10 (500-57389-9)	5/22/13	18:36 Central	Water	Water	X		1	
MWV-11 (500-57389-10)	5/23/13	15:08 Central	Water	Water	X		1	
Duplicate (500-57389-11)	5/23/13	Central	Water	Water	X		1	

**Possible Hazard Identification**

Unconfirmed  
 Deliverable Requested: I, II, III, IV, Other (specify)

4.3

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return To Client  
 Disposal By Lab  
 Archive For \_\_\_\_\_ Months

**Empty Kit Relinquished by**

Relinquished by	Date/Time	Date	Time	Method or System
<i>[Signature]</i>	05/28/13		1600	

Received by	Date/Time	Company	Received by	Date/Time	Company
<i>[Signature]</i>	05/28/13	TA - Chicago	<i>[Signature]</i>	5/30/13	TA

## Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-57389-1

SDG Number:

Login Number: 57389

List Number: 1

Creator: Lunt, Jeff T

List Source: TestAmerica Chicago

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	3,7,3,3,3,4
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-57389-1

SDG Number:

Login Number: 57389

List Number: 1

Creator: Cortes, Cesar C

List Source: TestAmerica Sacramento

List Creation: 05/31/13 10:51 AM

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	4.3
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	



## Certification Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

### Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	06-30-13 *
California	NELAP	9	01132CA	04-30-14
Georgia	State Program	4	N/A	04-30-14
Georgia	State Program	4	939	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14
Iowa	State Program	7	82	05-01-14
Kansas	NELAP	7	E-10161	10-31-13
Kentucky	State Program	4	90023	12-31-13
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-13
Massachusetts	State Program	1	M-IL035	06-30-13
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-13
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-13
South Carolina	State Program	4	77001	06-30-13 *
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Virginia	NELAP	3	460142	06-14-13
Wisconsin	State Program	5	999580010	08-31-13
Wyoming	State Program	8	8TMS-Q	07-15-13

### 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	A2LA		NE-OS-22-13	01-31-14
A2LA	A2LA		NE-OS-22-3	01-31-14
A2LA	DoD ELAP		2928-01	01-31-14
Alaska (UST)	State Program	10	UST-055	12-18-13
Arizona	State Program	9	AZ0708	08-11-13
Arkansas DEQ	State Program	6	88-0691	06-17-13
California	NELAP	9	1119CA	01-31-14
Colorado	State Program	8	N/A	08-31-13
Connecticut	State Program	1	PH-0691	06-30-13
Florida	NELAP	4	E87570	06-30-13
Guam	State Program	9	N/A	08-31-13
Hawaii	State Program	9	N/A	01-31-14
Illinois	NELAP	5	200060	03-17-14
Kansas	NELAP	7	E-10375	10-31-13
Louisiana	NELAP	6	30612	06-30-13
Michigan	State Program	5	9947	01-31-14
Nebraska	State Program	7	NE-OS-22-13	01-31-14
Nevada	State Program	9	CA44	07-31-13
New Jersey	NELAP	2	CA005	06-30-13
New York	NELAP	2	11666	04-01-14
Northern Mariana Islands	State Program	9	MP0007	02-01-14
Oregon	NELAP	10	CA200005	03-28-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Chicago

# Certification Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Ash Ponds

TestAmerica Job ID: 500-57389-1

## Laboratory: TestAmerica Sacramento (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Pennsylvania	NELAP	3	68-01272	03-31-14
South Carolina	State Program	4	87014	06-30-13
Texas	NELAP	6	T104704399-08-TX	05-31-14
US Fish & Wildlife	Federal		LE148388-0	12-31-13
USDA	Federal		P330-11-00436	12-30-14
USEPA UCMR	Federal	1	CA00044	11-06-14
Utah	NELAP	8	QUAN1	01-31-14
Washington	State Program	10	C581	05-05-14
West Virginia	State Program	3	9930C	12-31-13
West Virginia DEP	State Program	3	334	07-31-13
Wyoming	State Program	8	BTMS-Q	01-31-14



TestAmerica Chicago

# 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: 500-57697-1

Client Project/Site: Joliet #29 Station Ash Ponds

For:

KPRG and Associates, Inc.

14665 West Lisbon Road,

Suite 2B

Brookfield, Wisconsin 53005

Attn: Richard Gnat



Authorized for release by:

6/19/2013 5:00:07 PM

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

Comp 002538

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# Case Narrative

TestAmerica Job ID: 500-57697-1

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

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**Job ID: 500-57697-1**

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**Laboratory: TestAmerica Chicago**

**Narrative**

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**Job Narrative**  
500-57697-1

**Comments**

No additional comments.

**Receipt**

The samples were received on 6/5/2013 4:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

**Except:**

The Perchlorate sample was received at the Sacramento laboratory outside the required temperature criteria : 14.4 C.

6-10-2013 - Per client proceed with analysis.

**GC/MS VOA**

No analytical or quality issues were noted.

**Metals**

No other analytical or quality issues were noted.

**Field Service / Mobile Lab**

No analytical or quality issues were noted.

**General Chemistry**

No analytical or quality issues were noted.

## Method Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

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

#### 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

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6/19/2013

# Sample Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-57697-1	MW-5	Water	06/05/13 13:48	06/05/13 16:10
500-57697-2	Trp Blank	Water	06/05/13 00:00	06/05/13 16:10



# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

**Client Sample ID: MW-5**

**Lab Sample ID: 500-57697-1**

**Date Collected: 06/05/13 13:48**

**Matrix: Water**

**Date Received: 06/05/13 16:10**

### 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			06/07/13 15:07	1
Toluene	<0.00050		0.00050		mg/L			06/07/13 15:07	1
Ethylbenzene	<0.00050		0.00050		mg/L			06/07/13 15:07	1
Xylenes, Total	<0.0010		0.0010		mg/L			06/07/13 15:07	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	87		75 - 125					06/07/13 15:07	1
Toluene-d8 (Surr)	97		75 - 120					06/07/13 15:07	1
4-Bromofluorobenzene (Surr)	102		75 - 120					06/07/13 15:07	1
Dibromofluoromethane	89		75 - 120					06/07/13 15:07	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			06/14/13 00:54	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		06/11/13 11:12	06/19/13 15:45	1
Arsenic	<0.0010		0.0010		mg/L		06/11/13 11:12	06/17/13 17:46	1
<b>Barium</b>	<b>0.060</b>		0.0025		mg/L		06/11/13 11:12	06/17/13 17:46	1
Beryllium	<0.0010		0.0010		mg/L		06/11/13 11:12	06/19/13 12:12	1
<b>Boron</b>	<b>0.69</b>		0.050		mg/L		06/11/13 11:12	06/19/13 14:10	1
Cadmium	<0.00050		0.00050		mg/L		06/11/13 11:12	06/17/13 17:46	1
Chromium	<0.0050		0.0050		mg/L		06/11/13 11:12	06/17/13 17:46	1
Cobalt	<0.0010		0.0010		mg/L		06/11/13 11:12	06/18/13 17:07	1
Copper	<0.0020		0.0020		mg/L		06/11/13 11:12	06/19/13 15:45	1
Iron	<0.10		0.10		mg/L		06/11/13 11:12	06/17/13 17:46	1
Lead	<0.00050		0.00050		mg/L		06/11/13 11:12	06/17/13 17:46	1
Manganese	<0.0025		0.0025		mg/L		06/11/13 11:12	06/18/13 17:07	1
<b>Nickel</b>	<b>0.0029</b>		0.0020		mg/L		06/11/13 11:12	06/18/13 17:07	1
<b>Selenium</b>	<b>0.025</b>		0.0025		mg/L		06/11/13 11:12	06/17/13 17:46	1
Silver	<0.00050		0.00050		mg/L		06/11/13 11:12	06/17/13 17:46	1
Thallium	<0.0020		0.0020		mg/L		06/11/13 11:12	06/17/13 17:46	1
Vanadium	<0.0050		0.0050		mg/L		06/11/13 11:12	06/17/13 17:46	1
Zinc	<0.020		0.020		mg/L		06/11/13 11:12	06/17/13 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/06/13 15:30	06/07/13 11:30	1

### General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		06/06/13 12:35	06/06/13 15:10	1
<b>Sulfate</b>	<b>200</b>		50		mg/L			06/13/13 06:33	10
<b>Chloride</b>	<b>180</b>		10		mg/L			06/12/13 19:54	5
<b>Nitrogen, Nitrate</b>	<b>1.7</b>		0.10		mg/L			06/13/13 08:30	1
<b>Total Dissolved Solids</b>	<b>1100</b>		10		mg/L			06/07/13 03:11	1
<b>Fluoride</b>	<b>0.39</b>		0.10		mg/L			06/08/13 13:01	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			06/06/13 09:44	1
<b>Nitrogen, Nitrate Nitrite</b>	<b>1.7</b>		0.10		mg/L			06/12/13 12:32	1

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# Client Sample Results

Client: KPRG and Associates, Inc.  
 Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-57697-2**

**Date Collected: 06/05/13 00:00**

**Matrix: Water**

**Date Received: 06/05/13 16:10**

**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			06/07/13 15:32	1
Toluene	<0.00050		0.00050		mg/L			06/07/13 15:32	1
Ethylbenzene	<0.00050		0.00050		mg/L			06/07/13 15:32	1
Xylenes, Total	<0.0010		0.0010		mg/L			06/07/13 15:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		75 - 125					06/07/13 15:32	1
Toluene-d8 (Surr)	99		75 - 120					06/07/13 15:32	1
4-Bromofluorobenzene (Surr)	104		75 - 120					06/07/13 15:32	1
Dibromofluoromethane	86		75 - 120					06/07/13 15:32	1



## Definitions/Glossary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
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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6/19/2013

# QC Association Summary

Client: KPRG and Associates, Inc.  
 Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

## GC/MS VOA

### Analysis Batch: 188928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Total/NA	Water	8260B	
500-57697-2	Trip Blank	Total/NA	Water	8260B	
LCS 500-188928/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-188928/6	Method Blank	Total/NA	Water	8260B	

## HPLC/IC

### Analysis Batch: 18410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Total/NA	Water	314.0	
LCS 320-18410/8	Lab Control Sample	Total/NA	Water	314.0	
MB 320-18410/7	Method Blank	Total/NA	Water	314.0	
MRL 320-18410/6 MRL	Lab Control Sample	Total/NA	Water	314.0	

## Metals

### Prep Batch: 188842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	7470A	
LCS 500-188842/8-A	Lab Control Sample	Total/NA	Water	7470A	
MB 500-188842/7-A	Method Blank	Total/NA	Water	7470A	

### Analysis Batch: 189014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	7470A	188842
LCS 500-188842/8-A	Lab Control Sample	Total/NA	Water	7470A	188842
MB 500-188842/7-A	Method Blank	Total/NA	Water	7470A	188842

### Prep Batch: 189340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	Soluble Metals	
LCS 500-189340/2-A	Lab Control Sample	Soluble	Water	Soluble Metals	
MB 500-189340/1-A	Method Blank	Soluble	Water	Soluble Metals	

### Analysis Batch: 190127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	6020A	189340
LCS 500-189340/2-A	Lab Control Sample	Soluble	Water	6020A	189340
MB 500-189340/1-A	Method Blank	Soluble	Water	6020A	189340

### Analysis Batch: 190280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	6020A	189340
LCS 500-189340/2-A	Lab Control Sample	Soluble	Water	6020A	189340
MB 500-189340/1-A	Method Blank	Soluble	Water	6020A	189340

### Analysis Batch: 190369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	6020A	189340
500-57697-1	MW-5	Dissolved	Water	6020A	189340

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6/19/2013



## QC Association Summary

Client: KPRG and Associates, Inc.  
 Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

### Metals (Continued)

#### Analysis Batch: 190369 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-189340/2-A	Lab Control Sample	Soluble	Water	6020A	189340
LCS 500-189340/2-A	Lab Control Sample	Soluble	Water	6020A	189340
MB 500-189340/1-A	Method Blank	Soluble	Water	6020A	189340
MB 500-189340/1-A	Method Blank	Soluble	Water	6020A	189340

#### Analysis Batch: 190377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	6020A	189340
LCS 500-189340/2-A	Lab Control Sample	Soluble	Water	6020A	189340
MB 500-189340/1-A	Method Blank	Soluble	Water	6020A	189340

### General Chemistry

#### Prep Batch: 188817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	9010B	
LCS 500-188817/11-A	Lab Control Sample	Total/NA	Water	9010B	
MB 500-188817/10-A	Method Blank	Total/NA	Water	9010B	

#### Analysis Batch: 188893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	9014	188817
LCS 500-188817/11-A	Lab Control Sample	Total/NA	Water	9014	188817
MB 500-188817/10-A	Method Blank	Total/NA	Water	9014	188817

#### Analysis Batch: 188904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	SM 2540C	
LCS 500-188904/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 500-188904/1	Method Blank	Total/NA	Water	SM 2540C	

#### Analysis Batch: 189052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	SM 4500 NO2 B	
500-57697-1 MS	MW-5	Dissolved	Water	SM 4500 NO2 B	
500-57697-1 MSD	MW-5	Dissolved	Water	SM 4500 NO2 B	
LCS 500-189052/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	
MB 500-189052/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	

#### Analysis Batch: 189185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	SM 4500 F C	
LCS 500-189185/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MB 500-189185/3	Method Blank	Total/NA	Water	SM 4500 F C	

#### Analysis Batch: 189564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	SM 4500 NO3 F	
LCS 500-189564/37	Lab Control Sample	Total/NA	Water	SM 4500 NO3 F	
MB 500-189564/36	Method Blank	Total/NA	Water	SM 4500 NO3 F	

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## QC Association Summary

Client: KPRG and Associates, Inc.  
 Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

### General Chemistry (Continued)

#### Analysis Batch: 189576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	9251	
LCS 500-189576/43	Lab Control Sample	Total/NA	Water	9251	
MB 500-189576/42	Method Blank	Total/NA	Water	9251	

#### Analysis Batch: 189608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	Nitrate by calc	

#### Analysis Batch: 189729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-57697-1	MW-5	Dissolved	Water	9038	
500-57697-1 MS	MW-5	Dissolved	Water	9038	
500-57697-1 MSD	MW-5	Dissolved	Water	9038	
LCS 500-189729/4	Lab Control Sample	Total/NA	Water	9038	
MB 500-189729/3	Method Blank	Total/NA	Water	9038	



# Surrogate Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

## 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)
500-57697-1	MW-5	87	97	102	89
500-57697-2	Trip Blank	83	99	104	86
LCS 500-188928/4	Lab Control Sample	85	104	98	90
MB 500-188928/6	Method Blank	84	98	102	87

### Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

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## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

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

**Lab Sample ID: MB 500-188928/6**  
**Matrix: Water**  
**Analysis Batch: 188928**

**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			06/07/13 10:35	1
Toluene	<0.00050		0.00050		mg/L			06/07/13 10:35	1
Ethylbenzene	<0.00050		0.00050		mg/L			06/07/13 10:35	1
Xylenes, Total	<0.0010		0.0010		mg/L			06/07/13 10:35	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	84		75 - 125		06/07/13 10:35	1
Toluene-d8 (Surr)	98		75 - 120		06/07/13 10:35	1
4-Bromofluorobenzene (Surr)	102		75 - 120		06/07/13 10:35	1
Dibromofluoromethane	87		75 - 120		06/07/13 10:35	1

**Lab Sample ID: LCS 500-188928/4**  
**Matrix: Water**  
**Analysis Batch: 188928**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.0500	0.0530		mg/L		106	70 - 120
Ethylbenzene	0.0500	0.0506		mg/L		101	75 - 120
Xylenes, Total	0.100	0.0983		mg/L		98	70 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	85		75 - 125
Toluene-d8 (Surr)	104		75 - 120
4-Bromofluorobenzene (Surr)	98		75 - 120
Dibromofluoromethane	90		75 - 120

### Method: 314.0 - Perchlorate (IC)

**Lab Sample ID: MB 320-18410/7**  
**Matrix: Water**  
**Analysis Batch: 18410**

**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			06/13/13 18:29	1

**Lab Sample ID: LCS 320-18410/8**  
**Matrix: Water**  
**Analysis Batch: 18410**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

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## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

### Method: 314.0 - Perchlorate (IC) (Continued)

Lab Sample ID: MRL 320-18410/6 MRL  
Matrix: Water  
Analysis Batch: 18410

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		98	75 - 125

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

Lab Sample ID: MB 500-189340/1-A  
Matrix: Water  
Analysis Batch: 190127

Client Sample ID: Method Blank  
Prep Type: Soluble  
Prep Batch: 189340

Analyte	Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/11/13 11:12	06/17/13 17:40	1
Barium	<0.0025		0.0025		mg/L		06/11/13 11:12	06/17/13 17:40	1
Cadmium	<0.00050		0.00050		mg/L		06/11/13 11:12	06/17/13 17:40	1
Chromium	<0.0050		0.0050		mg/L		06/11/13 11:12	06/17/13 17:40	1
Iron	<0.10		0.10		mg/L		06/11/13 11:12	06/17/13 17:40	1
Lead	<0.00050		0.00050		mg/L		06/11/13 11:12	06/17/13 17:40	1
Selenium	<0.0025		0.0025		mg/L		06/11/13 11:12	06/17/13 17:40	1
Silver	<0.00050		0.00050		mg/L		06/11/13 11:12	06/17/13 17:40	1
Thallium	<0.0020		0.0020		mg/L		06/11/13 11:12	06/17/13 17:40	1
Vanadium	<0.0050		0.0050		mg/L		06/11/13 11:12	06/17/13 17:40	1
Zinc	<0.020		0.020		mg/L		06/11/13 11:12	06/17/13 17:40	1

Lab Sample ID: MB 500-189340/1-A  
Matrix: Water  
Analysis Batch: 190280

Client Sample ID: Method Blank  
Prep Type: Soluble  
Prep Batch: 189340

Analyte	Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.0010		0.0010		mg/L		06/11/13 11:12	06/18/13 17:02	1
Manganese	<0.0025		0.0025		mg/L		06/11/13 11:12	06/18/13 17:02	1
Nickel	<0.0020		0.0020		mg/L		06/11/13 11:12	06/18/13 17:02	1

Lab Sample ID: MB 500-189340/1-A  
Matrix: Water  
Analysis Batch: 190369

Client Sample ID: Method Blank  
Prep Type: Soluble  
Prep Batch: 189340

Analyte	Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0010		0.0010		mg/L		06/11/13 11:12	06/19/13 12:10	1

Lab Sample ID: MB 500-189340/1-A  
Matrix: Water  
Analysis Batch: 190369

Client Sample ID: Method Blank  
Prep Type: Soluble  
Prep Batch: 189340

Analyte	Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		06/11/13 11:12	06/19/13 14:08	1

TestAmerica Chicago

## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

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

Lab Sample ID: MB 500-189340/1-A			Client Sample ID: Method Blank						
Matrix: Water			Prep Type: Soluble						
Analysis Batch: 190377			Prep Batch: 189340						
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/11/13 11:12	06/19/13 15:06	1
Copper	<0.0020		0.0020		mg/L		06/11/13 11:12	06/19/13 15:06	1

Lab Sample ID: LCS 500-189340/2-A			Client Sample ID: Lab Control Sample						
Matrix: Water			Prep Type: Soluble						
Analysis Batch: 190127			Prep Batch: 189340						
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	0.100	0.0926		mg/L		93	80 - 120		
Barium	0.500	0.497		mg/L		99	80 - 120		
Cadmium	0.0500	0.0492		mg/L		98	80 - 120		
Chromium	0.200	0.214		mg/L		107	80 - 120		
Iron	1.00	1.19		mg/L		119	80 - 120		
Lead	0.100	0.106		mg/L		106	80 - 120		
Selenium	0.100	0.0946		mg/L		95	80 - 120		
Silver	0.0500	0.0465		mg/L		93	80 - 120		
Thallium	0.100	0.109		mg/L		109	80 - 120		
Vanadium	0.500	0.533		mg/L		107	80 - 120		
Zinc	0.500	0.480		mg/L		96	80 - 120		

Lab Sample ID: LCS 500-189340/2-A			Client Sample ID: Lab Control Sample						
Matrix: Water			Prep Type: Soluble						
Analysis Batch: 190280			Prep Batch: 189340						
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cobalt	0.500	0.512		mg/L		102	80 - 120		
Manganese	0.500	0.466		mg/L		93	80 - 120		
Nickel	0.500	0.526		mg/L		105	80 - 120		

Lab Sample ID: LCS 500-189340/2-A			Client Sample ID: Lab Control Sample						
Matrix: Water			Prep Type: Soluble						
Analysis Batch: 190369			Prep Batch: 189340						
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Beryllium	0.0500	0.0501		mg/L		100	80 - 120		

Lab Sample ID: LCS 500-189340/2-A			Client Sample ID: Lab Control Sample						
Matrix: Water			Prep Type: Soluble						
Analysis Batch: 190369			Prep Batch: 189340						
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron	1.00	0.954		mg/L		95	80 - 120		

Lab Sample ID: LCS 500-189340/2-A			Client Sample ID: Lab Control Sample						
Matrix: Water			Prep Type: Soluble						
Analysis Batch: 190377			Prep Batch: 189340						
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony	0.500	0.467		mg/L		93	80 - 120		

TestAmerica Chicago

Comp. 002552  
6/19/2013

## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

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

Lab Sample ID: LCS 500-189340/2-A  
Matrix: Water  
Analysis Batch: 190377

Client Sample ID: Lab Control Sample  
Prep Type: Soluble  
Prep Batch: 189340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.250	0.256		mg/L		102	80 - 120

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

Lab Sample ID: MB 500-188842/7-A  
Matrix: Water  
Analysis Batch: 189014

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 188842

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/06/13 15:30	06/07/13 11:05	1

Lab Sample ID: LCS 500-188842/8-A  
Matrix: Water  
Analysis Batch: 189014

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 188842

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00200		mg/L		100	80 - 120

### Method: 9014 - Cyanide

Lab Sample ID: MB 500-188817/10-A  
Matrix: Water  
Analysis Batch: 188893

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 188817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		06/06/13 12:35	06/06/13 15:07	1

Lab Sample ID: LCS 500-188817/11-A  
Matrix: Water  
Analysis Batch: 188893

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 188817

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.109		mg/L		109	80 - 120

### Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 500-189729/3  
Matrix: Water  
Analysis Batch: 189729

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			06/13/13 06:31	1

Lab Sample ID: LCS 500-189729/4  
Matrix: Water  
Analysis Batch: 189729

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	20.1		mg/L		100	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: KPRG and Associates, Inc.  
 Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

## Method: 9038 - Sulfate, Turbidimetric (Continued)

**Lab Sample ID: 500-57697-1 MS**  
**Matrix: Water**  
**Analysis Batch: 189729**

**Client Sample ID: MW-5**  
**Prep Type: Dissolved**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	200		400	613		mg/L		102	75 - 125

**Lab Sample ID: 500-57697-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 189729**

**Client Sample ID: MW-5**  
**Prep Type: Dissolved**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	200		400	626		mg/L		106	75 - 125	2	20

## Method: 9251 - Chloride

**Lab Sample ID: MB 500-189576/42**  
**Matrix: Water**  
**Analysis Batch: 189576**

**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			06/12/13 19 11	1

**Lab Sample ID: LCS 500-189576/43**  
**Matrix: Water**  
**Analysis Batch: 189576**

**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	49.2		mg/L		98	80 - 120

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

**Lab Sample ID: MB 500-188904/1**  
**Matrix: Water**  
**Analysis Batch: 188904**

**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			06/07/13 03 02	1

**Lab Sample ID: LCS 500-188904/2**  
**Matrix: Water**  
**Analysis Batch: 188904**

**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	246		mg/L		98	80 - 120

TestAmerica Chicago



## QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

### Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-189185/3  
Matrix: Water  
Analysis Batch: 189185

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			06/08/13 11:44	1

Lab Sample ID: LCS 500-189185/4  
Matrix: Water  
Analysis Batch: 189185

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	10.2		mg/L		102	80 - 120

### Method: SM 4500 NO2 B - Nitrogen, Nitrite

Lab Sample ID: MB 500-189052/3  
Matrix: Water  
Analysis Batch: 189052

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			06/06/13 09:43	1

Lab Sample ID: LCS 500-189052/4  
Matrix: Water  
Analysis Batch: 189052

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	0.104		mg/L		104	80 - 120

Lab Sample ID: 500-57697-1 MS  
Matrix: Water  
Analysis Batch: 189052

Client Sample ID: MW-5  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrite	<0.020		0.100	0.100		mg/L		100	75 - 125

Lab Sample ID: 500-57697-1 MSD  
Matrix: Water  
Analysis Batch: 189052

Client Sample ID: MW-5  
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrite	<0.020		0.100	0.104		mg/L		104	75 - 125	3	20

### Method: SM 4500 NO3 F - Nitrogen, Nitrate

Lab Sample ID: MB 500-189564/36  
Matrix: Water  
Analysis Batch: 189564

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			06/12/13 13:28	1

TestAmerica Chicago

Comp. 002555  
6/19/2013

# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

## Method: SM 4500 NO3 F - Nitrogen, Nitrate (Continued)

Lab Sample ID: LCS 500-189564/37  
Matrix: Water  
Analysis Batch: 189564

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	0.965		mg/L		96	80 - 120







## Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-57697-1

Login Number: 57697

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

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
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 $<6\text{mm}$ ( $1/4''$ ).	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-57697-1

Login Number: 57697  
 List Number: 1  
 Creator: Sadler, Jeremy

List Source: TestAmerica Sacramento  
 List Creation: 06/10/13 10:12 AM

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.	False	
Cooler Temperature is recorded.	True	14.4
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 $<6\text{mm}$ (1/4").	True	
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: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

### Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	06-30-13 *
California	NELAP	9	01132CA	04-30-14
Georgia	State Program	4	N/A	04-30-14
Georgia	State Program	4	939	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14
Iowa	State Program	7	82	05-01-14
Kansas	NELAP	7	E-10161	10-31-13
Kentucky	State Program	4	90023	12-31-13
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-13
Massachusetts	State Program	1	M-IL035	06-30-13
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-13
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-13
South Carolina	State Program	4	77001	06-30-13 *
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-13
Wyoming	State Program	8	8TMS-Q	07-15-13

### 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	01-31-14
Alaska (UST)	State Program	10	UST-055	12-18-13
Arizona	State Program	9	AZ0708	08-11-13
Arkansas DEQ	State Program	6	88-0691	06-30-13 *
California	NELAP	9	1119CA	01-31-14
Colorado	State Program	8	N/A	08-31-13
Connecticut	State Program	1	PH-0691	06-30-13
Florida	NELAP	4	E87570	06-30-13
Guam	State Program	9	N/A	08-31-13
Hawaii	State Program	9	N/A	01-31-14
Illinois	NELAP	5	200060	03-17-14
Kansas	NELAP	7	E-10375	10-31-13
Louisiana	NELAP	6	30612	06-30-13
Michigan	State Program	5	9947	01-31-14
Nebraska	State Program	7	NE-OS-22-13	01-31-14
Nevada	State Program	9	CA44	07-31-13
New Jersey	NELAP	2	CA005	06-30-13
New York	NELAP	2	11666	04-01-14
Northern Mariana Islands	State Program	9	MP0007	02-01-14
Oregon	NELAP	10	CA200005	03-28-14
Pennsylvania	NELAP	3	68-01272	03-31-14
South Carolina	State Program	4	87014	06-30-13
Texas	NELAP	6	T104704399-08-TX	05-31-14

\* Expired certification is currently pending renewal and is considered valid

TestAmerica Chicago

# Certification Summary

Client: KPRG and Associates, Inc.  
Project/Site: Joliet #29 Station Ash Ponds

TestAmerica Job ID: 500-57697-1

## Laboratory: TestAmerica Sacramento (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
US Fish & Wildlife	Federal		LE148388-0	12-31-13
USDA	Federal		P330-11-00436	12-30-14
USEPA UCMR	Federal	1	CA00044	11-06-14
Utah	NELAP	8	QUAN1	01-31-14
Washington	State Program	10	C581	05-05-14
West Virginia	State Program	3	9930C	12-31-13
West Virginia DEP	State Program	3	334	07-31-13
Wyoming	State Program	8	8TMS-Q	01-31-14