

QUARTERLY GROUNDWATER MONITORING REPORT
JOLIET #29 GENERATING STATION

June 23, 2017

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

Re: Quarterly Groundwater Monitoring Results – Second Quarter 2017
Joliet #29 Generating Station – Ash Impoundments
Compliance Commitment Agreement VN W-2012-00059; ID# 6284

Dear Ms. Rhodes:

The second quarterly groundwater sampling for 2017 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 summarizing the results of the monitoring event.

Well Inspection and Sampling Procedures

The groundwater monitoring network around the ash ponds at the Joliet 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). Overall the wells were in good condition with locked protector casings and the concrete surface seals were intact.

Groundwater samples at well locations MW-3 through MW-11 were collected using the low-flow sampling technique. Based on 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 well locations, samples were collected using a peristaltic pump. It is noted that during this quarter, there was an insufficient volume of water within well MW-1 to be able to collect a sample.

One duplicate sample was collected from well MW-9. 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 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. Groundwater flow is generally consistent with historical conditions with flow in a southerly direction.

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. All duplicate values were within an acceptable range (below +/- 30%). All wells for which the sampling data reports a value above one or more groundwater standards are located within the area of the approved Groundwater Management Zone.

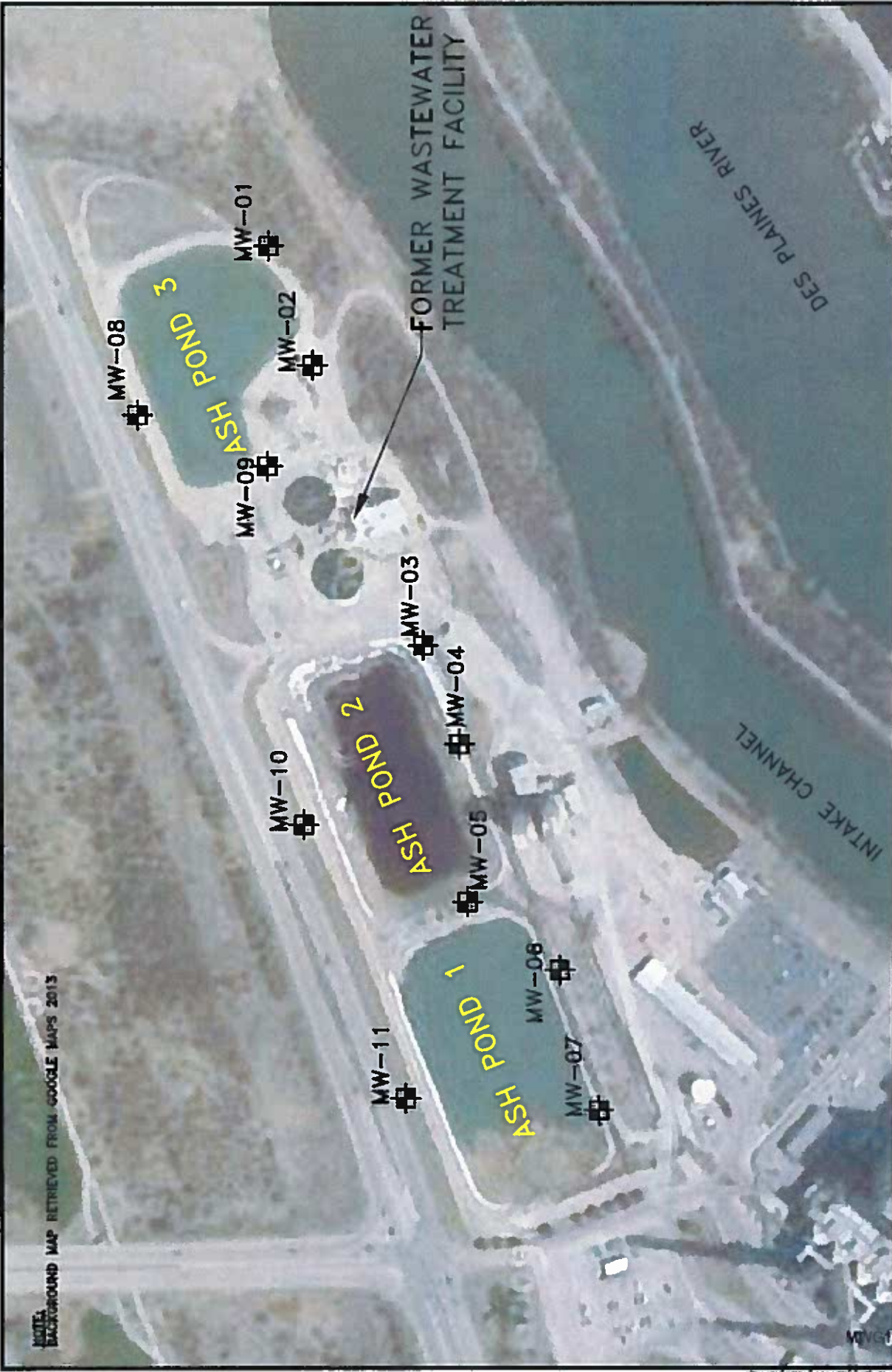
If there are any questions, please contact either Sharene Shealey of Midwest Generation at 815-372-4625 or Richard Gnat of KPRG and Associates, Inc. at 262-781-0475.

Sincerely,


William Naglosky
Station Manager

cc: William Buscher, IEPA
Sharene Shealey, Midwest Generation, LLC
Peter O'Day, Midwest Generation, LLC
Richard Gnat, KPRG and Associates, Inc.

FIGURES



MVG-13-15_62325

SITE MAP	
JOLIET #29 GENERATING STATION JOLIET, ILLINOIS	
Scale: 1" = 250'	Date: January 23, 2015
KPRG Project No. 12313.0	
FIGURE 1	

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

K P R G

14665 West Libbon Road, Suite 28 Brookfield, WI 53005 Telephone 262-781-0475 Facsimile 262-781-0478
414 Plaza Drive, Suite 106 Westmont, Illinois 60159 Telephone 630-325-1300 Facsimile 630-325-1591

0 250'
APPROXIMATE SCALE

N



NOTES:
BACKGROUND MAP RETRIEVED FROM GOOGLE MAPS 2013

LEGEND:
 GROUNDWATER CONTOUR LINE
 GROUNDWATER FLOW LINE

MWG15-15 62326



ENVIRONMENTAL CONSULTATION & REMEDIATION	GROUNDWATER CONTOUR MAP 04/2017	
	JOLIET #29 GENERATING STATION JOLIET, ILLINOIS	
K P R G KPRG and Associates, Inc. 14665 West Libbon Road, Suite 215 Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478 414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593	Scale: 1" = 250'	Date: June 22, 2017
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-01	02/10/15	534.76	531.46	NM	NM	504.88	NM	NM	29.88
	05/27/15	534.76	531.46	NM	NM	504.88	NM	NM	29.88
	08/04/15	534.76	531.46	NM	NM	504.88	NM	NM	29.88
	10/27/15	534.76	531.46	NM	NM	504.88	NM	NM	29.88
	02/09/16	534.03	531.56	NM	NM	505.50	NM	NM	28.53
	05/10/16	534.03	531.56	505.90	506.18	505.50	28.13	27.85	28.53
	08/30/16	534.03	531.56	506.85	506.91	505.50	27.18	27.12	28.53
	11/01/16	534.03	531.56	505.89	505.53	505.50	28.14	28.50	28.53
	02/06/17	534.03	531.56	NM	NM	505.50	NM	NM	28.53
04/25/17	534.03	531.56	NM	NM	505.50	NM	NM	28.53	
MW-02	02/10/15	534.28	531.19	505.17	505.17	504.05	29.11	29.11	30.23
	05/27/15	534.28	531.19	505.34	505.32	504.05	28.94	28.96	30.23
	08/04/15	534.28	531.19	505.14	505.13	504.05	29.14	29.15	30.23
	10/27/15	534.28	531.19	504.89	505.09	504.05	29.39	29.19	30.23
	02/09/16	534.30	531.17	505.59	505.57	504.07	28.71	28.73	30.23
	05/10/16	534.30	531.17	505.89	506.09	504.07	28.41	28.21	30.23
	08/30/16	534.30	531.17	506.83	506.97	504.07	27.47	27.33	30.23
	11/01/16	534.30	531.17	505.90	505.89	504.07	28.40	28.41	30.23
	02/06/17	534.30	531.17	505.46	505.74	504.07	28.84	28.56	30.23
04/25/17	534.30	531.17	505.69	505.70	504.07	28.61	28.60	30.23	
MW-03	02/10/15	538.78	535.54	505.19	505.20	494.68	33.59	33.58	44.10
	05/27/15	538.78	535.54	505.36	505.35	494.68	33.42	33.43	44.10
	08/04/15	538.78	535.54	505.22	505.22	494.68	33.56	33.56	44.10
	10/27/15	538.78	535.54	504.91	505.04	494.68	33.87	33.74	44.10
	02/09/16	538.79	535.53	505.62	505.51	494.68	33.17	33.28	44.10
	05/10/16	538.79	535.53	505.97	505.99	494.68	32.82	32.80	44.10
	08/30/16	538.79	535.53	506.91	507.22	494.68	31.88	31.57	44.10
	11/01/16	538.79	535.53	505.91	505.94	494.68	32.88	32.85	44.10
	02/06/17	538.79	535.53	505.54	505.54	494.68	33.25	33.25	44.10
04/26/17	538.79	535.53	505.73	505.78	494.68	33.06	33.01	44.10	
MW-04	02/10/15	539.03	535.80	505.19	505.18	496.13	33.84	33.85	42.90
	05/27/15	539.03	535.80	505.39	505.37	496.13	33.64	33.66	42.90
	08/04/15	539.03	535.80	505.19	505.19	496.13	33.84	33.84	42.90
	10/27/15	539.03	535.80	504.98	505.00	496.13	34.05	34.03	42.90
	02/09/16	539.01	535.83	505.59	505.44	496.11	33.42	33.57	42.90
	05/10/16	539.01	535.83	505.94	505.95	496.11	33.07	33.06	42.90
	08/30/16	539.01	535.83	506.93	507.19	496.11	32.08	31.82	42.90
	11/01/16	539.01	535.83	505.85	505.87	496.11	33.16	33.14	42.90
	02/06/17	539.01	535.83	505.50	505.52	496.11	33.51	33.49	42.90
04/26/17	539.01	535.83	505.72	505.74	496.11	33.29	33.27	42.90	
MW-05	02/11/15	539.69	536.43	505.12	505.12	494.64	34.57	34.57	45.05
	05/27/15	539.69	536.43	505.26	505.25	494.64	34.43	34.44	45.05
	08/04/15	539.69	536.43	505.14	505.14	494.64	34.55	34.55	45.05
	10/27/15	539.69	536.43	504.78	504.95	494.64	34.91	34.74	45.05
	02/09/16	539.64	536.36	505.46	505.33	494.59	34.18	34.31	45.05
	05/10/16	539.64	536.36	505.83	505.86	494.59	33.81	33.78	45.05
	08/30/16	539.64	536.36	506.82	507.09	494.59	32.82	32.55	45.05
	11/01/16	539.64	536.36	505.74	505.74	494.59	33.90	33.90	45.05
	02/06/17	539.64	536.36	505.41	505.40	494.59	34.23	34.24	45.05
04/26/17	539.64	536.36	505.60	505.66	494.59	34.04	33.98	45.05	
MW-06	02/10/15	539.06	535.86	505.23	505.23	496.86	33.83	33.83	42.20
	05/28/15	539.06	535.86	505.46	505.45	496.86	33.60	33.61	42.20
	08/05/15	539.06	535.86	505.11	505.12	496.86	33.95	33.94	42.20
	10/27/15	539.06	535.86	504.88	504.93	496.86	34.18	34.13	42.20
	02/09/16	539.05	535.89	505.61	505.46	496.85	33.44	33.59	42.20
	05/10/16	539.05	535.89	506.00	506.94	496.85	33.05	32.11	42.20
	08/30/16	539.05	535.89	506.96	507.36	496.85	32.09	31.69	42.20
	11/01/16	539.05	535.89	505.88	505.91	496.85	33.17	33.14	42.20
	02/06/17	539.05	535.89	505.56	505.57	496.85	33.49	33.48	42.20
04/27/17	539.05	535.89	505.74	505.77	496.85	33.31	33.28	42.20	
MW-07	02/10/15	539.35	535.86	505.24	505.24	496.12	34.11	34.11	43.23
	05/28/15	539.35	535.86	505.50	505.50	496.12	33.85	33.85	43.23
	08/05/15	539.35	535.86	505.18	505.17	496.12	34.17	34.18	43.23
	10/27/15	539.35	535.86	504.93	505.00	496.12	34.42	34.35	43.23
	02/09/16	539.35	535.87	505.66	505.51	496.12	33.69	33.84	43.23
	05/10/16	539.35	535.87	506.34	507.02	496.12	33.01	32.33	43.23
	08/30/16	539.35	535.87	507.04	507.41	496.12	32.31	31.94	43.23
	11/01/16	539.35	535.87	505.91	505.93	496.12	33.44	33.42	43.23
	02/06/17	539.35	535.87	505.59	505.62	496.12	33.76	33.73	43.23
04/27/17	539.35	535.87	505.77	505.82	496.12	33.58	33.53	43.23	

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

Well ID	Date	Top of Casing 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-08	02/10/15	536 87	533 72	505 18	505 19	-498 81	31 69	31 68	38 06
	05/27/15	536 87	533 72	505 36	505 38	-498 81	31 51	31 49	38 06
	08/04/15	536 87	533 72	505 19	505 20	-498 81	31 68	31 67	38 06
	10/27/15	536 87	533 72	504 93	504 98	-498 81	31 94	31 89	38 06
	02/09/16	536 96	533 77	505 72	505 72	-498 90	31 24	31 24	38 06
	05/10/16	536 96	533 77	498 00	498 24	-498 90	38 96	38 72	38 06
	08/30/16	536 96	533 77	507 05	507 09	-498 90	29 91	29 87	38 06
	11/01/16	536 96	533 77	506 01	506 03	-498 90	30 95	30 93	38 06
	02/06/17	536 96	533 77	505 58	505 62	-498 90	31 38	31 34	38 06
04/25/17	536 96	533 77	505 74	505 79	-498 90	31 22	31 17	38 06	
MW-09	02/10/15	534 44	531 13	505 22	504 70	-496 29	29 22	29 74	38 15
	05/27/15	534 44	531 13	505 37	504 98	-496 29	29 07	29 46	38 15
	08/04/15	534 44	531 13	505 22	504 91	-496 29	29 22	29 53	38 15
	10/27/15	534 44	531 13	504 96	504 83	-496 29	29 48	29 61	38 15
	02/09/16	534 41	531 08	505 64	505 49	-496 26	28 77	28 92	38 15
	05/10/16	534 41	531 08	505 90	506 39	-496 26	28 51	28 02	38 15
	08/30/16	534 41	531 08	506 98	506 94	-496 26	27 43	27 47	38 15
	11/01/16	534 41	531 08	505 89	505 32	-496 26	28 52	29 09	38 15
	02/06/17	534 41	531 08	505 51	505 66	-496 26	28 90	28 75	38 15
04/25/17	534 41	531 08	505 66	505 54	-496 26	28 75	28 87	38 15	
MW-10	02/11/15	540 03	536 95	505 27	505 27	-496 10	34 76	34 76	43 93
	05/28/15	540 03	536 95	505 48	505 48	-496 10	34 55	34 55	43 93
	08/04/15	540 03	536 95	505 29	505 30	-496 10	34 74	34 73	43 93
	10/27/15	540 03	536 95	504 93	505 07	-496 10	35 10	34 96	43 93
	02/09/16	540 02	536 98	505 70	505 61	-496 09	34 32	34 41	43 93
	05/10/16	540 02	536 98	506 00	506 66	-496 09	34 02	33 36	43 93
	08/30/16	540 02	536 98	507 05	507 38	-496 09	32 97	32 64	43 93
	11/01/16	540 02	536 98	505 98	505 97	-496 09	34 04	34 05	43 93
	02/06/17	540 02	536 98	505 60	505 62	-496 09	34 42	34 40	43 93
04/26/17	540 02	536 98	505 80	505 84	-496 09	34 22	34 18	43 93	
MW-11	02/11/15	539 47	536 52	505 49	505 49	-497 14	33 98	33 98	42 33
	05/28/15	539 47	536 52	505 96	505 97	-497 14	33 51	33 50	42 33
	08/04/15	539 47	536 52	505 65	505 64	-497 14	33 82	33 83	42 33
	10/27/15	539 47	536 52	505 16	505 32	-497 14	34 31	34 15	42 33
	02/09/16	539 41	536 62	506 10	505 88	-497 08	33 31	33 53	42 33
	05/10/16	539 41	536 62	507 33	506 60	-497 08	32 08	32 81	42 33
	08/30/16	539 41	536 62	508 27	508 85	-497 08	31 14	30 56	42 33
	11/01/16	539 41	536 62	506 32	506 28	-497 08	33 09	33 13	42 33
	02/06/17	539 41	536 62	505 90	505 92	-497 08	33 51	33 49	42 33
04/26/17	539 41	536 62	506 17	506 17	-497 08	33 24	33 24	42 33	

Note: Values for Depth to Bottom of Well are from prior to the installation of the dedicated pumps

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

Sample: MW-01	Date	5/27/2015		8/4/2015		10/28/2015		2/9/2016		5/11/2016		8/30/2016		11/3/2016		2/6/2017		4/25/2017	
		Standards	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL
Antimony	0.006	NS	NS	NS	NS	NS	NS	NS	NS	0.0030	ND	0.0030	ND	0.0030	ND	NS	NS	NS	NS
Arsenic	0.010	NS	NS	NS	NS	NS	NS	NS	NS	0.0010	ND	0.0010	ND	0.0010	ND	NS	NS	NS	NS
Barium	2.0	NS	NS	NS	NS	NS	NS	NS	NS	0.0025	0.15	0.0025	0.071	0.0025	0.12	NS	NS	NS	NS
Beryllium	0.004	NS	NS	NS	NS	NS	NS	NS	NS	0.0010	ND	0.0010	ND	0.0010	ND	NS	NS	NS	NS
Boron	2.0	NS	NS	NS	NS	NS	NS	NS	NS	0.050	0.18	0.050	0.24	0.050	0.25	NS	NS	NS	NS
Cadmium	0.005	NS	NS	NS	NS	NS	NS	NS	NS	0.00050	ND	0.00050	ND	0.00050	ND	NS	NS	NS	NS
Chloride	200.0	NS	NS	NS	NS	NS	NS	NS	NS	50	400	10	93	10	73	NS	NS	NS	NS
Chromium	0.1	NS	NS	NS	NS	NS	NS	NS	NS	0.0050	ND	0.0050	ND	0.0050	ND	NS	NS	NS	NS
Cobalt	1.0	NS	NS	NS	NS	NS	NS	NS	NS	0.0010	ND	0.0010	ND	0.0010	ND	NS	NS	NS	NS
Copper	0.65	NS	NS	NS	NS	NS	NS	NS	NS	0.0020	ND	0.0020	ND	0.0020	ND	NS	NS	NS	NS
Cyanide	0.2	NS	NS	NS	NS	NS	NS	NS	NS	0.010	ND	0.010	ND	0.010	ND	NS	NS	NS	NS
Fluoride	4.0	NS	NS	NS	NS	NS	NS	NS	NS	0.10	0.42	0.10	0.37	0.10	0.35	NS	NS	NS	NS
Iron	5.0	NS	NS	NS	NS	NS	NS	NS	NS	0.10	ND	0.10	ND	0.10	ND	NS	NS	NS	NS
Lead	0.0075	NS	NS	NS	NS	NS	NS	NS	NS	0.00050	ND	0.00050	ND	0.00050	ND	NS	NS	NS	NS
Manganese	0.15	NS	NS	NS	NS	NS	NS	NS	NS	0.0025	0.0065	0.0025	ND	0.0025	0.0032	NS	NS	NS	NS
Mercury	0.002	NS	NS	NS	NS	NS	NS	NS	NS	0.00020	ND	0.00020	ND	0.00020	ND	NS	NS	NS	NS
Nickel	0.1	NS	NS	NS	NS	NS	NS	NS	NS	0.0020	0.0041	0.0020	0.0022	0.0020	0.0022	NS	NS	NS	NS
Nitrogen/Nitrate	10.0	NS	NS	NS	NS	NS	NS	NS	NS	0.10	1.2	0.10	1.9	0.10	1.0	NS	NS	NS	NS
Nitrogen/Nitrate, Nitrite	NA	NS	NS	NS	NS	NS	NS	NS	NS	0.10	1.2	0.10	1.9	0.10	1.0	NS	NS	NS	NS
Nitrogen/Nitrite	NA	NS	NS	NS	NS	NS	NS	NS	NS	0.020	ND	0.020	ND	0.020	ND	NS	NS	NS	NS
Perchlorate	0.0049	NS	NS	NS	NS	NS	NS	NS	NS	0.0040	ND	0.0040	ND	0.0040	ND	NS	NS	NS	NS
Selenium	0.05	NS	NS	NS	NS	NS	NS	NS	NS	0.013	0.021	0.0025	0.0072	0.0025	0.0037	NS	NS	NS	NS
Silver	0.05	NS	NS	NS	NS	NS	NS	NS	NS	0.00050	ND	0.00050	ND	0.00050	ND	NS	NS	NS	NS
Sulfate	400.0	NS	NS	NS	NS	NS	NS	NS	NS	50	170	25	74	20	62	NS	NS	NS	NS
Thallium	0.002	NS	NS	NS	NS	NS	NS	NS	NS	0.0020	ND	0.0020	ND	0.0020	ND	NS	NS	NS	NS
Total Dissolved Solids	1,200	NS	NS	NS	NS	NS	NS	NS	NS	1,100	10	670	10	600	600	NS	NS	NS	NS
Vanadium	0.049	NS	NS	NS	NS	NS	NS	NS	NS	0.0050	ND	0.0050	ND	0.0050	0.0071	NS	NS	NS	NS
Zinc	5.0	NS	NS	NS	NS	NS	NS	NS	NS	0.020	ND	0.020	ND	0.020	ND	NS	NS	NS	NS
Benzene	0.005	NS	NS	NS	NS	NS	NS	NS	NS	0.0005	ND	0.0005	ND	0.0005	ND	NS	NS	NS	NS
BTEX	11.705	NS	NS	NS	NS	NS	NS	NS	NS	0.002	0.0024	0.002	0.002	0.002	0.00743	NS	NS	NS	NS
pH	6.5 - 9.0	NS	NS	NS	NS	NS	NS	NS	NS	NA	7.02	NA	6.50	NA	7.08	NS	NS	NS	NS
Temperature	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	14.78	NA	17.29	NA	14.78	NS	NS	NS	NS
Conductivity	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	1.83	NA	1.05	NA	0.91	NS	NS	NS	NS
Dissolved Oxygen	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	2.64	NA	5.40	NA	3.90	NS	NS	NS	NS
ORP	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	26.4	NA	-62.3	NA	-25.4	NS	NS	NS	NS

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 (ppm) unless otherwise noted.

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

NR - Not Required
 NS - Not Sampled
 F - Denotes instrument related QC exceeds the control limits
 F+ - MS and/or MSD Recovery outside of limits.

Temperature °C
 Conductivity $\mu\text{mS/cm}$
 Dissolved Oxygen mg/L
 ORP mV

degrees Celsius
 millieinsteins/centimeter
 milligrams-liter
 millivolt

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

Parameter	Standards	Date		5/27/2015		8/4/2015		10/28/2015		2/9/2016		5/11/2016		8/31/2016		11/1/2016		2/8/2017		4/25/2017	
		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
Arsenic	0.010	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	0.092	0.0025	0.090	0.0025	0.084	0.0025	0.084	0.0025	0.098	0.0025	0.11	0.0025	0.087	0.0025	0.071	0.0025	0.085	0.0025	0.10
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	0.35	0.050	0.25	0.050	0.21	0.050	0.21	0.050	0.20	0.050	0.18	0.050	0.18	0.050	0.18	0.050	0.17	0.050	0.15
Cadmium	0.005	0.00050	0.00069	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	50	410	10	290	10	130	10	180	10	180	10	340	10	170	10	97	10	140	10	330
Chromium	0.1	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	0.0010	0.010	0.0010	0.0027	0.0010	0.0017	0.0010	0.0011	0.0010	0.0011	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Copper	0.65	0.0020	0.0059	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	0.40	0.10	0.41	0.10	0.39	0.10	0.38	0.10	0.40	0.10	0.40	0.10	0.44	0.10	0.40	0.10	0.35	0.10	0.32
Iron	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
Lead	0.075	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	0.0025	0.0031	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
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	0.0020	0.013	0.0020	0.0073	0.0020	0.0031	0.0020	0.0039	0.0020	0.0039	0.0020	0.0071	0.0020	0.0062	0.0020	0.0044	0.0020	0.0030	0.0020	0.0050
Nitrogen/Nitrate	10.0	0.40	0.43	0.10	1.2	0.10	1.0	0.10	1.5	0.10	1.5	0.10	1.4	0.10	1.5	0.10	0.79	0.10	1.0	0.10	1.8
Nitrogen/Nitrite	NA	0.10	0.43	0.10	1.2	0.10	1.0	0.10	1.5	0.10	1.5	0.10	1.4	0.10	1.5	0.10	0.79	0.10	1.0	0.10	1.8
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	0.020	ND
Perchlorate	0.0049	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND
Selenium	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
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	100	25	85	20	60	20	88	20	88	25	100	25	62	10	41	20	50	25	140
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	1,200	10	890	10	610	10	750	10	960	10	960	10	700	10	570	10	630	10	890
Vanadium	0.049	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
Zinc	5.0	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	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND
BETX	11.705	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	ND
pH	6.5 - 9.0	NA	6.83	NA	7.61	NA	7.05	NA	7.12	NA	7.13	NA	7.13	NA	6.70	NA	7.26	NA	6.97	NA	7.15
Temperature	NA	NA	14.63	NA	16.75	NA	15.07	NA	11.10	NA	13.52	NA	13.52	NA	18.75	NA	17.85	NA	11.92	NA	14.74
Conductivity	NA	NA	1.75	NA	1.38	NA	1.10	NA	0.92	NA	1.38	NA	1.38	NA	1.11	NA	0.84	NA	0.78	NA	1.22
Dissolved Oxygen	NA	NA	1.96	NA	3.66	NA	4.47	NA	5.38	NA	4.25	NA	4.25	NA	4.84	NA	3.87	NA	4.90	NA	6.60
ORP	NA	NA	33.9	NA	-51.3	NA	110.4	NA	80.7	NA	38.4	NA	38.4	NA	47.8	NA	91.2	NA	15.3	NA	10.1

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, (ppm) unless otherwise noted.

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

NR - Not Required
 NS - Not Sampled
 - - Direction instrument related QC exceeds the control limits
 F1 - MS end or MSD Recovery outside of limits.
 F2 - MS/MSD RPD exceed control limits.

Temperature °C
 Conductivity µmhos/cm
 Dissolved Oxygen mg/L
 Oxygen Reduction Potential (ORP) mV

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

Parameter	Standards	5/27/2015		8/4/2015		10/28/2015		2/10/2016		5/10/2016		8/31/2016		11/2/2016		2/6/2017		4/26/2017	
		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	0.0010	0.0015	0.0010	ND	0.0010	ND	0.0010	0.0015	0.0010	ND	0.0010	0.0011	0.0010	0.0013	0.0010	0.0013	0.0010	0.0011
Barium	2.0	0.0025	0.004	0.0025	0.092	0.0025	0.10	0.0025	0.098	0.0025	0.093	0.0025	0.093	0.0025	0.089	0.0025	0.096	0.0025	0.096
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	0.48	0.050	0.29	0.050	0.49	0.050	0.44	0.050	0.37	0.050	0.38	0.050	0.39	0.050	0.45
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
Chloride	200.0	10	220	10	230	10	230	10	200	10	240	10	240	10	170	10	140	10	210
Chromium	0.1	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	0.0010	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	0.0020	ND	0.0020	0.0021	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	0.43	0.10	0.47	0.10	0.41	0.10	0.48	0.10	0.49	0.10	0.45	0.10	0.57	0.10	0.39	0.10	0.35
Iron	5.0	0.10	ND	0.10	ND	0.10	ND	0.10	0.22	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	0.10
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	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	0.0040	0.0025	ND	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	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.0020	0.0026	0.0020	ND	0.0020	0.0023	0.0020	0.0025	0.0020	ND	0.0020	0.0020	0.0020	0.0020	0.0020	0.0025	0.0020	0.0020
Nitrogen/Nitrate	10.0	0.10	2.1	0.10	1.9	0.10	1.6	0.10	1.9	0.10	1.5	0.10	3.4	0.10	1.9	0.10	1.4	0.10	2.6
Nitrogen/Nitrate, Nitrite	NA	0.20	2.1	0.10	1.9	0.10	1.6	0.10	1.9	0.20	1.5	0.50	3.4	0.10	1.9	0.10	1.4	0.20	2.6
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
Nitrogen/Nitrite	NA	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND
Perchlorate	0.049	0.0025	0.0063	0.0025	0.0066	0.0025	ND	0.0025	0.0048	0.013	ND	0.0025	0.0032	0.0025	0.0031	0.0025	0.0033	0.0025	0.0050
Selenium	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
Silver	400.0	25	84	25	91	40	180	50	150	25	130	25	96	20	87	25	75	25	110
Sulfate	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	830	10	860	10	820	10	780	10	830	10	920	10	800	10	740	10	890
Vanadium	0.049	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
Zinc	5.0	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	0.003	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	0.00094	0.0005	ND	0.0005	ND
BETX	11.705	0.002	0.0015	0.002	ND	0.002	0.0065	0.002	ND	0.002	0.0027	0.002	ND	0.002	0.02984	0.002	ND	0.002	ND
pH	6.5 - 9.0	NA	7.37	NA	7.29	NA	7.11	NA	7.31	NA	7.07	NA	7.18	NA	7.45	NA	7.35	NA	7.03
Temperature	NA	NA	16.14	NA	17.45	NA	13.85	NA	6.78	NA	13.77	NA	18.94	NA	16.53	NA	12.81	NA	15.34
Conductivity	NA	NA	1.23	NA	1.26	NA	1.50	NA	0.86	NA	1.18	NA	1.35	NA	1.14	NA	0.95	NA	1.05
Dissolved Oxygen	NA	NA	5.49	NA	6.03	NA	5.48	NA	5.93	NA	5.65	NA	6.91	NA	5.30	NA	5.69	NA	7.22
ORP	NA	NA	64.1	NA	7.6	NA	106.6	NA	94.8	NA	93.8	NA	66.4	NA	66.0	NA	5.1	NA	59.8

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) unless otherwise noted.

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
 FI = FIS and/or ASD Recovery outside of limits.

Temperature °C
 Conductivity um/cm
 Dissolved Oxygen mg/L
 Oxygen Reduction Potential (ORP) mV
 degrees Celsius
 milligrams/centimeters
 milligrams/liter
 millivolts

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

Parameter	Standards	5/27/2015		8/4/2015		10/28/2015		2/10/2016		5/10/2016		8/31/2016		11/2/2016		2/6/2017		4/26/2017	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.006	0.0030	ND FI	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	0.0010	0.0013 FI	0.0010	0.0015	0.0010	ND	0.0010	0.0013	0.0010	0.0013	0.0010	0.0013	0.0010	0.0012	0.0010	0.0013	0.0010	0.0011
Barium	2.0	0.0025	0.090 FI	0.0025	0.067	0.0025	0.083	0.0025	0.085	0.0025	0.10	0.0025	0.089	0.0025	0.079	0.0025	0.10	0.0025	0.084
Beryllium	0.004	0.0010	ND FI	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	0.36 FI	0.050	0.33	0.050	0.30	0.050	0.35	0.050	0.51	0.050	0.43	0.050	0.32	0.050	0.38	0.050	0.29
Cadmium	0.005	0.00050	ND FI	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	290	10	200	10	200	10	200	10	260	10	200	10	140	10	200	10	220
Chromium	0.1	0.0050	ND FI	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	0.0010	0.0062 FI	0.0010	0.0047	0.0010	0.0041	0.0010	0.0075	0.0010	0.0046	0.0010	0.0072	0.0010	0.0029	0.0010	0.0082	0.0010	0.0052
Copper	0.65	0.0020	ND FI	0.0020	0.0072	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	0.43	0.10	0.49	0.10	0.45	0.10	0.51	0.10	0.50	0.10	0.44	0.10	0.46	0.10	0.38	0.10	0.37
Iron	5.0	0.10	ND FI	0.10	ND	0.10	ND	0.10	0.31	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND
Lead	0.0075	0.00050	ND FI	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	0.0025	ND FI	0.0025	ND	0.0025	ND	0.0025	0.0054	0.0025	ND	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	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.0020	0.0023 FI	0.0020	ND	0.0020	ND	0.0020	0.0021	0.0020	0.0021	0.0020	0.0020	0.0020	ND	0.0020	ND	0.0020	ND
Nitrogen/Nitrate	10.0	0.10	2.5	0.10	1.3	0.10	1.7	0.10	1.8	0.10	2.1	0.10	1.8	0.10	1.9	0.10	1.8	0.10	2.4
Nitrogen/Nitrate, Nitrite	NA	0.20	2.5	0.10	1.3	0.10	1.7	0.10	1.8	0.20	2.1	0.10	1.8	0.10	1.9	0.10	1.8	0.20	2.4
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
Perchlorate	0.049	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND
Selenium	0.05	0.0025	ND FI	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	0.00050	ND FI	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	20	88	25	92	20	100	25	100	50	130	50	100	25	67	25	76	25	80
Thallium	0.002	0.0020	ND FI	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	30	980	10	770	10	780	10	760	10	860	10	800	10	700	10	870	10	750
Vanadium	0.049	0.0050	ND FI	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Zinc	5.0	0.020	ND FI	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	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	0.0010	0.0005	ND	0.0005	ND
BTEX	11.705	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	0.0017	0.002	ND	0.002	0.01675	0.002	ND	0.0005	ND
pH	6.5 - 9.0	NA	7.31	NA	6.80	NA	7.07	NA	7.22	NA	6.71	NA	7.07	NA	7.25	NA	7.19	NA	7.46
Temperature	NA	NA	15.49	NA	18.49	NA	13.44	NA	4.24	NA	12.83	NA	19.61	NA	15.48	NA	11.95	NA	15.52
Conductivity	NA	NA	1.34	NA	1.20	NA	1.34	NA	0.80	NA	1.21	NA	1.33	NA	1.10	NA	1.01	NA	1.08
Dissolved Oxygen	NA	NA	6.54	NA	5.60	NA	5.76	NA	6.44	NA	7.00	NA	7.06	NA	3.56	NA	5.06	NA	8.90
ORP	NA	NA	36.7	NA	25.8	NA	104.2	NA	99.2	NA	150.9	NA	72.1	NA	71.2	NA	-14.7	NA	-15.3

Notes: Standards obtained from IAC, Title 35, Chapter 1, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class 1 Potable Resource Groundwater
 All values are in mg/L (ppm) unless otherwise noted.

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 limit
 F1, M5 and/or M5D Recovery outside of limits.

Temperature °C
 Conductivity µmS/cm
 Dissolved Oxygen mg/L
 Oxygen Reduction Potential (ORP) mV
 degrees Celsius
 milligrams per liter
 millivolts

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

Parameter	Standards	Date		5/27/2015		8/4/2015		10/28/2015		2/10/2016		5/10/2016		8/31/2016		11/2/2016		2/6/2017		4/26/2017	
		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
Arsenic	0.010	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	0.053	0.0025	0.060	0.0025	0.037	0.0025	0.063	0.0025	0.063	0.0025	0.065	0.0025	0.066	0.0025	0.054	0.0025	0.077	0.0025	0.059
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	1.0	0.050	1.1	0.050	0.57	0.050	0.45	0.050	0.45	0.050	0.69	0.050	0.98	0.050	0.40	0.050	0.47	0.050	0.62
Cadmium	0.005	0.00050	ND	0.00050	0.0014	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	250	10	180	10	170	10	210	10	210	10	230	10	92	10	120	10	180	10	190
Chromium	0.1	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	0.0010	ND	0.0010	0.0052	0.0010	0.0014	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Copper	0.65	0.0020	0.0026	0.0020	0.015	0.0020	0.0032	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	0.54	0.10	0.52	0.10	0.38	0.10	0.42	0.10	0.42	0.10	0.51	0.10	0.56	0.10	0.36	0.10	0.29	0.10	0.38
Iron	5.0	0.10	ND	0.10	ND	0.10	ND	0.10	0.28	0.10	0.28	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND
Lead	0.0075	0.00050	ND	0.00050	0.00074	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	0.0025	ND	0.0025	0.012	0.0025	0.0046	0.0025	0.0050	0.0025	0.0050	0.0025	ND	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	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.0020	0.0055	0.0020	0.011	0.0020	0.0037	0.0020	0.0027	0.0020	0.0027	0.0020	0.0033	0.0020	0.0044	0.0020	0.0020	0.0020	0.0022	0.0020	0.0025
Nitrogen/Nitrate	10.0	0.10	1.5	0.10	0.18	0.10	1.0	0.10	1.1	0.10	1.1	0.10	1.7	0.10	0.86	0.10	1.1	0.10	1.3	0.10	1.6
Nitrogen/Nitrate, Nitrite	NA	0.10	1.5	0.10	0.18	0.10	1.0	0.10	1.1	0.10	1.1	0.10	1.7	0.10	0.86	0.10	1.1	0.10	1.3	0.10	1.6
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	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND
Selenium	0.05	0.0025	0.025	0.0025	0.013	0.0025	0.0030	0.0025	0.0030	0.0025	0.0030	0.013	0.018	0.0025	0.019	0.0025	0.0025	0.0025	0.0025	0.0025	0.014
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	50	290	50	260	50	140	50	110	50	110	50	270	50	270	50	95	50	130	50	170
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	760	10	770	10	770	10	910	10	850	10	630	10	840	10	760
Vanadium	0.049	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	0.011	0.0050	ND	0.0050	ND	0.0050	0.0087
Zinc	5.0	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	0.0005	ND	0.0005	ND	0.0005	0.0008	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND
BTEX	11.705	0.002	ND	0.002	ND	0.002	0.0031	0.002	ND	0.002	ND	0.002	0.0009	0.002	ND	0.002	ND	0.002	ND	0.002	ND
pH	6.5 - 9.0	NA	7.35	NA	7.31	NA	7.12	NA	7.25	NA	7.25	NA	6.88	NA	6.81	NA	7.26	NA	7.22	NA	7.28
Temperature	NA	NA	18.15	NA	21.19	NA	14.30	NA	8.60	NA	8.60	NA	14.22	NA	21.67	NA	17.16	NA	12.75	NA	17.02
Conductivity	NA	NA	1.49	NA	1.47	NA	1.31	NA	0.84	NA	0.84	NA	1.24	NA	1.27	NA	0.99	NA	0.93	NA	1.06
Dissolved Oxygen	NA	NA	6.73	NA	2.77	NA	2.29	NA	4.11	NA	4.11	NA	5.76	NA	4.62	NA	4.45	NA	6.15	NA	6.18
ORP	NA	NA	92.2	NA	-27.6	NA	107.2	NA	123.3	NA	123.3	NA	78.3	NA	61.6	NA	73.3	NA	11.9	NA	34.0

Notes: Standards obtained from IAC, Table 315, Chapter 1, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Possible Resource Groundwater. All values are in mg/L (ppm) unless otherwise noted.

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
 F1 - MS and/or MSD Recovery outside of limits.

Temperature °C
 Conductivity µmS/cm
 Dissolved Oxygen mg/L
 Oxygen Reduction Potential (ORP) mV

Degrees Celsius
 millimhos/cm
 milligrams/liter
 millivolts

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

Parameter	Standards	5/28/2015		8/5/2015		10/27/2015		2/11/2016		5/12/2016		9/1/2016		11/3/2016		2/7/2017		4/27/2017	
		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	0.0010	0.0017	0.0010	0.0016	0.0010	ND	0.0010	0.0016	0.0030	ND	0.0010	0.0012	0.0010	0.0012	0.0010	0.0014	0.0010	0.0012
Barium	2.0	0.0025	0.14	0.0025	0.11	0.0025	0.12	0.0025	0.14	0.0025	0.14	0.0025	0.096	0.0025	0.12	0.0025	0.16	0.0025	0.10
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	0.19	0.050	0.21	0.050	0.22	0.050	0.17	0.050	0.19	0.050	0.28	0.050	0.25	0.050	0.22	0.050	0.15
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
Chloride	200.0	10	270	10	140	10	130	10	230	10	250	10	79	10	85	10	200	10	150
Chromium	0.1	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	0.0010	0.0015	0.0010	0.0011	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Copper	0.65	0.0020	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	0.054	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	0.39	0.10	0.32	0.10	0.34	0.10	0.38	0.10	0.34	0.10	0.32	0.10	0.27	0.10	0.28
Iron	5.0	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.50	ND	0.10	ND	0.10	ND	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	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	0.0068	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
Nickel	0.1	0.0020	0.0034	0.0020	0.0023	0.0020	0.0026	0.0020	0.0020	0.0032	0.0032	0.0020	0.0027	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Nitrogen/Nitrate	10.0	0.10	1.2	0.10	0.35	0.10	0.47	0.10	1.6	0.10	1.5	0.10	0.43	0.10	0.31	0.10	0.99	0.10	1.1
Nitrogen/Nitrate, 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
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	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND
Selenium	0.05	0.0025	0.0036	0.0025	ND	0.0025	0.0035	0.0025	0.0027	0.0025	0.0030	0.0025	0.0037	0.0025	0.0025	0.0025	0.0042	0.0025	0.0026
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
Sulfate	400.0	25	94	50	110	25	120	50	140	50	160	50	97	25	97	50	130	25	83
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	870	10	680	10	650	10	820	10	880	10	530	10	590	10	840	10	590
Vanadium	0.049	0.0050	0.0060	0.0050	0.0063	0.0050	ND	0.0050	0.0065	0.0050	ND	0.0050	0.0054	0.0050	0.0066	0.0050	0.0060	0.0050	0.0054
Zinc	5.0	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	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND
BTEX	11.705	0.002	0.00073	0.002	ND	0.002	ND	0.002	ND	0.002	0.0029	0.002	ND	0.002	0.0027	0.002	ND	0.002	ND
pH	6.5-9.0	NA	7.60	NA	7.79	NA	7.02	NA	7.30	NA	7.31	NA	7.36	NA	7.36	NA	6.84	NA	7.65
Temperature	NA	NA	16.30	NA	18.55	NA	14.11	NA	9.02	NA	13.65	NA	18.41	NA	15.80	NA	11.16	NA	11.48
Conductivity	NA	NA	119	NA	111	NA	112	NA	0.89	NA	1.16	NA	0.94	NA	0.78	NA	0.92	NA	0.83
Dissolved Oxygen	NA	NA	6.80	NA	5.23	NA	5.42	NA	6.28	NA	5.88	NA	5.35	NA	4.09	NA	6.71	NA	8.59
ORP	NA	NA	129.7	NA	-16.5	NA	164.8	NA	114.3	NA	50.1	NA	53.4	NA	22.7	NA	201.6	NA	-16.1

Notes: Standards obtained from IAC, Title 35, Chapter 1, Part 620, Subpart D, Section 6.20.4(1) - Groundwater Quality Standards for Class 1 Potable Recharge Groundwater. All values are in mg/L, (ppm) unless otherwise noted.

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

NR - Not Required
 NS - Not Sampled
 * - Deposes Instrument related QC exceeds the control limits
 F1 - MS met or MSD Recovery outside of limits.

Temperature
 Conductivity
 Dissolved Oxygen
 Oxygen Reduction Potential (ORP)

°C
 mS/cm
 mg/L
 millivolts

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

Parameter	Standards	5/28/2015		8/5/2015		10/27/2015		2/11/2016		5/12/2016		9/1/2016		11/3/2016		2/7/2017		4/27/2017	
		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	0.0010	0.0013	0.0010	ND	0.0010	0.0017	0.0010	0.0010	0.0050	ND	0.0010	ND	0.0010	0.0011	0.0010	0.0010	0.0010	ND
Barium	2.0	0.0025	0.12	0.0025	0.11	0.0025	0.15	0.0025	0.12	0.0025	0.12	0.0025	0.084	0.0025	0.11	0.0025	0.15	0.0025	0.096
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	0.16	0.050	0.19	0.050	0.16	0.050	0.20	0.050	0.20	0.050	0.23	0.050	0.23	0.050	0.19	0.050	0.13
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
Chloride	200.0	10	260	10	130	10	110	10	240	10	240	10	77	10	84	10	240	10	160
Chromium	0.1	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
Chromium	1.0	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
Cobalt	1.0	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	0.0020	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
Fluoride	4.0	0.10	0.32	0.10	0.35	0.10	0.33	0.10	0.35	0.10	0.35	0.10	0.32	0.10	0.31	0.10	0.25	0.10	0.28
Iron	5.0	0.10	ND	0.10	ND	0.10	0.85	0.10	0.50	0.50	0.50	0.10	ND	0.10	0.25	0.10	0.15	0.10	0.40
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	0.00037	0.00050	0.00037	0.00050	0.00037	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.0025	0.0026	0.0025	ND	0.0025	0.018	0.0025	0.018	0.0025	0.018	0.0025	0.025	0.0025	0.0093	0.0025	0.0075	0.0025	0.011
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	0.0020	0.0034	0.0020	ND	0.0020	0.0030	0.0020	0.0030	0.0020	0.0030	0.0020	ND	0.0020	0.0022	0.0020	ND	0.0020	ND
Nitrogen/Nitrate	10.0	0.10	1.1	0.10	0.37	0.10	1.7	0.10	1.4	0.10	1.4	0.10	0.36	0.10	0.33	0.10	1.2	0.10	1.0
Nitrogen/Nitrate, Nitrite	NA	0.10	1.1	0.10	0.37	0.10	1.7	0.10	1.4	0.10	1.4	0.10	0.36	0.10	0.33	0.10	1.2	0.10	1.0
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	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND
Selenium	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
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
Sulfate	400.0	25	80	25	99	50	140	50	180	50	180	25	75	25	100	25	85	25	74
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	860	10	640	10	620	10	860	10	860	10	510	10	570	10	840	10	590
Vanadium	0.049	0.0050	ND	0.0050	0.0051	0.0050	0.0077	0.0050	0.0077	0.0050	0.0077	0.0050	ND	0.0050	0.0051	0.0050	ND	0.0050	0.0050
Zinc	5.0	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	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	0.0018	0.0005	ND	0.0005	ND
BETX	11.705	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	0.0039	0.002	ND	0.002	0.0375	0.002	ND	0.002	ND
pH	6.5 - 9.0	NA	7.52	NA	7.75	NA	7.21	NA	7.35	NA	7.27	NA	6.96	NA	7.55	NA	7.31	NA	7.70
Temperature	NA	NA	17.16	NA	21.99	NA	14.87	NA	5.97	NA	13.22	NA	18.40	NA	17.87	NA	12.53	NA	11.28
Conductivity	NA	NA	1.30	NA	1.06	NA	1.04	NA	0.86	NA	1.12	NA	0.86	NA	0.78	NA	0.98	NA	0.79
Dissolved Oxygen	NA	NA	4.82	NA	1.80	NA	3.74	NA	6.33	NA	5.75	NA	4.17	NA	4.97	NA	5.01	NA	6.40
ORP	NA	NA	128.5	NA	-1.0	NA	147.0	NA	129.1	NA	74.0	NA	102.1	NA	24.2	NA	153.9	NA	-10.4

Notes: Standards obtained from IAC, Table 3.1, Chapter 4, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Possible Resource Groundwater. All values are in mg/L (ppm) unless otherwise noted.

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
 F1 = MS and/or ASD Recovery outside of limits.

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

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

Parameter	Standards	Date		5/27/2015		8/4/2015		10/27/2015		2/9/2016		5/11/2016		8/30/2016		11/1/2016		2/7/2017		4/25/2017	
		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
Arsenic	0.010	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	0.057	0.0025	0.044	0.0025	0.048	0.0025	0.048	0.0025	0.055	0.0025	0.059	0.0025	0.044	0.0025	0.042	0.0025	0.069	0.0025	0.056
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	0.11	0.050	0.15	0.050	0.15	0.050	0.15	0.050	0.11	0.050	0.12	0.050	0.18	0.050	0.13	0.050	0.12	0.050	0.10
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	270	10	130	2.0	70	2.0	70	10	190	10	300	2.0	69	2.0	67	10	270	10	280
Chromium	0.1	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	0.0010	0.0018	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	0.0020	0.0039	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	0.39	0.10	0.32	0.10	0.32	0.10	0.36	0.10	0.42	0.10	0.33	0.10	0.32	0.10	0.30	0.10	0.31
Iron	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
Lead	0.075	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	0.0025	0.0044	0.0025	0.0039	0.0025	ND	0.0025	0.0034	0.0025	0.0034	0.0025	0.023	0.0025	0.0043	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	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.0020	0.0033	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0039	0.0020	0.0020	0.0020	0.0020	0.0020	0.0027	0.0020	0.0035
Nitrogen/Nitrate	10.0	0.10	1.7	0.10	0.72	0.10	1.0	0.10	1.0	0.10	0.82	0.10	1.2	0.10	1.3	0.10	0.46	0.10	1.3	0.10	1.4
Nitrogen/Nitrate, Nitrite	NA	0.10	1.7	0.10	0.72	0.10	1.0	0.10	1.0	0.10	0.82	0.10	1.2	0.10	1.3	0.10	0.46	0.10	1.3	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	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND
Selenium	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
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	5.0	25	10	31	10	41	10	41	10	48	20	70	10	23	10	50	10	43	20	57
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	760	10	540	10	470	10	470	10	740	10	810	10	450	10	450	10	810	10	800
Vanadium	0.049	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
Zinc	5.0	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	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND
BETX	11.705	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.0016	0.002	0.002	ND	0.002	0.00269	0.002	ND	0.002	ND
pH	6.5 - 9.0	NA	7.26	NA	7.47	NA	6.95	NA	7.08	NA	7.08	NA	7.05	NA	6.88	NA	7.04	NA	6.95	NA	7.37
Temperature	NA	NA	17.90	NA	22.19	NA	14.00	NA	7.88	NA	7.88	NA	14.82	NA	21.32	NA	19.47	NA	11.98	NA	17.31
Conductivity	NA	NA	157	NA	0.98	NA	0.86	NA	0.81	NA	0.81	NA	1.28	NA	1.16	NA	0.69	NA	0.98	NA	1.14
Dissolved Oxygen	NA	NA	3.82	NA	3.84	NA	3.86	NA	5.38	NA	5.38	NA	5.09	NA	4.83	NA	3.68	NA	5.62	NA	7.88
ORP	NA	NA	-9.9	NA	-19.0	NA	146.3	NA	41.1	NA	-15.4	NA	22.7	NA	65.0	NA	100.1	NA	9.2	NA	9.2

Notes: Standards obtained from IAC, Table 35, Chapter 1, Part 020.
 Subject D, Section 0.20.410 - Groundwater Quality Standards for Class 1, Possible Resource Groundwater
 All values are in mg/L (ppm) unless otherwise noted.
 DL - Detection limit
 NA - Not Applicable
 ND - Not Detected
 NM - Not Measured
 NR - Not Required
 NS - Not Sampled
 * - Detects instrument related QC exceeds the control limits
 F1 - MS and/or MSD Recovery outside of limits.
 Temperature Conductivity Dissolved Oxygen ORP
 °C mg/L mg/L mV
 degrees Celsius
 milligrams per liter
 milligrams per liter
 millivolts

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

Parameter	Standards	Date		5/27/2015		8/4/2015		10/27/2015		2/9/2016		5/11/2016		8/30/2016		11/1/2016		2/8/2017		4/25/2017	
		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
Arsenic	0.10	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	0.018	0.0013	0.025	0.014	0.014	0.025	0.014	0.025	0.013	0.025	0.017	0.025	0.015	0.025	0.014	0.025	0.012	0.025	0.014
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	0.37	0.050	0.38	0.050	0.33	0.050	0.33	0.050	0.36	0.050	0.40	0.050	0.72	0.050	0.47	0.050	0.34	0.050	0.30
Calcium	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	340	10	230	10	220	10	220	10	170	20	23	20	19	10	110	10	150	10	180
Chromium	0.1	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	0.0010	0.017	0.0010	0.011	0.0010	0.016	0.0010	0.034	0.0010	0.034	0.0010	0.050	0.0010	0.034	0.0010	0.016	0.0010	0.0089	0.0010	0.023
Copper	0.65	0.0070	0.0023	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	3.0	0.10	0.44	0.10	0.27	0.10	0.35	0.10	0.45	0.10	0.45	0.10	0.31	0.10	0.26	0.10	0.30	0.10	0.36	0.10	0.31
Iron	5.0	0.10	140	0.10	ND	0.10	170	0.10	ND	0.10	ND	2.0	3400	0.10	ND	1.0	900	1.0	250	0.50	1000
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	0.0025	0.66	0.0025	1.4	0.0025	0.79	0.0025	2.3	0.0025	2.3	0.050	6.0	0.0025	3.7	0.0025	1.6	0.0025	0.61	0.0025	1.9
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	0.00032	0.00020	0.00096	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.0020	0.026	0.0020	0.021	0.0020	0.025	0.0020	0.071	0.0020	0.071	0.0020	0.17	0.0020	0.14	0.0020	0.045	0.0020	0.045	0.0020	0.060
Nitrogen/Nitrate	10.0	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
Nitrogen/Nitrite	NA	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
Nitrogen/Nitrite	NA	0.020	ND	0.020	0.020	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	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND
Selenium	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
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	500	1100	500	1900	500	1100	500	3600	500	3600	2000	12000	2500	8100	500	3600	500	1200	1000	4700
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	17	3100	10	3900	10	2600	10	4700	50	19000	50	19000	100	15000	17	6100	10	2800	25	6500
Vanadium	0.049	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
Zinc	5.0	0.020	0.028	0.020	0.17	0.020	0.050	0.020	0.70	0.020	2.3	0.020	2.3	0.020	1.8	0.020	0.45	0.020	0.092	0.10	0.73
Benzene	0.005	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND
BIETX	11.705	0.002	ND	0.002	ND	0.00093	0.002	0.002	ND	0.002	0.00062	0.002	0.002	0.002	0.002	0.002	0.00823	0.002	0.002	0.002	0.002
pH	6.5 - 9.0	NA	6.59	NA	6.52	NA	6.37	NA	6.03	NA	5.73	NA	5.73	NA	3.36	NA	6.19	NA	5.74	NA	6.13
Temperature	NA	NA	19.34	NA	22.72	NA	13.47	NA	7.31	NA	13.73	NA	13.73	NA	22.44	NA	18.36	NA	9.03	NA	15.44
Conductivity	NA	NA	3.51	NA	4.04	NA	3.53	NA	3.29	NA	9.49	NA	9.49	NA	8.79	NA	4.93	NA	2.14	NA	4.95
Dissolved Oxygen	NA	NA	0.81	NA	1.00	NA	0.95	NA	0.60	NA	1.90	NA	1.90	NA	1.55	NA	0.52	NA	3.13	NA	4.22
ORP	NA	NA	-96.9	NA	-108.0	NA	-24.9	NA	-19.6	NA	-12.9	NA	-12.9	NA	332.9	NA	-94.2	NA	34.9	NA	-51.1

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

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

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

NR - Not Required
 NS - Not Sampled
 - - Detects instrument read (QC exceeds the control limit)
 F1 - MS and/or MSD Recovery outside of limits.

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

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

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

Parameter	Standards	Date		5/28/2015		8/4/2015		10/28/2015		2/10/2016		5/12/2016		8/31/2016		11/2/2016		2/7/2017		4/26/2017	
		DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.06	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	0.0010	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	0.025	0.046	0.025	0.035	0.025	0.041	0.025	0.041	0.025	0.042	0.025	0.055	0.025	0.037	0.025	0.034	0.025	0.046	0.025	0.038
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	0.35	0.050	0.32	0.050	0.44	0.050	0.44	0.050	0.43	0.050	0.32	0.050	0.34	0.050	0.49	0.050	0.39	0.050	0.29
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	330	10	180	10	210	10	210	10	200	10	290	10	150	10	120	10	200	10	210
Chromium	0.1	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	0.0010	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	0.0020	ND	0.0020	0.0027	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	0.43	0.10	0.46	0.10	0.41	0.10	0.41	0.10	0.45	0.10	0.46	0.10	0.44	0.10	0.43	0.10	0.36	0.10	0.35
Iron	5.0	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	0.13	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	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	0.0037	0.0025	ND	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	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.0020	0.0023	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	0.0032	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Nitrogen/Nitrate	10.0	0.10	2.9	0.10	1.5	0.10	2.4	0.10	2.4	0.10	2.2	0.10	2.6	0.10	1.4	0.10	2.3	0.10	1.9	0.10	2.3
Nitrogen/Nitrite	NA	0.20	2.9	0.10	1.5	0.10	2.4	0.10	2.4	0.20	2.2	0.20	2.6	0.10	1.4	0.50	2.3	0.10	1.9	0.20	2.3
Nitrogen/Nitrite	NA	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND
Perrchlorate	0.0049	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND
Selenium	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
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	20	50	25	97	25	86	25	86	25	110	25	120	25	80	20	92	25	88	25	89
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	1100	10	710	10	810	10	810	10	800	10	920	10	670	10	690	10	810	10	750
Vanadium	0.049	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
Zinc	5.0	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	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND
BTEX	11.705	0.002	ND	0.002	ND	0.002	0.00075	0.002	0.00075	0.002	0.002	0.002	0.00069	0.002	ND	0.002	0.02226	0.002	0.002	0.002	0.002
pH	6.5-9.0	NA	7.27	NA	6.92	NA	7.04	NA	7.04	NA	7.17	NA	7.02	NA	6.95	NA	6.99	NA	6.99	NA	7.27
Temperature	NA	NA	15.02	NA	17.42	NA	12.90	NA	12.90	NA	7.17	NA	13.60	NA	19.33	NA	15.66	NA	11.40	NA	16.65
Conductivity	NA	NA	1.37	NA	1.19	NA	1.40	NA	1.40	NA	0.85	NA	1.29	NA	1.25	NA	0.95	NA	0.98	NA	1.09
Dissolved Oxygen	NA	NA	7.41	NA	5.39	NA	6.49	NA	6.49	NA	7.45	NA	6.76	NA	7.13	NA	5.97	NA	6.48	NA	8.46
ORP	NA	NA	134.8	NA	15.3	NA	113.8	NA	113.8	NA	121.8	NA	54.2	NA	90.4	NA	86.8	NA	127.9	NA	28.7

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) unless otherwise noted.

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

Temperature °C
 Conductivity microhm/cm
 Dissolved Oxygen mg/L
 Oxygen Reduction Potential (ORP) millivolts

NR - Not Required
 NS - Not Sampled
 * - Denotes instrument related QC exceeds the control limits
 F1 - NS and/or MSD Recovery outside of limits.

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

Parameter	Sample: MW-11	Standards	5/28/2015		8/4/2015		10/29/2015		2/11/2016		5/11/2016		9/1/2016		11/2/2016		2/7/2017		4/26/2017	
			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	0.0010	0.0015	0.0026	0.0010	0.0025	0.0010	0.0010	0.0018	0.0010	0.0015	0.0010	0.0017	0.0010	0.0016	0.0010	0.0014	0.0010	0.0014
Barium		2.0	0.0025	0.039	0.062	0.0025	0.069	0.0025	0.074	0.0025	0.066	0.0025	0.056	0.0025	0.062	0.0025	0.078	0.0025	0.078	0.0025
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	1.0	3.4	0.050	0.78	0.050	1.4	0.050	1.5	0.050	1.6	0.050	1.6	0.050	1.3	0.050	1.3	0.050
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
Chloride		200.0	10	290	10	150	10	120	10	230	10	240	10	110	10	93	10	240	10	150
Chromium		0.1	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	0.0010	0.0016	0.0015	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
Copper		0.65	0.0020	0.0073	0.0020	0.0022	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	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
Fluoride		4.0	0.10	0.35	0.10	0.38	0.10	0.30	0.10	0.34	0.10	0.39	0.10	0.34	0.10	0.31	0.10	0.30	0.10	0.28
Iron		5.0	0.10	ND	0.10	ND	0.10	ND	0.10	0.12	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Lead		0.075	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	0.0025	ND	0.0025	0.49	0.0025	0.40	0.0025	0.0034	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
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	0.0020	0.0097	0.0020	0.0099	0.0020	0.0028	0.0020	0.0028	0.0020	0.0031	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Nitrogen/Nitrate		10.0	0.10	1.1	0.15	0.15	0.10	0.48	0.10	1.8	0.10	1.4	0.10	0.69	0.10	0.58	0.10	1.2	0.10	1.1
Nitrogen/Nitrate, Nitrite		NA	0.10	1.1	0.15	0.15	0.10	0.48	0.10	1.8	0.10	1.4	0.10	0.69	0.10	0.58	0.10	1.2	0.10	1.1
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	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.0040	ND	0.20	ND	0.0040	ND	0.0040	ND	0.0040	ND
Selenium		0.05	0.0025	0.0035	0.0025	0.0050	0.0025	0.0025	0.0040	0.0025	0.0033	0.0025	0.0046	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0034
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
Sulfate		400.0	25	84	50	110	50	170	50	140	50	150	50	120	25	130	25	90	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
Total Dissolved Solids		1,200	10	860	10	700	10	740	10	880	10	920	10	660	10	640	10	830	10	620
Vanadium		0.049	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
Zinc		5.0	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	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005	ND
BTEX		11.705	0.002	ND	0.002	ND	0.002	0.00094	0.002	ND	0.002	0.0023	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
pH		6.5-9.0	NA	7.42	NA	7.40	7.26	NA	7.15	NA	7.24	NA	7.20	NA	7.18	NA	7.21	NA	7.21	NA
Temperature		NA	NA	17.77	NA	17.05	NA	12.34	NA	6.49	NA	14.15	NA	18.10	NA	16.36	NA	12.91	NA	17.52
Conductivity		NA	NA	145	NA	108	NA	113	NA	0.87	NA	119	NA	1.03	NA	0.88	NA	1.04	NA	0.98
Dissolved Oxygen		NA	NA	5.44	NA	1.52	NA	8.45	NA	8.32	NA	8.21	NA	6.22	NA	4.89	NA	4.91	NA	6.50
ORP		NA	NA	121.5	NA	-25.7	NA	86.5	NA	139.1	NA	48.6	NA	53.3	NA	73.7	NA	133.0	NA	25.2

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Possible Release Circumstances
 All values are in mg/L, ppm unless otherwise noted.
 DL - Detection Limit
 NA - Not Applicable
 ND - Not Detected
 NR - Not Required
 NS - Not Sampled
 * - Detector instrument read (QC exceeds the control limit)
 F - MS and/or MSD Recovery outside of limits.
 °C - Temperature
 mg/L - Conductivity
 mg/L - Dissolved Oxygen
 mV - Oxygen Reduction Potential (ORP)
 degrees Celsius
 milligrams/liter
 millimoles

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: 500-127127-1
Client Project/Site: Joliet #29 Station Ash Ponds (CCA)

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

Attn: Richard Gnat



Authorized for release by:
5/11/2017 2:59:40 PM

Eric Lang, Manager of Project Management
(708)534-5200
eric.lang@testamericainc.com

LINKS

Review your project
results through
Total Access

Have a Question?



Visit us at:
www.testamericainc.com

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

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

MWG13-15_62342

1

2

3

4

5

8

9

10

11

13

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	18
QC Association	19
Surrogate Summary	26
QC Sample Results	27
Chain of Custody	36
Receipt Checklists	43
Certification Summary	45



Case Narrative

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

TestAmerica Job ID: 500-127127-1

Job ID: 500-127127-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-127127-1

Comments

No additional comments.

Receipt

The samples were received on 4/26/2017 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 2.0° C, 2.9° C, 3.6° C, 3.8° C, 4.5° C, 4.9° C and 4.9° C.

GC/MS VOA

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

Metals

Method(s) 6020A: The continuing calibration verification (CCV) associated with batch 500-382851 recovered above the upper control limit for Copper. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 6020A: The following sample was diluted due to the nature of the sample matrix: MW-09 (500-127127-3) and DUPLICATE (500-127127-4) at 5.0. Elevated reporting limits (RLs) are provided.

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

Field Service / Mobile Lab

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

General Chemistry

Method(s) 314.0: The continuing calibration verification (CCV) associated with batch 320-162663 recovered above the upper control limit for <perchlorate> by 1%. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Method Summary

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

TestAmerica Job ID: 500-127127-1

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

MWG13-15_62345
5/11/2017

Sample Summary

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

TestAmerica Job ID: 500-127127-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-127127-1	MW-02	Water	04/25/17 12:59	04/26/17 09:00
500-127127-2	MW-08	Water	04/25/17 14:07	04/26/17 09:00
500-127127-3	MW-09	Water	04/25/17 15:02	04/26/17 09:00
500-127127-4	DUPLICATE	Water	04/25/17 00:00	04/26/17 09:00
500-127127-5	MW-03	Water	04/26/17 10:43	04/27/17 10:30
500-127127-6	MW-04	Water	04/26/17 09:08	04/27/17 10:30
500-127127-7	MW-05	Water	04/26/17 11:55	04/27/17 10:30
500-127127-8	MW-10	Water	04/26/17 13:22	04/27/17 10:30
500-127127-9	MW-11	Water	04/26/17 15:32	04/27/17 10:30
500-127127-10	MW-06	Water	04/27/17 10:02	04/27/17 13:50
500-127127-11	MW-07	Water	04/27/17 10:57	04/27/17 13:50
500-127127-12	Trip Blank	Water	04/25/17 00:00	04/27/17 13:50

TestAmerica Chicago

MWG13-15_62346

5/11/2017

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: MW-02

Lab Sample ID: 500-127127-1

Date Collected: 04/25/17 12:59

Matrix: Water

Date Received: 04/26/17 09:00

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			05/04/17 22:06	1
Toluene	<0.00050		0.00050		mg/L			05/04/17 22:06	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/04/17 22:06	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/04/17 22:06	1

Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		05/04/17 22:06	1
Toluene-d8 (Surr)	102		75 - 120		05/04/17 22:06	1
4-Bromofluorobenzene (Surr)	110		72 - 124		05/04/17 22:06	1
Dibromofluoromethane	91		75 - 120		05/04/17 22:06	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			05/02/17 15:24	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		04/27/17 15:11	05/03/17 20:09	1
Arsenic	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:09	1
Barium	0.10		0.0025		mg/L		04/27/17 15:11	05/03/17 20:09	1
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:09	1
Boron	0.15		0.050		mg/L		04/27/17 15:11	05/03/17 20:09	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:20	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:20	1
Cobalt	<0.0010		0.0010		mg/L		04/27/17 15:11	04/28/17 13:20	1
Copper	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 13:20	1
Iron	<0.10		0.10		mg/L		04/27/17 15:11	04/28/17 13:20	1
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:20	1
Manganese	<0.0025		0.0025		mg/L		04/27/17 15:11	04/28/17 13:20	1
Nickel	0.0050		0.0020		mg/L		04/27/17 15:11	05/03/17 20:09	1
Selenium	<0.0025		0.0025		mg/L		04/27/17 15:11	05/03/17 20:09	1
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:20	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 13:20	1
Vanadium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:20	1
Zinc	<0.020		0.020		mg/L		04/27/17 15:11	05/03/17 20:09	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 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		05/05/17 10:30	05/05/17 16:35	1
Sulfate	140		25		mg/L			05/05/17 11:06	5
Chloride	330		10		mg/L			04/30/17 20:19	5
Nitrogen, Nitrate	1.8		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	890		10		mg/L			04/30/17 22:30	1
Fluoride	0.32		0.10		mg/L			05/01/17 14:31	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/26/17 18:11	1
Nitrogen, Nitrate Nitrite	1.8		0.10		mg/L			05/04/17 22:35	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: MW-08

Lab Sample ID: 500-127127-2

Date Collected: 04/25/17 14:07

Matrix: Water

Date Received: 04/26/17 09:00

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			05/04/17 22:32	1
Toluene	<0.00050		0.00050		mg/L			05/04/17 22:32	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/04/17 22:32	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/04/17 22:32	1

Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		05/04/17 22:32	1
Toluene-d8 (Surr)	101		75 - 120		05/04/17 22:32	1
4-Bromofluorobenzene (Surr)	109		72 - 124		05/04/17 22:32	1
Dibromofluoromethane	90		75 - 120		05/04/17 22:32	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			05/02/17 16:16	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		04/27/17 15:11	05/03/17 20:13	1
Arsenic	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:13	1
Barium	0.056		0.0025		mg/L		04/27/17 15:11	05/03/17 20:13	1
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:13	1
Boron	0.10		0.050		mg/L		04/27/17 15:11	05/03/17 20:13	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:24	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:24	1
Cobalt	<0.0010		0.0010		mg/L		04/27/17 15:11	04/28/17 13:24	1
Copper	<0.0020	^	0.0020		mg/L		04/27/17 15:11	04/28/17 13:24	1
Iron	<0.10		0.10		mg/L		04/27/17 15:11	04/28/17 13:24	1
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:24	1
Manganese	<0.0025		0.0025		mg/L		04/27/17 15:11	04/28/17 13:24	1
Nickel	0.0035		0.0020		mg/L		04/27/17 15:11	05/03/17 20:13	1
Selenium	<0.0025		0.0025		mg/L		04/27/17 15:11	05/03/17 20:13	1
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:24	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 13:24	1
Vanadium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:24	1
Zinc	<0.020		0.020		mg/L		04/27/17 15:11	05/03/17 20:13	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 12:52	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/05/17 10:30	05/05/17 16:35	1
Sulfate	57		20		mg/L			05/05/17 11:09	4
Chloride	280		10		mg/L			04/30/17 20:20	5
Nitrogen, Nitrate	1.4		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	800		10		mg/L			04/30/17 22:35	1
Fluoride	0.31		0.10		mg/L			05/01/17 14:33	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/26/17 18:11	1
Nitrogen, Nitrate Nitrite	1.4		0.10		mg/L			05/04/17 22:37	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: MW-09

Lab Sample ID: 500-127127-3

Date Collected: 04/25/17 15:02

Matrix: Water

Date Received: 04/26/17 09:00

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			05/04/17 22:58	1
Toluene	<0.00050		0.00050		mg/L			05/04/17 22:58	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/04/17 22:58	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/04/17 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126		05/04/17 22:58	1
Toluene-d8 (Surr)	102		75 - 120		05/04/17 22:58	1
4-Bromofluorobenzene (Surr)	109		72 - 124		05/04/17 22:58	1
Dibromofluoromethane	89		75 - 120		05/04/17 22:58	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040	^	0.0040		mg/L			05/03/17 14:51	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		04/27/17 15:11	05/03/17 21:02	1
Arsenic	<0.0050		0.0050		mg/L		04/27/17 15:11	05/05/17 17:40	5
Barium	0.014		0.013		mg/L		04/27/17 15:11	05/05/17 17:40	5
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 21:02	1
Boron	0.30		0.050		mg/L		04/27/17 15:11	05/03/17 21:02	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:27	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:27	1
Cobalt	0.023		0.0010		mg/L		04/27/17 15:11	04/28/17 13:27	1
Copper	<0.0020	^	0.0020		mg/L		04/27/17 15:11	04/28/17 13:27	1
Iron	1000		0.50		mg/L		04/27/17 15:11	05/05/17 17:40	5
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:27	1
Manganese	1.9		0.0025		mg/L		04/27/17 15:11	04/28/17 13:27	1
Nickel	0.060		0.0020		mg/L		04/27/17 15:11	05/03/17 21:02	1
Selenium	<0.013		0.013		mg/L		04/27/17 15:11	05/05/17 17:40	5
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:27	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 13:27	1
Vanadium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:27	1
Zinc	0.73		0.10		mg/L		04/27/17 15:11	05/05/17 17:40	5

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 12:54	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/05/17 10:30	05/05/17 16:35	1
Sulfate	4700		1000		mg/L			05/05/17 11:10	200
Chloride	180		10		mg/L			04/30/17 20:21	5
Nitrogen, Nitrate	<0.10		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	6500		25		mg/L			05/02/17 05:20	1
Fluoride	0.31		0.10		mg/L			05/01/17 14:36	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/26/17 18:12	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			05/04/17 22:39	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: DUPLICATE

Lab Sample ID: 500-127127-4

Date Collected: 04/25/17 00:00

Matrix: Water

Date Received: 04/26/17 09:00

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			05/04/17 23:24	1
Toluene	<0.00050		0.00050		mg/L			05/04/17 23:24	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/04/17 23:24	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/04/17 23:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		05/04/17 23:24	1
Toluene-d8 (Surr)	100		75 - 120		05/04/17 23:24	1
4-Bromofluorobenzene (Surr)	110		72 - 124		05/04/17 23:24	1
Dibromofluoromethane	91		75 - 120		05/04/17 23:24	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040	^	0.0040		mg/L			05/03/17 15:30	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		04/27/17 15:11	05/03/17 21:06	1
Arsenic	<0.0050		0.0050		mg/L		04/27/17 15:11	05/05/17 17:44	5
Barium	<0.013		0.013		mg/L		04/27/17 15:11	05/05/17 17:44	5
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 21:06	1
Boron	0.31		0.050		mg/L		04/27/17 15:11	05/03/17 21:06	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:31	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:31	1
Cobalt	0.024		0.0010		mg/L		04/27/17 15:11	04/28/17 13:31	1
Copper	<0.0020	^	0.0020		mg/L		04/27/17 15:11	04/28/17 13:31	1
Iron	1100		0.50		mg/L		04/27/17 15:11	05/05/17 17:44	5
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:31	1
Manganese	2.0		0.0025		mg/L		04/27/17 15:11	04/28/17 13:31	1
Nickel	0.060		0.0020		mg/L		04/27/17 15:11	05/03/17 21:06	1
Selenium	<0.013		0.013		mg/L		04/27/17 15:11	05/05/17 17:44	5
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:31	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 13:31	1
Vanadium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:31	1
Zinc	0.73		0.10		mg/L		04/27/17 15:11	05/05/17 17:44	5

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 12:58	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/05/17 10:30	05/05/17 16:36	1
Sulfate	4600		1000		mg/L			05/05/17 11:11	200
Chloride	180		10		mg/L			04/30/17 20:21	5
Nitrogen, Nitrate	<0.10		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	6600		25		mg/L			05/02/17 05:23	1
Fluoride	0.29		0.10		mg/L			05/01/17 14:39	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/26/17 18:12	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			05/04/17 22:42	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: MW-03

Lab Sample ID: 500-127127-5

Date Collected: 04/26/17 10:43

Matrix: Water

Date Received: 04/27/17 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			05/04/17 23:50	1
Toluene	<0.00050		0.00050		mg/L			05/04/17 23:50	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/04/17 23:50	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/04/17 23:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		05/04/17 23:50	1
Toluene-d8 (Surr)	102		75 - 120		05/04/17 23:50	1
4-Bromofluorobenzene (Surr)	111		72 - 124		05/04/17 23:50	1
Dibromofluoromethane	90		75 - 120		05/04/17 23:50	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			05/02/17 16:34	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		04/27/17 15:11	05/03/17 20:17	1
Arsenic	0.0011		0.0010		mg/L		04/27/17 15:11	05/03/17 20:17	1
Barium	0.096		0.0025		mg/L		04/27/17 15:11	05/03/17 20:17	1
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:17	1
Boron	0.45		0.050		mg/L		04/27/17 15:11	05/03/17 20:17	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:35	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:35	1
Cobalt	<0.0010		0.0010		mg/L		04/27/17 15:11	04/28/17 13:35	1
Copper	<0.0020	^	0.0020		mg/L		04/27/17 15:11	04/28/17 13:35	1
Iron	0.10		0.10		mg/L		04/27/17 15:11	04/28/17 13:35	1
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:35	1
Manganese	<0.0025		0.0025		mg/L		04/27/17 15:11	04/28/17 13:35	1
Nickel	<0.0020		0.0020		mg/L		04/27/17 15:11	05/03/17 20:17	1
Selenium	0.0050		0.0025		mg/L		04/27/17 15:11	05/03/17 20:17	1
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:35	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 13:35	1
Vanadium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:35	1
Zinc	<0.020		0.020		mg/L		04/27/17 15:11	05/03/17 20:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 13:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/06/17 12:40	05/06/17 13:21	1
Sulfate	110		25		mg/L			05/05/17 11:12	5
Chloride	210		10		mg/L			04/30/17 20:22	5
Nitrogen, Nitrate	2.6		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	890		10		mg/L			04/30/17 22:43	1
Fluoride	0.35		0.10		mg/L			05/01/17 14:49	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/27/17 16:05	1
Nitrogen, Nitrate Nitrite	2.6		0.20		mg/L			05/04/17 23:11	2

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: MW-04

Lab Sample ID: 500-127127-6

Date Collected: 04/26/17 09:08

Matrix: Water

Date Received: 04/27/17 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			05/05/17 00:17	1
Toluene	<0.00050		0.00050		mg/L			05/05/17 00:17	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/05/17 00:17	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/05/17 00:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		05/05/17 00:17	1
Toluene-d8 (Surr)	102		75 - 120		05/05/17 00:17	1
4-Bromofluorobenzene (Surr)	111		72 - 124		05/05/17 00:17	1
Dibromofluoromethane	92		75 - 120		05/05/17 00:17	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			05/02/17 16:51	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		04/27/17 15:11	05/03/17 20:20	1
Arsenic	0.0011		0.0010		mg/L		04/27/17 15:11	05/03/17 20:20	1
Barium	0.084		0.0025		mg/L		04/27/17 15:11	05/03/17 20:20	1
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:20	1
Boron	0.29		0.050		mg/L		04/27/17 15:11	05/03/17 20:20	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:46	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:46	1
Cobalt	0.0052		0.0010		mg/L		04/27/17 15:11	04/28/17 13:46	1
Copper	<0.0020	^	0.0020		mg/L		04/27/17 15:11	04/28/17 13:46	1
Iron	<0.10		0.10		mg/L		04/27/17 15:11	04/28/17 13:46	1
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:46	1
Manganese	<0.0025		0.0025		mg/L		04/27/17 15:11	04/28/17 13:46	1
Nickel	<0.0020		0.0020		mg/L		04/27/17 15:11	05/03/17 20:20	1
Selenium	<0.0025		0.0025		mg/L		04/27/17 15:11	05/03/17 20:20	1
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:46	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 13:46	1
Vanadium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:46	1
Zinc	<0.020		0.020		mg/L		04/27/17 15:11	05/03/17 20:20	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 13:01	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/06/17 12:40	05/06/17 13:22	1
Sulfate	80		25		mg/L			05/05/17 11:15	5
Chloride	220		10		mg/L			04/30/17 20:22	5
Nitrogen, Nitrate	2.4		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	750		10		mg/L			05/01/17 01:17	1
Fluoride	0.37		0.10		mg/L			05/01/17 14:51	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/27/17 16:07	1
Nitrogen, Nitrate Nitrite	2.4		0.20		mg/L			05/04/17 23:12	2

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: MW-05

Lab Sample ID: 500-127127-7

Date Collected: 04/26/17 11:55

Matrix: Water

Date Received: 04/27/17 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			05/05/17 00:43	1
Toluene	<0.00050		0.00050		mg/L			05/05/17 00:43	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/05/17 00:43	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/05/17 00:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					05/05/17 00:43	1
Toluene-d8 (Surr)	102		75 - 120					05/05/17 00:43	1
4-Bromofluorobenzene (Surr)	108		72 - 124					05/05/17 00:43	1
Dibromofluoromethane	88		75 - 120					05/05/17 00:43	1

Method: 314.0 - Perchlorate (IC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			05/02/17 17:09	1

Method: 6020A - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		04/27/17 15:11	05/03/17 20:32	1
Arsenic	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:32	1
Barium	0.059		0.0025		mg/L		04/27/17 15:11	05/03/17 20:32	1
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:32	1
Boron	0.62		0.050		mg/L		04/27/17 15:11	05/03/17 20:32	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:50	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:50	1
Cobalt	<0.0010		0.0010		mg/L		04/27/17 15:11	04/28/17 13:50	1
Copper	<0.0020	^	0.0020		mg/L		04/27/17 15:11	04/28/17 13:50	1
Iron	<0.10		0.10		mg/L		04/27/17 15:11	04/28/17 13:50	1
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:50	1
Manganese	<0.0025		0.0025		mg/L		04/27/17 15:11	04/28/17 13:50	1
Nickel	0.0025		0.0020		mg/L		04/27/17 15:11	05/03/17 20:32	1
Selenium	0.014		0.0025		mg/L		04/27/17 15:11	05/03/17 20:32	1
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:50	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 13:50	1
Vanadium	0.0087		0.0050		mg/L		04/27/17 15:11	04/28/17 13:50	1
Zinc	<0.020		0.020		mg/L		04/27/17 15:11	05/03/17 20:32	1

Method: 7470A - Mercury (CVAA) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 13:03	1

General Chemistry - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/06/17 12:40	05/06/17 13:22	1
Sulfate	170		50		mg/L			05/05/17 11:16	10
Chloride	190		10		mg/L			04/30/17 20:24	5
Nitrogen, Nitrate	1.6		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	760		10		mg/L			05/01/17 01:19	1
Fluoride	0.38		0.10		mg/L			05/01/17 14:54	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/27/17 16:07	1
Nitrogen, Nitrate Nitrite	1.6		0.10		mg/L			05/04/17 22:46	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: MW-10

Lab Sample ID: 500-127127-8

Date Collected: 04/26/17 13:22

Matrix: Water

Date Received: 04/27/17 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			05/05/17 01:09	1
Toluene	<0.00050		0.00050		mg/L			05/05/17 01:09	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/05/17 01:09	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/05/17 01:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126		05/05/17 01:09	1
Toluene-d8 (Surr)	101		75 - 120		05/05/17 01:09	1
4-Bromofluorobenzene (Surr)	108		72 - 124		05/05/17 01:09	1
Dibromofluoromethane	90		75 - 120		05/05/17 01:09	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			05/02/17 17:26	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		04/27/17 15:11	05/03/17 20:36	1
Arsenic	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:36	1
Barium	0.038		0.0025		mg/L		04/27/17 15:11	05/03/17 20:36	1
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:36	1
Boron	0.29		0.050		mg/L		04/27/17 15:11	05/03/17 20:36	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:54	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:54	1
Cobalt	<0.0010		0.0010		mg/L		04/27/17 15:11	04/28/17 13:54	1
Copper	<0.0020	^	0.0020		mg/L		04/27/17 15:11	04/28/17 13:54	1
Iron	<0.10		0.10		mg/L		04/27/17 15:11	04/28/17 13:54	1
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:54	1
Manganese	<0.0025		0.0025		mg/L		04/27/17 15:11	04/28/17 13:54	1
Nickel	<0.0020		0.0020		mg/L		04/27/17 15:11	05/03/17 20:36	1
Selenium	<0.0025		0.0025		mg/L		04/27/17 15:11	05/03/17 20:36	1
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:54	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 13:54	1
Vanadium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:54	1
Zinc	<0.020		0.020		mg/L		04/27/17 15:11	05/03/17 20:36	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 13:04	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/06/17 12:40	05/06/17 13:22	1
Sulfate	89		25		mg/L			05/05/17 11:17	5
Chloride	210		10		mg/L			04/30/17 20:25	5
Nitrogen, Nitrate	2.3		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	750		10		mg/L			05/01/17 01:22	1
Fluoride	0.35		0.10		mg/L			05/01/17 14:56	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/27/17 16:08	1
Nitrogen, Nitrate Nitrite	2.3		0.20		mg/L			05/04/17 23:13	2

TestAmerica Chicago

MWG13-15_62354

5/11/2017

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: MW-11

Lab Sample ID: 500-127127-9

Date Collected: 04/26/17 15:32

Matrix: Water

Date Received: 04/27/17 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			05/05/17 01:35	1
Toluene	<0.00050		0.00050		mg/L			05/05/17 01:35	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/05/17 01:35	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/05/17 01:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		05/05/17 01:35	1
Toluene-d8 (Surr)	101		75 - 120		05/05/17 01:35	1
4-Bromofluorobenzene (Surr)	110		72 - 124		05/05/17 01:35	1
Dibromofluoromethane	91		75 - 120		05/05/17 01:35	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			05/02/17 17:44	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		04/27/17 15:11	05/03/17 20:39	1
Arsenic	0.0014		0.0010		mg/L		04/27/17 15:11	05/03/17 20:39	1
Barium	0.051		0.0025		mg/L		04/27/17 15:11	05/03/17 20:39	1
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:39	1
Boron	1.1		0.050		mg/L		04/27/17 15:11	05/03/17 20:39	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:58	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:58	1
Cobalt	<0.0010		0.0010		mg/L		04/27/17 15:11	04/28/17 13:58	1
Copper	<0.0020	^	0.0020		mg/L		04/27/17 15:11	04/28/17 13:58	1
Iron	<0.10		0.10		mg/L		04/27/17 15:11	04/28/17 13:58	1
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:58	1
Manganese	<0.0025		0.0025		mg/L		04/27/17 15:11	04/28/17 13:58	1
Nickel	<0.0020		0.0020		mg/L		04/27/17 15:11	05/03/17 20:39	1
Selenium	0.0034		0.0025		mg/L		04/27/17 15:11	05/03/17 20:39	1
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 13:58	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 13:58	1
Vanadium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 13:58	1
Zinc	<0.020		0.020		mg/L		04/27/17 15:11	05/03/17 20:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 13:05	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/06/17 12:40	05/06/17 13:23	1
Sulfate	100		25		mg/L			05/05/17 11:18	5
Chloride	150		10		mg/L			04/30/17 20:26	5
Nitrogen, Nitrate	1.1		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	620		10		mg/L			05/01/17 01:24	1
Fluoride	0.28		0.10		mg/L			05/01/17 14:59	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/27/17 16:08	1
Nitrogen, Nitrate Nitrite	1.1		0.10		mg/L			05/04/17 22:49	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: MW-06

Lab Sample ID: 500-127127-10

Date Collected: 04/27/17 10:02

Matrix: Water

Date Received: 04/27/17 13:50

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			05/05/17 02:01	1
Toluene	<0.00050		0.00050		mg/L			05/05/17 02:01	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/05/17 02:01	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/05/17 02:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		05/05/17 02:01	1
Toluene-d8 (Surr)	102		75 - 120		05/05/17 02:01	1
4-Bromofluorobenzene (Surr)	112		72 - 124		05/05/17 02:01	1
Dibromofluoromethane	91		75 - 120		05/05/17 02:01	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			05/02/17 18:01	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		04/27/17 15:11	05/03/17 20:43	1
Arsenic	0.0012		0.0010		mg/L		04/27/17 15:11	05/03/17 20:43	1
Barium	0.10		0.0025		mg/L		04/27/17 15:11	05/03/17 20:43	1
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:43	1
Boron	0.15		0.050		mg/L		04/27/17 15:11	05/03/17 20:43	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 14:02	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 14:02	1
Cobalt	<0.0010		0.0010		mg/L		04/27/17 15:11	04/28/17 14:02	1
Copper	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 14:02	1
Iron	<0.10		0.10		mg/L		04/27/17 15:11	04/28/17 14:02	1
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 14:02	1
Manganese	<0.0025		0.0025		mg/L		04/27/17 15:11	04/28/17 14:02	1
Nickel	<0.0020		0.0020		mg/L		04/27/17 15:11	05/03/17 20:43	1
Selenium	0.0026		0.0025		mg/L		04/27/17 15:11	05/03/17 20:43	1
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 14:02	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 14:02	1
Vanadium	0.0054		0.0050		mg/L		04/27/17 15:11	04/28/17 14:02	1
Zinc	<0.020		0.020		mg/L		04/27/17 15:11	05/03/17 20:43	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 13:07	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/06/17 12:40	05/06/17 13:23	1
Sulfate	83		25		mg/L			05/05/17 11:19	5
Chloride	150		10		mg/L			04/30/17 20:27	5
Nitrogen, Nitrate	1.1		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	590		10		mg/L			05/01/17 01:27	1
Fluoride	0.28		0.10		mg/L			05/01/17 15:02	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/27/17 16:09	1
Nitrogen, Nitrate Nitrite	1.1		0.10		mg/L			05/04/17 22:50	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: MW-07

Lab Sample ID: 500-127127-11

Date Collected: 04/27/17 10:57

Matrix: Water

Date Received: 04/27/17 13:50

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			05/05/17 02:27	1
Toluene	<0.00050		0.00050		mg/L			05/05/17 02:27	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/05/17 02:27	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/05/17 02:27	1

Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		05/05/17 02:27	1
Toluene-d8 (Surr)	101		75 - 120		05/05/17 02:27	1
4-Bromofluorobenzene (Surr)	110		72 - 124		05/05/17 02:27	1
Dibromofluoromethane	89		75 - 120		05/05/17 02:27	1

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040	^	0.0040		mg/L			05/03/17 13:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		04/27/17 15:11	05/03/17 20:47	1
Arsenic	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:47	1
Barium	0.096		0.0025		mg/L		04/27/17 15:11	05/03/17 20:47	1
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:11	05/03/17 20:47	1
Boron	0.13		0.050		mg/L		04/27/17 15:11	05/03/17 20:47	1
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 14:05	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 14:05	1
Cobalt	<0.0010		0.0010		mg/L		04/27/17 15:11	04/28/17 14:05	1
Copper	<0.0020	^	0.0020		mg/L		04/27/17 15:11	04/28/17 14:05	1
Iron	0.40		0.10		mg/L		04/27/17 15:11	04/28/17 14:05	1
Lead	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 14:05	1
Manganese	0.011		0.0025		mg/L		04/27/17 15:11	04/28/17 14:05	1
Nickel	<0.0020		0.0020		mg/L		04/27/17 15:11	05/03/17 20:47	1
Selenium	<0.0025		0.0025		mg/L		04/27/17 15:11	05/03/17 20:47	1
Silver	<0.00050		0.00050		mg/L		04/27/17 15:11	04/28/17 14:05	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:11	04/28/17 14:05	1
Vanadium	0.0050		0.0050		mg/L		04/27/17 15:11	04/28/17 14:05	1
Zinc	<0.020		0.020		mg/L		04/27/17 15:11	05/03/17 20:47	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 13:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/06/17 12:40	05/06/17 13:24	1
Sulfate	74		25		mg/L			05/05/17 11:20	5
Chloride	160		10		mg/L			04/30/17 20:27	5
Nitrogen, Nitrate	1.0		0.10		mg/L			05/06/17 02:07	1
Total Dissolved Solids	590		10		mg/L			05/01/17 01:30	1
Fluoride	0.28		0.10		mg/L			05/01/17 15:05	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			04/27/17 16:10	1
Nitrogen, Nitrate Nitrite	1.0		0.10		mg/L			05/04/17 22:51	1

TestAmerica Chicago

Client Sample Results

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

TestAmerica Job ID: 500-127127-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-127127-12

Date Collected: 04/25/17 00:00

Matrix: Water

Date Received: 04/27/17 13:50

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			05/04/17 21:40	1
Toluene	<0.00050		0.00050		mg/L			05/04/17 21:40	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/04/17 21:40	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/04/17 21:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		05/04/17 21:40	1
Toluene-d8 (Surr)	104		75 - 120		05/04/17 21:40	1
4-Bromofluorobenzene (Surr)	111		72 - 124		05/04/17 21:40	1
Dibromofluoromethane	91		75 - 120		05/04/17 21:40	1

Definitions/Glossary

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

TestAmerica Job ID: 500-127127-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
A	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Metals

Qualifier	Qualifier Description
A	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

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

TestAmerica Job ID: 500-127127-1



GC/MS VOA

Analysis Batch: 383746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Total/NA	Water	8260B	
500-127127-2	MW-08	Total/NA	Water	8260B	
500-127127-3	MW-09	Total/NA	Water	8260B	
500-127127-4	DUPLICATE	Total/NA	Water	8260B	
500-127127-5	MW-03	Total/NA	Water	8260B	
500-127127-6	MW-04	Total/NA	Water	8260B	
500-127127-7	MW-05	Total/NA	Water	8260B	
500-127127-8	MW-10	Total/NA	Water	8260B	
500-127127-9	MW-11	Total/NA	Water	8260B	
500-127127-10	MW-06	Total/NA	Water	8260B	
500-127127-11	MW-07	Total/NA	Water	8260B	
500-127127-12	Trip Blank	Total/NA	Water	8260B	
MB 500-383746/4	Method Blank	Total/NA	Water	8260B	
LCS 500-383746/3	Lab Control Sample	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 162663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-3	MW-09	Total/NA	Water	314.0	
500-127127-4	DUPLICATE	Total/NA	Water	314.0	
500-127127-11	MW-07	Total/NA	Water	314.0	
MB 320-162663/5	Method Blank	Total/NA	Water	314.0	
LCS 320-162663/6	Lab Control Sample	Total/NA	Water	314.0	
MRL 320-162663/4	Lab Control Sample	Total/NA	Water	314.0	
500-127127-11 MS	MW-07	Total/NA	Water	314.0	
500-127127-11 MSD	MW-07	Total/NA	Water	314.0	

Analysis Batch: 162666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Total/NA	Water	314.0	
500-127127-2	MW-08	Total/NA	Water	314.0	
500-127127-5	MW-03	Total/NA	Water	314.0	
500-127127-6	MW-04	Total/NA	Water	314.0	
500-127127-7	MW-05	Total/NA	Water	314.0	
500-127127-8	MW-10	Total/NA	Water	314.0	
500-127127-9	MW-11	Total/NA	Water	314.0	
500-127127-10	MW-06	Total/NA	Water	314.0	
MB 320-162666/5	Method Blank	Total/NA	Water	314.0	
LCS 320-162666/6	Lab Control Sample	Total/NA	Water	314.0	
MRL 320-162666/4	Lab Control Sample	Total/NA	Water	314.0	
500-127127-1 MS	MW-02	Total/NA	Water	314.0	
500-127127-1 MSD	MW-02	Total/NA	Water	314.0	

Metals

Prep Batch: 382602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	Soluble Metals	
500-127127-2	MW-08	Dissolved	Water	Soluble Metals	

TestAmerica Chicago

QC Association Summary

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

TestAmerica Job ID: 500-127127-1

Metals (Continued)

Prep Batch: 382602 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-3	MW-09	Dissolved	Water	Soluble Metals	
500-127127-4	DUPLICATE	Dissolved	Water	Soluble Metals	
500-127127-5	MW-03	Dissolved	Water	Soluble Metals	
500-127127-6	MW-04	Dissolved	Water	Soluble Metals	
500-127127-7	MW-05	Dissolved	Water	Soluble Metals	
500-127127-8	MW-10	Dissolved	Water	Soluble Metals	
500-127127-9	MW-11	Dissolved	Water	Soluble Metals	
500-127127-10	MW-06	Dissolved	Water	Soluble Metals	
500-127127-11	MW-07	Dissolved	Water	Soluble Metals	
MB 500-382602/1-A	Method Blank	Soluble	Water	Soluble Metals	
LCS 500-382602/2-A	Lab Control Sample	Soluble	Water	Soluble Metals	

Analysis Batch: 382851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	6020A	382602
500-127127-2	MW-08	Dissolved	Water	6020A	382602
500-127127-3	MW-09	Dissolved	Water	6020A	382602
500-127127-4	DUPLICATE	Dissolved	Water	6020A	382602
500-127127-5	MW-03	Dissolved	Water	6020A	382602
500-127127-6	MW-04	Dissolved	Water	6020A	382602
500-127127-7	MW-05	Dissolved	Water	6020A	382602
500-127127-8	MW-10	Dissolved	Water	6020A	382602
500-127127-9	MW-11	Dissolved	Water	6020A	382602
500-127127-10	MW-06	Dissolved	Water	6020A	382602
500-127127-11	MW-07	Dissolved	Water	6020A	382602
MB 500-382602/1-A	Method Blank	Soluble	Water	6020A	382602
LCS 500-382602/2-A	Lab Control Sample	Soluble	Water	6020A	382602

Prep Batch: 383333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	7470A	
500-127127-2	MW-08	Dissolved	Water	7470A	
500-127127-3	MW-09	Dissolved	Water	7470A	
500-127127-4	DUPLICATE	Dissolved	Water	7470A	
500-127127-5	MW-03	Dissolved	Water	7470A	
500-127127-6	MW-04	Dissolved	Water	7470A	
500-127127-7	MW-05	Dissolved	Water	7470A	
500-127127-8	MW-10	Dissolved	Water	7470A	
500-127127-9	MW-11	Dissolved	Water	7470A	
500-127127-10	MW-06	Dissolved	Water	7470A	
500-127127-11	MW-07	Dissolved	Water	7470A	
MB 500-383333/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-383333/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-127127-1 MS	MW-02	Dissolved	Water	7470A	
500-127127-1 MSD	MW-02	Dissolved	Water	7470A	
500-127127-1 DU	MW-02	Dissolved	Water	7470A	

Analysis Batch: 383570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	7470A	383333
500-127127-2	MW-08	Dissolved	Water	7470A	383333

TestAmerica Chicago

QC Association Summary

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

TestAmerica Job ID: 500-127127-1

Metals (Continued)

Analysis Batch: 383570 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-3	MW-09	Dissolved	Water	7470A	383333
500-127127-4	DUPLICATE	Dissolved	Water	7470A	383333
500-127127-5	MW-03	Dissolved	Water	7470A	383333
500-127127-6	MW-04	Dissolved	Water	7470A	383333
500-127127-7	MW-05	Dissolved	Water	7470A	383333
500-127127-8	MW-10	Dissolved	Water	7470A	383333
500-127127-9	MW-11	Dissolved	Water	7470A	383333
500-127127-10	MW-06	Dissolved	Water	7470A	383333
500-127127-11	MW-07	Dissolved	Water	7470A	383333
MB 500-383333/12-A	Method Blank	Total/NA	Water	7470A	383333
LCS 500-383333/13-A	Lab Control Sample	Total/NA	Water	7470A	383333
500-127127-1 MS	MW-02	Dissolved	Water	7470A	383333
500-127127-1 MSD	MW-02	Dissolved	Water	7470A	383333
500-127127-1 DU	MW-02	Dissolved	Water	7470A	383333

Analysis Batch: 383705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	6020A	382602
500-127127-2	MW-08	Dissolved	Water	6020A	382602
500-127127-3	MW-09	Dissolved	Water	6020A	382602
500-127127-4	DUPLICATE	Dissolved	Water	6020A	382602
500-127127-5	MW-03	Dissolved	Water	6020A	382602
500-127127-6	MW-04	Dissolved	Water	6020A	382602
500-127127-7	MW-05	Dissolved	Water	6020A	382602
500-127127-8	MW-10	Dissolved	Water	6020A	382602
500-127127-9	MW-11	Dissolved	Water	6020A	382602
500-127127-10	MW-06	Dissolved	Water	6020A	382602
500-127127-11	MW-07	Dissolved	Water	6020A	382602
MB 500-382602/1-A	Method Blank	Soluble	Water	6020A	382602
LCS 500-382602/2-A	Lab Control Sample	Soluble	Water	6020A	382602

Analysis Batch: 384194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-3	MW-09	Dissolved	Water	6020A	382602
500-127127-4	DUPLICATE	Dissolved	Water	6020A	382602

General Chemistry

Analysis Batch: 382630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	SM 4500 NO2 B	
500-127127-2	MW-08	Dissolved	Water	SM 4500 NO2 B	
500-127127-3	MW-09	Dissolved	Water	SM 4500 NO2 B	
500-127127-4	DUPLICATE	Dissolved	Water	SM 4500 NO2 B	
MB 500-382630/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	
LCS 500-382630/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	

Analysis Batch: 382632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-5	MW-03	Dissolved	Water	SM 4500 NO2 B	

TestAmerica Chicago

QC Association Summary

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

TestAmerica Job ID: 500-127127-1

General Chemistry (Continued)

Analysis Batch: 382632 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-6	MW-04	Dissolved	Water	SM 4500 NO2 B	
500-127127-7	MW-05	Dissolved	Water	SM 4500 NO2 B	
500-127127-8	MW-10	Dissolved	Water	SM 4500 NO2 B	
500-127127-9	MW-11	Dissolved	Water	SM 4500 NO2 B	
500-127127-10	MW-06	Dissolved	Water	SM 4500 NO2 B	
500-127127-11	MW-07	Dissolved	Water	SM 4500 NO2 B	
MB 500-382632/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	
LCS 500-382632/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	
500-127127-5 MS	MW-03	Dissolved	Water	SM 4500 NO2 B	
500-127127-5 MSD	MW-03	Dissolved	Water	SM 4500 NO2 B	

Analysis Batch: 383023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	SM 2540C	
500-127127-2	MW-08	Dissolved	Water	SM 2540C	
500-127127-5	MW-03	Dissolved	Water	SM 2540C	
MB 500-383023/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-383023/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-127127-1 DU	MW-02	Dissolved	Water	SM 2540C	

Analysis Batch: 383024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-6	MW-04	Dissolved	Water	SM 2540C	
500-127127-7	MW-05	Dissolved	Water	SM 2540C	
500-127127-8	MW-10	Dissolved	Water	SM 2540C	
500-127127-9	MW-11	Dissolved	Water	SM 2540C	
500-127127-10	MW-06	Dissolved	Water	SM 2540C	
500-127127-11	MW-07	Dissolved	Water	SM 2540C	
MB 500-383024/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-383024/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 383026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	9251	
500-127127-2	MW-08	Dissolved	Water	9251	
500-127127-3	MW-09	Dissolved	Water	9251	
500-127127-4	DUPLICATE	Dissolved	Water	9251	
500-127127-5	MW-03	Dissolved	Water	9251	
500-127127-6	MW-04	Dissolved	Water	9251	
500-127127-7	MW-05	Dissolved	Water	9251	
500-127127-8	MW-10	Dissolved	Water	9251	
500-127127-9	MW-11	Dissolved	Water	9251	
500-127127-10	MW-06	Dissolved	Water	9251	
500-127127-11	MW-07	Dissolved	Water	9251	
MB 500-383026/4	Method Blank	Total/NA	Water	9251	
LCS 500-383026/5	Lab Control Sample	Total/NA	Water	9251	
500-127127-8 MS	MW-10	Dissolved	Water	9251	
500-127127-8 MSD	MW-10	Dissolved	Water	9251	

TestAmerica Chicago

QC Association Summary

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

TestAmerica Job ID: 500-127127-1

General Chemistry (Continued)

Analysis Batch: 383193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	SM 4500 F C	
500-127127-2	MW-08	Dissolved	Water	SM 4500 F C	
500-127127-3	MW-09	Dissolved	Water	SM 4500 F C	
500-127127-4	DUPLICATE	Dissolved	Water	SM 4500 F C	
500-127127-5	MW-03	Dissolved	Water	SM 4500 F C	
500-127127-6	MW-04	Dissolved	Water	SM 4500 F C	
500-127127-7	MW-05	Dissolved	Water	SM 4500 F C	
500-127127-8	MW-10	Dissolved	Water	SM 4500 F C	
500-127127-9	MW-11	Dissolved	Water	SM 4500 F C	
500-127127-10	MW-06	Dissolved	Water	SM 4500 F C	
500-127127-11	MW-07	Dissolved	Water	SM 4500 F C	
MB 500-383193/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-383193/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 383234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-3	MW-09	Dissolved	Water	SM 2540C	
500-127127-4	DUPLICATE	Dissolved	Water	SM 2540C	
MB 500-383234/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-383234/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Prep Batch: 383920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	9010B	
500-127127-2	MW-08	Dissolved	Water	9010B	
500-127127-3	MW-09	Dissolved	Water	9010B	
500-127127-4	DUPLICATE	Dissolved	Water	9010B	
MB 500-383920/1-A	Method Blank	Total/NA	Water	9010B	
LCS 500-383920/2-A	Lab Control Sample	Total/NA	Water	9010B	

Analysis Batch: 383927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	9038	
500-127127-2	MW-08	Dissolved	Water	9038	
500-127127-3	MW-09	Dissolved	Water	9038	
500-127127-4	DUPLICATE	Dissolved	Water	9038	
500-127127-5	MW-03	Dissolved	Water	9038	
500-127127-6	MW-04	Dissolved	Water	9038	
500-127127-7	MW-05	Dissolved	Water	9038	
500-127127-8	MW-10	Dissolved	Water	9038	
500-127127-9	MW-11	Dissolved	Water	9038	
500-127127-10	MW-06	Dissolved	Water	9038	
500-127127-11	MW-07	Dissolved	Water	9038	
MB 500-383927/3	Method Blank	Total/NA	Water	9038	
LCS 500-383927/4	Lab Control Sample	Total/NA	Water	9038	
500-127127-1 MS	MW-02	Dissolved	Water	9038	
500-127127-1 MSD	MW-02	Dissolved	Water	9038	

Analysis Batch: 384016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	SM 4500 NO3 F	

TestAmerica Chicago

QC Association Summary

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

TestAmerica Job ID: 500-127127-1

General Chemistry (Continued)

Analysis Batch: 384016 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-2	MW-08	Dissolved	Water	SM 4500 NO3 F	
500-127127-3	MW-09	Dissolved	Water	SM 4500 NO3 F	
500-127127-4	DUPLICATE	Dissolved	Water	SM 4500 NO3 F	
500-127127-5	MW-03	Dissolved	Water	SM 4500 NO3 F	
500-127127-6	MW-04	Dissolved	Water	SM 4500 NO3 F	
500-127127-7	MW-05	Dissolved	Water	SM 4500 NO3 F	
500-127127-8	MW-10	Dissolved	Water	SM 4500 NO3 F	
500-127127-9	MW-11	Dissolved	Water	SM 4500 NO3 F	
500-127127-10	MW-06	Dissolved	Water	SM 4500 NO3 F	
500-127127-11	MW-07	Dissolved	Water	SM 4500 NO3 F	
MB 500-384016/12	Method Blank	Total/NA	Water	SM 4500 NO3 F	
LCS 500-384016/13	Lab Control Sample	Total/NA	Water	SM 4500 NO3 F	

Analysis Batch: 384049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	Nitrate by calc	
500-127127-2	MW-08	Dissolved	Water	Nitrate by calc	
500-127127-3	MW-09	Dissolved	Water	Nitrate by calc	
500-127127-4	DUPLICATE	Dissolved	Water	Nitrate by calc	
500-127127-5	MW-03	Dissolved	Water	Nitrate by calc	
500-127127-6	MW-04	Dissolved	Water	Nitrate by calc	
500-127127-7	MW-05	Dissolved	Water	Nitrate by calc	
500-127127-8	MW-10	Dissolved	Water	Nitrate by calc	
500-127127-9	MW-11	Dissolved	Water	Nitrate by calc	
500-127127-10	MW-06	Dissolved	Water	Nitrate by calc	
500-127127-11	MW-07	Dissolved	Water	Nitrate by calc	

Prep Batch: 384080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-5	MW-03	Dissolved	Water	9010B	
500-127127-6	MW-04	Dissolved	Water	9010B	
500-127127-7	MW-05	Dissolved	Water	9010B	
500-127127-8	MW-10	Dissolved	Water	9010B	
500-127127-9	MW-11	Dissolved	Water	9010B	
500-127127-10	MW-06	Dissolved	Water	9010B	
500-127127-11	MW-07	Dissolved	Water	9010B	
MB 500-384080/1-A	Method Blank	Total/NA	Water	9010B	
LCS 500-384080/2-A	Lab Control Sample	Total/NA	Water	9010B	

Analysis Batch: 384225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-5	MW-03	Dissolved	Water	9014	384080
500-127127-6	MW-04	Dissolved	Water	9014	384080
500-127127-7	MW-05	Dissolved	Water	9014	384080
500-127127-8	MW-10	Dissolved	Water	9014	384080
500-127127-9	MW-11	Dissolved	Water	9014	384080
500-127127-10	MW-06	Dissolved	Water	9014	384080
500-127127-11	MW-07	Dissolved	Water	9014	384080
MB 500-384080/1-A	Method Blank	Total/NA	Water	9014	384080
LCS 500-384080/2-A	Lab Control Sample	Total/NA	Water	9014	384080

TestAmerica Chicago

QC Association Summary

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

TestAmerica Job ID: 500-127127-1



General Chemistry (Continued)

Analysis Batch: 384226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127127-1	MW-02	Dissolved	Water	9014	383920
500-127127-2	MW-08	Dissolved	Water	9014	383920
500-127127-3	MW-09	Dissolved	Water	9014	383920
500-127127-4	DUPLICATE	Dissolved	Water	9014	383920
MB 500-383920/1-A	Method Blank	Total/NA	Water	9014	383920
LCS 500-383920/2-A	Lab Control Sample	Total/NA	Water	9014	383920

Surrogate Summary

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

TestAmerica Job ID: 500-127127-1

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 (75-126)	TOL (75-120)	BFB (72-124)	DBFM (75-120)
500-127127-1	MW-02	103	102	110	91
500-127127-2	MW-08	106	101	109	90
500-127127-3	MW-09	105	102	109	89
500-127127-4	DUPLICATE	106	100	110	91
500-127127-5	MW-03	106	102	111	90
500-127127-6	MW-04	106	102	111	92
500-127127-7	MW-05	103	102	108	88
500-127127-8	MW-10	105	101	108	90
500-127127-9	MW-11	106	101	110	91
500-127127-10	MW-06	103	102	112	91
500-127127-11	MW-07	103	101	110	89
500-127127-12	Trip Blank	104	104	111	91
LCS 500-383746/3	Lab Control Sample	105	99	110	94
MB 500-383746/4	Method Blank	107	102	112	92

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TestAmerica Chicago

QC Sample Results

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

TestAmerica Job ID: 500-127127-1



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

Lab Sample ID: MB 500-383746/4
Matrix: Water
Analysis Batch: 383746

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			05/04/17 21:14	1
Toluene	<0.00050		0.00050		mg/L			05/04/17 21:14	1
Ethylbenzene	<0.00050		0.00050		mg/L			05/04/17 21:14	1
Xylenes, Total	<0.0010		0.0010		mg/L			05/04/17 21:14	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		05/04/17 21:14	1
Toluene-d8 (Surr)	102		75 - 120		05/04/17 21:14	1
4-Bromofluorobenzene (Surr)	112		72 - 124		05/04/17 21:14	1
Dibromofluoromethane	92		75 - 120		05/04/17 21:14	1

Lab Sample ID: LCS 500-383746/3
Matrix: Water
Analysis Batch: 383746

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	0.0471		mg/L		94	70 - 120
Toluene	0.0500	0.0502		mg/L		100	70 - 125
Ethylbenzene	0.0500	0.0477		mg/L		95	70 - 120
Xylenes, Total	0.100	0.0971		mg/L		97	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	105		75 - 126
Toluene-d8 (Surr)	99		75 - 120
4-Bromofluorobenzene (Surr)	110		72 - 124
Dibromofluoromethane	94		75 - 120

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 320-162663/5
Matrix: Water
Analysis Batch: 162663

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			05/03/17 13:14	1

Lab Sample ID: LCS 320-162663/6
Matrix: Water
Analysis Batch: 162663

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Perchlorate	0.0500	0.0543	^	mg/L		109	85 - 115

QC Sample Results

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

TestAmerica Job ID: 500-127127-1

Method: 314.0 - Perchlorate (IC) (Continued)

Lab Sample ID: MRL 320-162663/4				Client Sample ID: Lab Control Sample							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 162663											
Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits				
Perchlorate	4.00	4.75		ug/L		119	75 - 125				
Lab Sample ID: 500-127127-11 MS				Client Sample ID: MW-07							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 162663											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate	<0.0040	^	0.0500	0.0533	^	mg/L		107	80 - 120		
Lab Sample ID: 500-127127-11 MSD				Client Sample ID: MW-07							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 162663											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	<0.0040	^	0.0500	0.0531	^	mg/L		106	80 - 120	0	20
Lab Sample ID: MB 320-162666/5				Client Sample ID: Method Blank							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 162666											
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Perchlorate	<0.0040		0.0040		mg/L			05/02/17 12:06	1		
Lab Sample ID: LCS 320-162666/6				Client Sample ID: Lab Control Sample							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 162666											
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits				
Perchlorate	0.0500	0.0519		mg/L		104	85 - 115				
Lab Sample ID: MRL 320-162666/4				Client Sample ID: Lab Control Sample							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 162666											
Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits				
Perchlorate	4.00	<4.0		ug/L		98	75 - 125				
Lab Sample ID: 500-127127-1 MS				Client Sample ID: MW-02							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 162666											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate	<0.0040		0.0500	0.0419		mg/L		84	80 - 120		
Lab Sample ID: 500-127127-1 MSD				Client Sample ID: MW-02							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 162666											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	<0.0040		0.0500	0.0424		mg/L		85	80 - 120	1	20

TestAmerica Chicago

QC Sample Results

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

TestAmerica Job ID: 500-127127-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-382602/1-A
Matrix: Water
Analysis Batch: 382851

Client Sample ID: Method Blank
Prep Type: Soluble
Prep Batch: 382602

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00050		0.00050		mg/L		04/27/17 15:04	04/28/17 13:12	1
Chromium	<0.0050		0.0050		mg/L		04/27/17 15:04	04/28/17 13:12	1
Cobalt	<0.0010		0.0010		mg/L		04/27/17 15:04	04/28/17 13:12	1
Copper	<0.0020	^	0.0020		mg/L		04/27/17 15:04	04/28/17 13:12	1
Iron	<0.10		0.10		mg/L		04/27/17 15:04	04/28/17 13:12	1
Lead	<0.00050		0.00050		mg/L		04/27/17 15:04	04/28/17 13:12	1
Manganese	<0.0025		0.0025		mg/L		04/27/17 15:04	04/28/17 13:12	1
Silver	<0.00050		0.00050		mg/L		04/27/17 15:04	04/28/17 13:12	1
Thallium	<0.0020		0.0020		mg/L		04/27/17 15:04	04/28/17 13:12	1
Vanadium	<0.0050		0.0050		mg/L		04/27/17 15:04	04/28/17 13:12	1

Lab Sample ID: MB 500-382602/1-A
Matrix: Water
Analysis Batch: 383705

Client Sample ID: Method Blank
Prep Type: Soluble
Prep Batch: 382602

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		04/27/17 15:04	05/03/17 20:01	1
Arsenic	<0.0010		0.0010		mg/L		04/27/17 15:04	05/03/17 20:01	1
Barium	<0.0025		0.0025		mg/L		04/27/17 15:04	05/03/17 20:01	1
Beryllium	<0.0010		0.0010		mg/L		04/27/17 15:04	05/03/17 20:01	1
Boron	<0.050		0.050		mg/L		04/27/17 15:04	05/03/17 20:01	1
Nickel	<0.0020		0.0020		mg/L		04/27/17 15:04	05/03/17 20:01	1
Selenium	<0.0025		0.0025		mg/L		04/27/17 15:04	05/03/17 20:01	1
Zinc	<0.020		0.020		mg/L		04/27/17 15:04	05/03/17 20:01	1

Lab Sample ID: LCS 500-382602/2-A
Matrix: Water
Analysis Batch: 382851

Client Sample ID: Lab Control Sample
Prep Type: Soluble
Prep Batch: 382602

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.0500	0.0510		mg/L		102	80 - 120
Chromium	0.200	0.201		mg/L		101	80 - 120
Cobalt	0.500	0.506		mg/L		101	80 - 120
Copper	0.250	0.252	^	mg/L		101	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Manganese	0.500	0.505		mg/L		101	80 - 120
Silver	0.0500	0.0519		mg/L		104	80 - 120
Thallium	0.100	0.106		mg/L		106	80 - 120
Vanadium	0.500	0.495		mg/L		99	80 - 120

Lab Sample ID: LCS 500-382602/2-A
Matrix: Water
Analysis Batch: 383705

Client Sample ID: Lab Control Sample
Prep Type: Soluble
Prep Batch: 382602

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.501		mg/L		100	80 - 120
Arsenic	0.100	0.101		mg/L		101	80 - 120
Barium	0.500	0.520		mg/L		104	80 - 120

TestAmerica Chicago

QC Sample Results

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

TestAmerica Job ID: 500-127127-1

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

Lab Sample ID: LCS 500-382602/2-A Matrix: Water Analysis Batch: 383705			Client Sample ID: Lab Control Sample Prep Type: Soluble Prep Batch: 382602 %Rec.				
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Beryllium	0.0500	0.0497		mg/L		99	80 - 120
Boron	1.00	0.971		mg/L		97	80 - 120
Nickel	0.500	0.514		mg/L		103	80 - 120
Selenium	0.100	0.103		mg/L		103	80 - 120
Zinc	0.500	0.508		mg/L		102	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-383333/12-A Matrix: Water Analysis Batch: 383570			Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 383333						
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/02/17 12:00	05/03/17 12:34	1

Lab Sample ID: LCS 500-383333/13-A Matrix: Water Analysis Batch: 383570			Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 383333 %Rec.				
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00173		mg/L		86	80 - 120

Lab Sample ID: 500-127127-1 MS Matrix: Water Analysis Batch: 383570			Client Sample ID: MW-02 Prep Type: Dissolved Prep Batch: 383333 %Rec.						
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.000942		mg/L		94	75 - 125

Lab Sample ID: 500-127127-1 MSD Matrix: Water Analysis Batch: 383570			Client Sample ID: MW-02 Prep Type: Dissolved Prep Batch: 383333 %Rec. RPD								
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.00020		0.00100	0.000886		mg/L		89	75 - 125	6	20

Lab Sample ID: 500-127127-1 DU Matrix: Water Analysis Batch: 383570			Client Sample ID: MW-02 Prep Type: Dissolved Prep Batch: 383333 %Rec. RPD							
Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit		
Mercury	<0.00020		<0.00020		mg/L		NC	20		

TestAmerica Chicago

QC Sample Results

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

TestAmerica Job ID: 500-127127-1

Method: 9014 - Cyanide

Lab Sample ID: MB 500-383920/1-A
Matrix: Water
Analysis Batch: 384226

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 383920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/05/17 10:30	05/05/17 16:29	1

Lab Sample ID: LCS 500-383920/2-A
Matrix: Water
Analysis Batch: 384226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 383920
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.100	0.103		mg/L		103	80 - 120

Lab Sample ID: MB 500-384080/1-A
Matrix: Water
Analysis Batch: 384225

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 384080

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		05/06/17 12:40	05/06/17 13:15	1

Lab Sample ID: LCS 500-384080/2-A
Matrix: Water
Analysis Batch: 384225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 384080
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.100	0.0985		mg/L		99	80 - 120

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 500-383927/3
Matrix: Water
Analysis Batch: 383927

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			05/05/17 11:03	1

Lab Sample ID: LCS 500-383927/4
Matrix: Water
Analysis Batch: 383927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Sulfate	20.0	20.7		mg/L		103	80 - 120

Lab Sample ID: 500-127127-1 MS
Matrix: Water
Analysis Batch: 383927

Client Sample ID: MW-02
Prep Type: Dissolved
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Sulfate	140		200	332		mg/L		94	75 - 125

TestAmerica Chicago

MWG13-15_62372
 5/11/2017

QC Sample Results

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

TestAmerica Job ID: 500-127127-1

Method: 9038 - Sulfate, Turbidimetric (Continued)

Lab Sample ID: 500-127127-1 MSD
Matrix: Water
Analysis Batch: 383927

Client Sample ID: MW-02
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	140		200	334		mg/L		95	75 - 125	0	20

Method: 9251 - Chloride

Lab Sample ID: MB 500-383026/4
Matrix: Water
Analysis Batch: 383026

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			04/30/17 19:38	1

Lab Sample ID: LCS 500-383026/5
Matrix: Water
Analysis Batch: 383026

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	52.8		mg/L		106	80 - 120

Lab Sample ID: 500-127127-8 MS
Matrix: Water
Analysis Batch: 383026

Client Sample ID: MW-10
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	210		50.0	235	4	mg/L		56	75 - 125

Lab Sample ID: 500-127127-8 MSD
Matrix: Water
Analysis Batch: 383026

Client Sample ID: MW-10
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	210		50.0	238	4	mg/L		62	75 - 125	1	20

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

Lab Sample ID: MB 500-383023/1
Matrix: Water
Analysis Batch: 383023

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			04/30/17 21:44	1

Lab Sample ID: LCS 500-383023/2
Matrix: Water
Analysis Batch: 383023

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	292		mg/L		117	80 - 120

TestAmerica Chicago

QC Sample Results

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

TestAmerica Job ID: 500-127127-1



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

Lab Sample ID: MB 500-383024/1
Matrix: Water
Analysis Batch: 383024

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			05/01/17 01:12	1

Lab Sample ID: LCS 500-383024/2
Matrix: Water
Analysis Batch: 383024

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

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

Lab Sample ID: MB 500-383234/1
Matrix: Water
Analysis Batch: 383234

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			05/02/17 04:25	1

Lab Sample ID: LCS 500-383234/2
Matrix: Water
Analysis Batch: 383234

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	288		mg/L		115	80 - 120

Lab Sample ID: 500-127127-1 DU
Matrix: Water
Analysis Batch: 383023

Client Sample ID: MW-02
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	890		906		mg/L		2	5

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-383193/3
Matrix: Water
Analysis Batch: 383193

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			05/01/17 14:15	1

Lab Sample ID: LCS 500-383193/4
Matrix: Water
Analysis Batch: 383193

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	9.89		mg/L		99	80 - 120

TestAmerica Chicago

MWG13-15_62374
 5/11/2017

QC Sample Results

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

TestAmerica Job ID: 500-127127-1

Method: SM 4500 NO2 B - Nitrogen, Nitrite

Lab Sample ID: MB 500-382630/3
Matrix: Water
Analysis Batch: 382630

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			04/26/17 18:10	1

Lab Sample ID: LCS 500-382630/4
Matrix: Water
Analysis Batch: 382630

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	0.105		mg/L		105	80 - 120

Lab Sample ID: MB 500-382632/3
Matrix: Water
Analysis Batch: 382632

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			04/27/17 16:04	1

Lab Sample ID: LCS 500-382632/4
Matrix: Water
Analysis Batch: 382632

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	0.106		mg/L		106	80 - 120

Lab Sample ID: 500-127127-5 MS
Matrix: Water
Analysis Batch: 382632

Client Sample ID: MW-03
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	0.0968		mg/L		97	75 - 125

Lab Sample ID: 500-127127-5 MSD
Matrix: Water
Analysis Batch: 382632

Client Sample ID: MW-03
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	0.0980		mg/L		98	75 - 125	1	20

Method: SM 4500 NO3 F - Nitrogen, Nitrate

Lab Sample ID: MB 500-384016/12
Matrix: Water
Analysis Batch: 384016

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			05/04/17 22:03	1

TestAmerica Chicago

MWG13-15_62375

5/11/2017

QC Sample Results

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

TestAmerica Job ID: 500-127127-1

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

Lab Sample ID: LCS 500-384016/13
Matrix: Water
Analysis Batch: 384016

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	0.823		mg/L		82	80 - 120



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Chicago

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

Report To:

Contact: Rich Gnal
Company: KPRG & Associates Inc.
Address: 14865 W. Lisbon Rd., Suite 2B
Brookfield, WI
Phone: 262-781-0475
Fax:
Email: richardg@kprginc.com


Bill To:

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

Lab Lot # 500-127127
Package Sealed Yes No
Received on ice Yes No
Temperature °C of Cooler 1.4-22.0

Laboratory ID	Client Sample ID	Sampling Date	Time	Matrix	# of Cont	Client Project #		Additional Analyses / Remarks	
						12313.0	50005078	Yes	No
1	MW-02	4-25-17	12:59	W	1			Preserv. Indicated Yes No N/A	
2	MW-08	4-25-17	14:07	W	1			Rea CL ₂ Check OK Yes No N/A	
3	MW-09	4-25-17	15:02	W	1			Sample Labels and COC Agree Yes No COC not present	
4	DUPLICATE	4-25-17		W	1				

RELINQUISHED BY: *[Signature]* COMPANY: KPRG DATE: 4-25-17 TIME: 17:30
 RECEIVED BY: FEDEX COMPANY: TA DATE: 04/26/17 TIME: 0900

COMMENTS:  500-127127 COC

Date Received: 04/26/17
 Courier: FX
 Hand Delivered:

Matrix Key: SE = Sediment, SO = Solid, DL = Drum Liquid, DS = Drum Solid, MS = Miscellaneous, OL = Oil, A = Air
 Container Key: 1. Plastic, 2. VOA Vial, 3. Sterile Plastic, 4. Amber Glass, 5. Wadsworth Glass, 6. Other
 Preservative Key: 1. HCl, Cool to 4°, 2. H₂SO₄, Cool to 4°, 3. HNO₃, Cool to 4°, 4. NaOH, Cool to 4°, 5. NaOH/Zn, Cool to 4°, 6. Cool to 4°, 7. None

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Chicago
2417 Bond St
University Park, IL 60484
708-534-5200
Fax 708-534-5211

Report To: **Rich Gnal**
Contact: **KPRG & Associates Inc.**
Company: **14665 W. Lisbon Rd, Suite 2B**
Address: **Brookfield, WI**
Phone: **262-781-0475**
Fax: **richardg@kprginc.com**
Email: **richardg@kprginc.com**

Bill To: **Lab Lot # 500-127127**
Contact: **Package Sealed**
Company: **Yes No**
Address: **Samples Sealed**
Phone: **Yes No**
Fax: **Samples Intact**
Email: **Yes No N/A**
Temperature °C of cooler: **4.3**

Sampler Name:	Client Project #	Refrg #	Comp/Grb	Volume	Preserv.	# of Cont	Matrix	Sampling Date	Time	Additional Analyses / Remarks
Ian John Howieson	12313.0							4-26-17	10:43	
Project Name:	TestAmerica Project Number:							4-26-17	09:08	
Joliet #29 Station Ash Ponds	50005078							4-26-17	11:55	
Project Location:	Date Required							4-26-17	13:22	
Joliet IL	Hard Copy:							4-26-17	15:32	
Lab PM: Eric Lang	Fax:									
Laboratory ID	Client Sample ID									
5	MW-03									
6	MN-04									
7	MW-05									
8	MW-10									
9	MW-11									

RELINQUISHED BY: **ISH** COMPANY: **KPRG** DATE: **4-26-17** TIME: **17:50**
RECEIVED BY: **FEDEX** COMPANY: **FEDEX** DATE: **04/27/17** TIME: **1030**

Matrix Key	Container Key	Preservative Key
WW = Wastewater	1. Plastic	1. HC, Cool to 4°
W = Water	2. VOA Vial	2. H ₂ SO ₄ , Cool to 4°
S = Soil	3. Sterile Plastic	3. HNO ₃ , Cool to 4°
SL = Sludge	4. Amber Glass	4. NaOH, Cool to 4°
MS = Miscellaneous	5. W/leachate Glass	5. NaOH/Zn, Cool to 4°
OL = Oil	6. Other	6. Cool to 4°
A = Air		7. None

Comments: **500-127127**
Date Received: **04/27/17**
Courier: **1030**
Hand Delivered:
BIN of Loading: **1**
PAGE **1** of **1**
STL-8208 (0600) MWG13-15-62378 5/11/2017

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Report To: Bill To:
 Contact: Rich Gnat
 Company: KPRG & Associates Inc.
 Address: 14665 W. Lisbon Rd. Suite 2B
 Brookfield, WI
 Phone: 262-781-0475
 Fax:
 Email: richardg@kprginc.com

Lab Lot # 500-127127
 Package Sealed Yes (No) No (Yes)
 Samples Sealed Yes (No) No (Yes)
 Received on Ice Yes (No) No (Yes)
 Samples Intact Yes (No) No (Yes)
 Temperature °C of Cooler (3.1)(2.9)(3.8)(4.6)(4.9)

Sampler Name:	Client Project #	Refrg #																						
Lab PM:	Eric Lang																							
Laboratory ID	MS-MS9	Client Sample ID	Sampling Date	Time	Matrix	# OF Containers	Metals dissolved	Cl, TDS, SO4, F, dissolved	NO2 dissolved	NO3+NO2 dissolved	Cyanide, dissolved	BTEX	Perchlorate	Additional Analyses / Remarks										
1	MW-01	NOT SAMPLED	4-25-17	12:59	W	1	X	X	—	X	X	X	X											
5	MW-02		4-26-17	10:43	W	8	X	X	—	X	X	X	X											
6	MW-03		4-26-17	09:08	W	8	X	X	—	X	X	X	X											
7	MW-04		4-26-17	11:55	W	8	X	X	—	X	X	X	X											
10	MW-05		4-26-17	10:02	W	9	X	X	—	X	X	X	X											
11	MW-06		4-27-17	10:57	W	9	X	X	—	X	X	X	X											
2	MW-07		4-25-17	14:07	W	8	X	X	—	X	X	X	X											
3	MW-08		4-25-17	15:02	W	8	X	X	—	X	X	X	X											
8	MW-09		4-26-17	13:22	W	8	X	X	—	X	X	X	X											
9	MW-10		4-26-17	15:32	W	8	X	X	—	X	X	X	X											
4	Duplicates		4-25-17	N/A	W	8	X	X	—	X	X	X	X											
12	Trip Blank		N/A	N/A	W	2	X	X	—	X	X	X	X											

RELIQUISHED BY: UJH
 COMPANY: KPRG
 DATE: 4-27-17
 TIME: 13:50
 RECEIVED BY: [Signature]
 COMPANY: TA
 DATE: 04/27/17
 TIME: 1350

Matrix Key
 WW = Wastewater
 W = Water
 S = Soil
 SL = Sludge
 MS = Miscellaneous
 OL = Oil
 A = Air

Container Key
 1 Plastic
 2 VOA Vial
 3 Sterile Plastic
 4 Amber Glass
 5 Wide-mouth Glass
 6 Other

Preservative Key
 1 HCl, Cool to 4°
 2 H₂SO₄, Cool to 4°
 3 HNO₃, Cool to 4°
 4 NaOH, Cool to 4°
 5 NaOH/Zn, Cool to 4°
 6 Cool to 4°
 7 None

COMMENTS
 500-127127 COC

Date Received: 04/27/17
 Courier: [Signature]
 Hand Delivered:
 Bill of Lading: [Signature]

1 2 3 4 5 6 7 8 9 10 11 12 13

ORIGIN ID:DPAA (630) 325-1300
XPRG & ASSOCIATES INC
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US

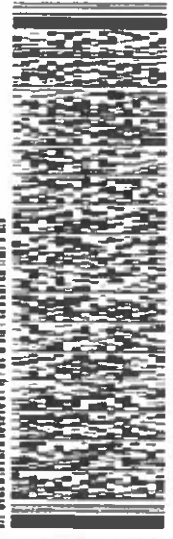
SHIP DATE: 25APR17
ACTWT: 24.00 LB
CAD: 691055/95F01801
DIM3: 20x14x11 IN
BILL THIRD PARTY

TO TESTAMERICA
TESTAMERICA
2417 BOND ST

UNIVERSITY PARK IL 60484

(708) 534-5200
FAX
REF 1

REF 1



FedEx
Express
E

WED - 26 APR 3:00P
STANDARD OVERNIGHT

IRKW 7863 5905 7092
0201

79 JOTA

60484
IL-US ORD



500-127127 Waybill

ORIGIN ID:DPAN (530) 325-1300
KPRG & FASSOC INC

414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

TO TESTAMERICA
TESTAMERICA
2417 BOND ST

SHIP DATE: 26APR17
ACTWT: 26.30 LB
CNO: 6991054/55FD1801
DIMS: 17x15x11 IN
BILL THIRD PARTY



500-127127 Wwyblll

UNIVERSITY PARK IL 60484

(708) 634-6200

FEDEX

REF1

0201 7863 7254 0124



FedEx
Express



THU - 27 APR 3:00P
STANDARD OVERNIGHT

TRK# 7863 7254 0124

79 JOTA

60484
IL-116 ORD



Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PN Lang, Enc A		Carried Training (Yes/No)	
Company TestAmerica Laboratories, Inc		Lab # eric.lang@testamericainc.com		State of Origin Illinois	
Shipping/Receiving		Accreditation or Regulatory (State Code)		Page 1 of 2	
Address 680 Riverside Parkway, West Sacramento State Zip CA, 95605		NELAP Illinois		Job # 500-127127-1	
Phone 916-373-5600(Tel) 916-372-106R(Fax)		Due Date Requested 5/8/2017		Preservation Codes	
Fax #		TAT Requested (days)		A - HCL M - H2O2 N - None O - ASH/OS P - Na2CO3 Q - NaHSO4 R - Na2SO3 S - H2SO4 T - Ascorbic Acid U - Acetone V - UCAA W - pH 4.5 X - I DA Z - Other Specify	
Project Name Joliet #29 Station Ash Ponds (CCA)		PO #		Analysis Requested	
Site		WU #		Total Number of Containers	
Project # 50015078		Project # 550W#		1	
Sample Identification - Client ID (Lab ID)		Project #		Special Instructions/Note	
MW-02 (500-127127-1)		50015078		1	
MW-08 (500-127127-2)		550W#		1	
MW-09 (500-127127-3)				1	
DUPLICATE (500-127127-4)				1	
MW-03 (500-127127-5)				1	
MW-04 (500-127127-6)				1	
MW-05 (500-127127-7)				1	
MW-10 (500-127127-8)				1	
MW-11 (500-127127-9)				1	

Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Residue, Dissolved, or Total)	Preservation Code	Filter Filtered Sample (Yes or No)	Performs Analysis (Yes or No)	316 Perchlorate
4/25/17	12:59 Central	Water	Water	X	X		
4/25/17	1:07 Central	Water	Water	X	X		
4/25/17	15:02 Central	Water	Water	X	X		
4/25/17	Central	Water	Water	X	X		
4/25/17	10:43 Central	Water	Water	X	X		
4/28/17	09:08 Central	Water	Water	X	X		
4/26/17	11:55 Central	Water	Water	X	X		
4/26/17	13:22 Central	Water	Water	X	X		
4/26/17	15:32 Central	Water	Water	X	X		

Possible Hazard Identification

Return To Client Disposal By Lab Archive For Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Special Instructions/QC Requirements

Received by <i>[Signature]</i>	Date Time A/25/17 9:30	Company TAW
Received by	Date Time	Company
Received by	Date Time	Company

Cooler Temperature: °C and Other Remarks: 2-8

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)		Lab P/L Lang, Eric A	Carrier Tracking No.	COC No 500-86529 2					
Client Contact Shipping/Receiving		Phone eric.lang@testamericainc.com	State of Origin Illinois	Page Page 2 of 2					
Company TestAmerica Laboratories, Inc		Address 880 Riverside Parkway West Sacramento State of CA, 95605	Analysis Requested	Lab # 500-127127 1					
Address 880 Riverside Parkway West Sacramento State of CA, 95605		City West Sacramento	Analysis Requested	Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - NaOH E - NaOH F - NaOH G - Acetic Acid H - Acetic Acid I - Ice J - DI Water K - EDTA L - EDTA Other					
Phone 916-373-5800(Tel) 916-372-1059(Fax)		State of CA, 95605	Analysis Requested	M - Hexane N - None O - ASH2O P - NaOH Q - NaOH R - NaOH S - H2SO4 T - H2SO4 U - Acetone V - MCAA W - CH4-5 Z - Other (specify)					
Email		Project # 50005078	Analysis Requested						
Project Name Joint #29 Slalom Ash Ponds (CCA)		SSOWE	Analysis Requested						
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (As received, Preserved, Or treated)	Field Filtered Sample (Yes or No)	Field Perchlorate	Total Number of Containers	Special Instructions/Note
MW-06 (500-127127-10)		4/27/17	10:02 Central		Water	X	X	1	
MW-07 (500-127127-11)		4/27/17	10:57 Central		Water	X	X	1	
<p>Field Perchlorate</p> <p>Field Filtered Sample (Yes or No)</p> <p>Matrix (As received, Preserved, Or treated)</p> <p>Sample Type (C=comp, G=grab)</p> <p>Sample Time</p> <p>Sample Date</p> <p>Project #</p> <p>Project Name</p> <p>State of CA, 95605</p> <p>West Sacramento</p> <p>880 Riverside Parkway</p> <p>TestAmerica Laboratories, Inc</p> <p>Company</p> <p>Shipping/Receiving</p> <p>Client Contact</p> <p>Client Information (Sub Contract Lab)</p>									
<p>Due Date Requested 5/8/2017</p> <p>TAT Requested (days)</p> <p>Phone</p> <p>916-373-5800(Tel) 916-372-1059(Fax)</p> <p>State of CA, 95605</p> <p>West Sacramento</p> <p>880 Riverside Parkway</p> <p>TestAmerica Laboratories, Inc</p> <p>Company</p> <p>Shipping/Receiving</p> <p>Client Contact</p> <p>Client Information (Sub Contract Lab)</p>									
<p>Lab P/L Lang, Eric A</p> <p>Carrier Tracking No.</p> <p>COC No 500-86529 2</p> <p>Page Page 2 of 2</p> <p>Lab # 500-127127 1</p> <p>Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - NaOH E - NaOH F - NaOH G - Acetic Acid H - Acetic Acid I - Ice J - DI Water K - EDTA L - EDTA Other</p> <p>M - Hexane N - None O - ASH2O P - NaOH Q - NaOH R - NaOH S - H2SO4 T - H2SO4 U - Acetone V - MCAA W - CH4-5 Z - Other (specify)</p>									
<p>Field Perchlorate</p> <p>Field Filtered Sample (Yes or No)</p> <p>Matrix (As received, Preserved, Or treated)</p> <p>Sample Type (C=comp, G=grab)</p> <p>Sample Time</p> <p>Sample Date</p> <p>Project #</p> <p>Project Name</p> <p>State of CA, 95605</p> <p>West Sacramento</p> <p>880 Riverside Parkway</p> <p>TestAmerica Laboratories, Inc</p> <p>Company</p> <p>Shipping/Receiving</p> <p>Client Contact</p> <p>Client Information (Sub Contract Lab)</p>									
<p>Due Date Requested 5/8/2017</p> <p>TAT Requested (days)</p> <p>Phone</p> <p>916-373-5800(Tel) 916-372-1059(Fax)</p> <p>State of CA, 95605</p> <p>West Sacramento</p> <p>880 Riverside Parkway</p> <p>TestAmerica Laboratories, Inc</p> <p>Company</p> <p>Shipping/Receiving</p> <p>Client Contact</p> <p>Client Information (Sub Contract Lab)</p>									
<p>Lab P/L Lang, Eric A</p> <p>Carrier Tracking No.</p> <p>COC No 500-86529 2</p> <p>Page Page 2 of 2</p> <p>Lab # 500-127127 1</p> <p>Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - NaOH E - NaOH F - NaOH G - Acetic Acid H - Acetic Acid I - Ice J - DI Water K - EDTA L - EDTA Other</p> <p>M - Hexane N - None O - ASH2O P - NaOH Q - NaOH R - NaOH S - H2SO4 T - H2SO4 U - Acetone V - MCAA W - CH4-5 Z - Other (specify)</p>									

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-127127-1

Login Number: 127127

List Source: TestAmerica Chicago

List Number: 1

Creator: Kelsey, Shawn M

Question	Answer	Comment
Radioactivity wasn't checked or is <= 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	2.0c, 4.5c, (
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
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: 500-127127-1

Login Number: 127127

List Number: 2

Creator: Edman, Connor M

List Source: TestAmerica Sacramento

List Creation: 04/28/17 03:11 PM

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	060267
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	headspace for method 314
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	

Accreditation/Certification Summary

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 500-127127-1

Project/Site: Joliet #29 Station Ash Ponds (CCA)

Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	200060	03-17-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
314.0		Water	Perchlorate



