ANNUAL and QUARTERLY GROUNDWATER MONITORING REPORT
JOLIET #29 GENERATING STATION

January 13, 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: Annual and Quarterly Groundwater Monitoring Results – Fourth Quarter 2016
Joliet #29 Generating Station – Ash Impoundments
Compliance Commitment Agreement VN W-2012-00059; ID# 6284

Dear Ms. Rhodes:

The fourth quarterly groundwater sampling for 2016 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. This report is also intended to serve as the Annual Report and includes historical data analysis/summaries.

Well Inspection and Sampling Procedures

The groundwater monitoring network around the ash ponds at this facility consists of eleven wells (MW-01 through MW-11) as shown on Figure 1. As part of sampling procedures, the integrity of all monitoring wells was inspected and water levels obtained using an electronic water level meter (see summary of water level discussion below). All wells were generally found in good condition with locked protector casings and the concrete surface seals were intact.

Groundwater samples at well locations MW-03 through MW-11 were collected using the low-flow sampling technique. Dedicated PVC bailers were used to collect groundwater samples at monitoring well locations MW-01 and MW-02 due to the short water column (generally less than two feet within each well).

One duplicate sample was collected at well MW-08. In addition, a de-ionized water trip blank accompanied the groundwater samples bottles from and back to the laboratory. The groundwater monitoring samples and the duplicate sample were analyzed for the compounds listed in Illinois Administrative Code (IAC) 620.410(a), 620.410(d) and 620.410(e), excluding radium 226/228. The trip blank was analyzed for the volatile organic compounds (VOCs) listed in IAC 620.410(d).

Comp. Ex. 245M

Groundwater Flow Evaluation

Water level data from the most recent round of sampling along with historical water levels obtained from each well are summarized in Table 1. The water levels were used to generate a groundwater flow map which is provided on Figure 2. The water elevation data indicates a general southeasterly flow. The flow conditions observed during this sampling are consistent with historical conditions reported for the site. Relative to an annual evaluation of groundwater levels, a historical hydrograph is presented in Attachment 1.

Summary of Analytical Data

A copy of the analytical data package is provided in Attachment 2. 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 (+/- 30%) with the exception of toluene and ethyl benzene which were detected in trace concentrations in both samples but which exceeded the 30% comparison threshold between the two samples. Constituent concentrations at well MW-09 are showing a recovery to historically consistent values after the various constituent increases (and pH decrease) during earlier quarters in 2016 monitoring. All wells for which the sampling data reports a value above groundwater comparison standards are located within the area of the approved Groundwater Management Zone (GMZ).

Relative to an annual evaluation of the water chemistry data, time versus concentration curves are provided for each parameter analyzed in Attachment 3. The curves include the Class I drinking water standard for reference, where applicable.

As noted previously, all wells for which the sampling data reports a value above one or more applicable groundwater standards are located within the area of the approved GMZ.

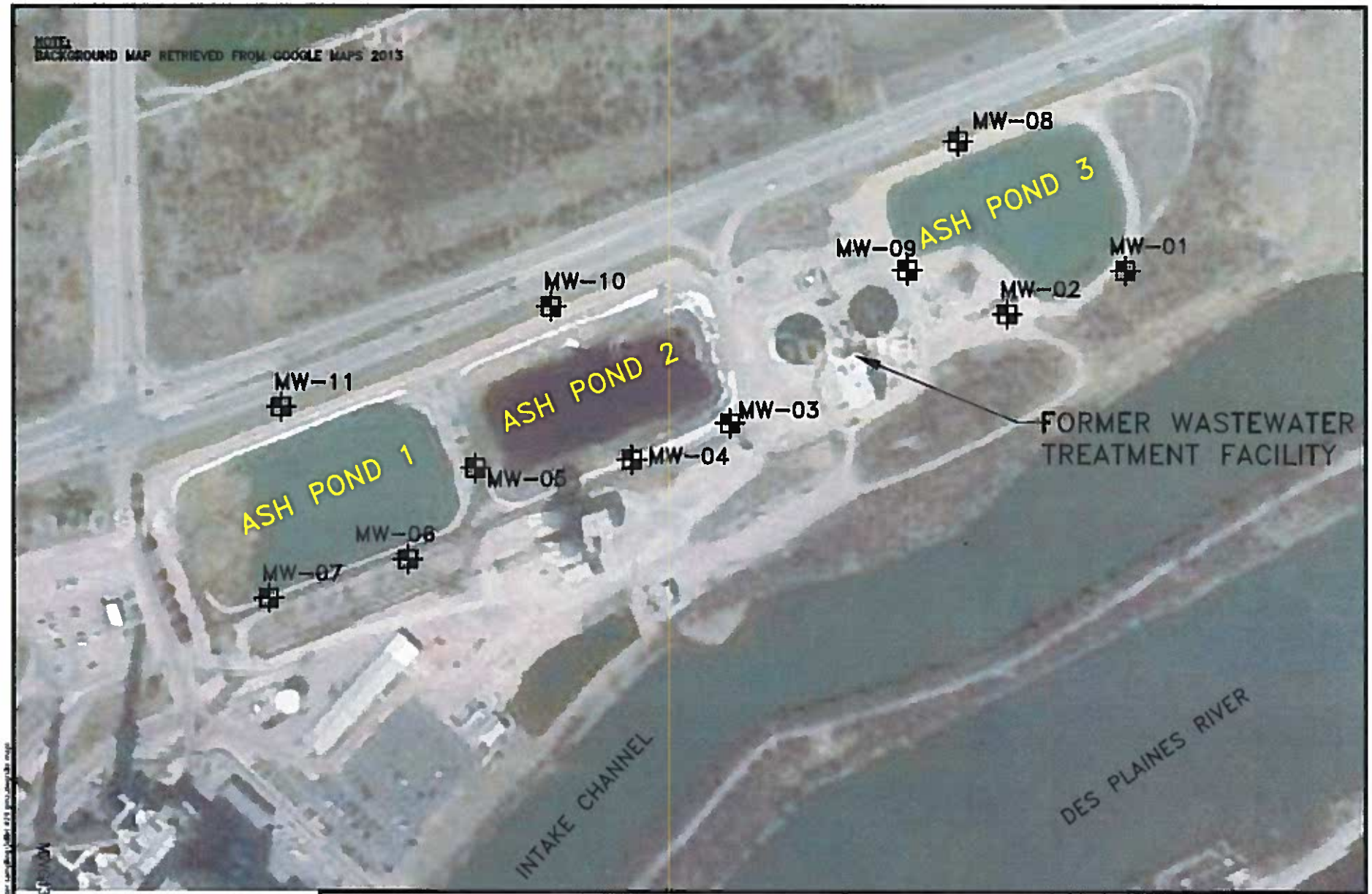
If there are any questions, please contact either Sharene Shealey of NRG Energy at 815-372-4625 or Richard Gnat of KPRG and Associates, Inc. at 262-781-0475.

Sincerely,

William Naglosky
Station Manager

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

FIGURES



MW-03-15_58295

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 2B 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

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

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GROUNDWATER CONTOUR MAP 11/2016

JOLIET #29 GENERATING STATION
JOLIET, ILLINOIS

Scale: 1" = 250'	Date: December 19, 2016
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	10/23/14	534 76	531 46	505 80	NM	504 87	28 96	29 23	29 89
	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
MW-02	10/23/14	534 28	531 19	505 79	505 79	504 05	28 49	28 49	30 23
	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
MW-03	10/23/14	538 78	535 54	505 82	505 82	494 68	32 96	32 96	44 10
	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
MW-04	10/23/14	539 03	535 80	505 86	505 82	496 13	33 17	33 21	42 90
	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
MW-05	10/23/14	539 69	536 43	505 65	505 65	494 64	34 04	34 04	45 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
MW-06	10/23/14	539 06	535 86	505 75	505 77	496 86	33 31	33 29	42 20
	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
MW-07	10/23/14	539 35	535 86	505 79	505 78	496 12	33 56	33 57	43 23
	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

NM - Not Measured

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-08	10/23/14	536 87	533 72	505 78	505 77	498 81	31 09	31 10	38 06
	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
MW-09	10/23/14	534 44	531 13	505 82	505 46	496 29	28 62	28 98	38 15
	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
MW-10	10/23/14	540 03	536 95	505 89	505 88	496 10	34 14	34 15	43 93
	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
MW-11	10/23/14	539 47	536 52	506 28	506 28	497 14	33 19	33 19	42 33
	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

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

NM - Not Measured

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

Sample: MW-01	Date	10/23/2014		2/10/2015		5/27/2015		8/4/2015		10/28/2015		2/9/2016		5/11/2016		8/30/2016		11/3/2016	
Parameter	Standards	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0 006	0 0030	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0030	ND	0 0030	ND	0 0030	ND
Arsenic	0 010	0 0010	ND^	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0010	ND ^	0 0010	ND	0 0010	ND
Barium	2 0	0 0025	0 17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0025	0 15	0 0025	0 071	0 0025	0 12
Beryllium	0 004	0 0010	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0010	ND	0 0010	ND ^	0 0010	ND
Boron	2 0	0 050	0 21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 050	0 18	0 050	0 24	0 050	0 25
Cadmium	0 005	0 00050	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 00050	ND	0 00050	ND	0 00050	ND
Chloride	200 0	10	79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50	400	10	93	10	73
Chromium	0 1	0 0050	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0050	ND	0 0050	ND	0 0050	ND
Cobalt	1 0	0 0010	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0010	ND	0 0010	ND	0 0010	ND
Copper	0 65	0 0020	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0020	ND	0 0020	ND	0 0020	ND
Cyanide	0 2	0 010	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 010	ND	0 010	ND	0 010	ND
Fluoride	4 0	0 10	0 39	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 10	0 42	0 10	0 37	0 10	0 35
Iron	5 0	0 10	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 10	ND ^	0 10	ND	0 10	ND
Lead	0 0075	0 00050	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 00050	ND	0 00050	ND	0 00050	ND
Manganese	0 15	0 0025	0 015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0025	0 0065	0 0025	ND	0 0025	0 0032
Mercury	0 002	0 00020	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 00020	ND	0 00020	ND	0 00020	ND
Nickel	0 1	0 0020	0 0020	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0020	0 0041	0 0020	0 0022	0 0020	0 0022
Nitrogen/Nitrate	10 0	0 10	0 71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 10	1 2	0 10	1 9	0 10	1 0
Nitrogen/Nitrate, Nitrite	NA	0 10	0 71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 10	1 2	0 10	1 9	0 10	1 0
Nitrogen/Nitrite	NA	0 020	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 020	ND	0 020	ND	0 020	ND
Perchlorate	0 0049	0 0040	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0040	ND	0 0040	ND	0 0040	ND
Selenium	0 05	0 0025	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 013	0 021 ^	0 0025	0 0072	0 0025	0 0037
Silver	0 05	0 00050	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 00050	ND	0 00050	ND	0 00050	ND
Sulfate	400 0	20	65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50	170	25	74	20	62
Thallium	0 002	0 0020	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0020	ND	0 0020	ND	0 0020	ND
Total Dissolved Solids	1,200	10	570	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	1100	10	670	10	600
Vanadium	0 049	0 0050	0 0068	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0050	ND	0 0050	ND	0 0050	0 0071
Zinc	5 0	0 020	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 020	ND	0 020	ND	0 020	ND
Benzene	0 005	0 0005	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 0005	ND	0 0005	ND	0 0005	ND
BETX	11 705	0 002	0 00056	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0 002	0 0024	0 002	ND	0 002	0 00743
pH	6 5 - 9 0	NA	7 08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	7 02	NA	6 50	NA	7 08
Temperature	NA	NA	12 25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	14 78	NA	17 29	NA	14 78
Conductivity	NA	NA	0 90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	1 83	NA	1 05	NA	0 91
Dissolved Oxygen	NA	NA	1 36	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	2 64	NA	5 40	NA	3 90
ORP	NA	NA	66 2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	26 4	NA	-62 3	NA	-25 4

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Potable Resource Groundwater
All values are in mg/L (ppm) 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 = MS and/or MSD Recovery outside of limits.

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

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

Sample: MW-02	Date	10/23/2014		2/10/2015		5/27/2015		8/4/2015		10/28/2015		2/9/2016		5/11/2016		8/31/2016		11/1/2016	
Parameter	Standards	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	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	0.089	0.0025	0.088	0.0025	0.092	0.0025	0.090	0.0025	0.084	0.0025	0.098	0.0025	0.11	0.0025	0.087	0.0025	0.071
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	0.22	0.050	0.23	0.050	0.35	0.050	0.25	0.050	0.21	0.050	0.20	0.050	0.18	0.050	0.18	0.050	0.18
Cadmium	0.005	0.00050	ND	0.00050	ND	0.00050	0.00069	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Chloride	200.0	10	240	10	190	50	410	10	290	10	130	10	180	10	340	10	170	10	97
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	0.0017	0.0010	0.010	0.0010	0.0027	0.0010	0.0017	0.0010	0.0011	0.0010	ND	0.0010	ND	0.0010	ND
Copper	0.65	0.0020	ND	0.0020	ND	0.0020	0.0059	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	0.45	0.10	0.40	0.10	0.40	0.10	0.41	0.10	0.39	0.10	0.38	0.10	0.40	0.10	0.44	0.10	0.40
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
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	0.0031	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
Nickel	0.1	0.0020	0.0069	0.0020	0.0053	0.0020	0.013	0.0020	0.0073	0.0020	0.0031	0.0020	0.0039	0.0020	0.0071	0.0020	0.0062	0.0020	0.0044
Nitrogen/Nitrate	10.0	0.10	1.3	0.10	1.3	0.10	0.43	0.10	1.2	0.10	1.0	0.10	1.5	0.10	1.4	0.10	1.5	0.10	0.79
Nitrogen/Nitrate, Nitrite	NA	0.10	1.3	0.10	1.3	0.10	0.43	0.10	1.2	0.10	1.0	0.10	1.5	0.10	1.4	0.10	1.5	0.10	0.79
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 F1	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	92	20	67	25	100	25	85	20	60	20	88	25	100	25	62	10	41
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	810	10	730	10	1200	10	890	10	610	10	750	10	960	10	700	10	570
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
BETX	11.705	0.002	0.00076	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	ND	0.002	0.002	0.002	ND	0.002	0.0068
pH	6.5 - 9.0	NA	7.31	NA	7.46	NA	6.83	NA	7.61	NA	7.05	NA	7.12	NA	7.13	NA	6.70	NA	7.26
Temperature	NA	NA	14.30	NA	9.28	NA	14.63	NA	16.75	NA	15.07	NA	11.10	NA	13.52	NA	18.75	NA	17.85
Conductivity	NA	NA	1.30	NA	0.94	NA	1.75	NA	1.38	NA	1.10	NA	0.92	NA	1.38	NA	1.11	NA	0.84
Dissolved Oxygen	NA	NA	4.07	NA	5.58	NA	1.96	NA	3.66	NA	4.47	NA	5.38	NA	4.25	NA	4.84	NA	3.87
ORP	NA	NA	57.1	NA	73.2	NA	33.9	NA	-51.3	NA	110.4	NA	80.7	NA	38.4	NA	47.8	NA	91.2

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

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

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

Sample: MW-03	Date	10/23/2014		2/10/2015		5/27/2015		8/4/2015		10/28/2015		2/10/2016		5/10/2016		8/31/2016		11/2/2016	
Parameter	Standards	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	ND^	0.0010	0.0015	0.0010	0.0015	0.0010	0.0015	0.0010	ND	0.0010	0.0015	0.0010	ND^	0.0010	0.0011	0.0010	0.0013
Barium	2.0	0.0025	0.089	0.0025	0.093	0.0025	0.094	0.0025	0.092	0.0025	0.10	0.0025	0.098	0.0025	0.093	0.0025	0.093	0.0025	0.089
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	0.45	0.050	0.52	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
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	2000	10	180	10	160	10	220	10	230	10	230	10	200	10	240	10	240	10	170
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	ND	0.0020	ND	0.0020	0.0021	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	0.49	0.10	0.46	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
Iron	5.0	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	ND	0.10	0.22	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
Manganese	0.15	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	ND	0.0025	0.0040	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	0.0020	ND	0.0020	0.0026	0.0020	ND	0.0020	0.0023	0.0020	0.0025	0.0020	ND	0.0020	0.0020	0.0020	ND
Nitrogen/Nitrate	10.0	0.10	1.8	0.10	2.5	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
Nitrogen/Nitrate, Nitrite	NA	0.10	1.8	0.20	2.5	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
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	0.0054	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
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	50	130	25	58	25	84	25	91	40	180	50	150	25	130	25	96	20	87
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	760	10	700	10	830	10	860	10	820	10	780	10	850	10	920	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
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	0.00094
BETX	11.705	0.002	ND	0.002	ND	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
pH	6.5 - 9.0	NA	7.16	NA	7.55	NA	7.37	NA	7.29	NA	7.11	NA	7.31	NA	7.07	NA	7.18	NA	7.45
Temperature	NA	NA	13.97	NA	9.02	NA	16.14	NA	17.45	NA	13.85	NA	6.78	NA	13.77	NA	18.94	NA	16.53
Conductivity	NA	NA	1.22	NA	0.90	NA	1.23	NA	1.26	NA	1.50	NA	0.86	NA	1.18	NA	1.35	NA	1.14
Dissolved Oxygen	NA	NA	5.41	NA	4.84	NA	5.49	NA	6.03	NA	5.48	NA	5.93	NA	5.65	NA	6.91	NA	5.30
ORP	NA	NA	69.5	NA	71.9	NA	64.1	NA	7.6	NA	106.6	NA	94.8	NA	93.8	NA	66.4	NA	66.0

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

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

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

Sample: MW-04	Date	10/23/2014		2/10/2015		5/27/2015		8/4/2015		10/28/2015		2/10/2016		5/10/2016		8/31/2016		11/2/2016	
Parameter	Standards	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 F1	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	0 0013 F1	0 0010	0 0015	0 0010	ND	0 0010	0 0013	0 0010	ND ^	0 0010	0 0013	0 0010	0 0012
Barium	2 0	0 0025	0 078	0 0025	0 079	0 0025	0 090 F1	0 0025	0 067	0 0025	0 083	0 0025	0 085	0 0025	0 10	0 0025	0 089	0 0025	0 079
Beryllium	0 004	0 0010	ND	0 0010	ND	0 0010	ND F1	0 0010	ND	0 0010	ND	0 0010	ND ^	0 0010	ND ^	0 0010	ND ^	0 0010	ND
Boron	2 0	0 050	0 41	0 050	0 44	0 050	0 36 F1	0 050	0 33	0 050	0 30	0 050	0 35	0 050	0 51	0 050	0 43	0 050	0 32
Cadmium	0 005	0 00050	ND	0 00050	ND	0 00050	ND F1	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
Chloride	200 0	10	160	10	180	10	290	10	200	10	200	10	200	10	260	10	200	10	140
Chromium	0 1	0 0050	ND	0 0050	ND	0 0050	ND F1	0 0050	ND	0 0050	ND	0 0050	ND	0 0050	ND	0 0050	ND	0 0050	ND
Cobalt	1 0	0 0010	0 011	0 0010	0 0076	0 0010	0 0062 F1	0 0010	0 0047	0 0010	0 0041	0 0010	0 0075	0 0010	0 0046	0 0010	0 0072	0 0010	0 0029
Copper	0 65	0 0020	ND	0 0020	ND	0 0020	ND F1	0 0020	0 0072	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 49	0 10	0 44	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
Iron	5 0	0 10	ND	0 10	0 14	0 10	ND F1	0 10	ND	0 10	ND	0 10	0 31	0 10	ND ^	0 10	ND	0 10	ND
Lead	0 0075	0 00050	ND	0 00050	ND	0 00050	ND F1	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 0044	0 0025	ND F1	0 0025	ND	0 0025	ND	0 0025	0 0054	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	ND	0 0020	ND	0 0020	0 0023 F1	0 0020	ND	0 0020	ND	0 0020	0 0021	0 0020	0 0021	0 0020	0 0020	0 0020	ND
Nitrogen/Nitrate	100	0 10	1 6	0 10	2 2	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
Nitrogen/Nitrate, Nitrite	NA	0 10	1 6	0 20	2 2	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
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 F1	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 F1	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
Sulfate	400 0	50	160	25	65	20	88	25	92	20	100	25	100	50	130	50	100	25	67
Thallium	0 002	0 0020	ND	0 0020	ND	0 0020	ND F1	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND
Total Dissolved Solids	1,200	10	720	10	730	10	980	10	770	10	780	10	760	10	860	10	800	10	700
Vanadium	0 049	0 0050	ND	0 0050	ND	0 0050	ND F1	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 F1	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	0 0010
BETX	11 705	0 002	ND	0 002	ND	0 002	ND	0 002	ND	0 002	ND	0 002	ND	0 002	0 0017	0 002	ND	0 002	0 01675
pH	6 5 - 9 0	NA	7 11	NA	7 53	NA	7 31	NA	6 80	NA	7 07	NA	7 22	NA	6 71	NA	7 07	NA	7 25
Temperature	NA	NA	14 52	NA	8 49	NA	15 49	NA	18 49	NA	13 44	NA	4 24	NA	12 83	NA	19 61	NA	15 48
Conductivity	NA	NA	1 18	NA	0 90	NA	1 34	NA	1 20	NA	1 34	NA	0 80	NA	1 21	NA	1 33	NA	1 10
Dissolved Oxygen	NA	NA	5 54	NA	4 57	NA	6 54	NA	5 60	NA	5 76	NA	6 44	NA	7 00	NA	7 06	NA	3 56
ORP	NA	NA	57 6	NA	41 7	NA	36 7	NA	25 8	NA	104 2	NA	99 2	NA	150 9	NA	72 1	NA	71 2

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Potable Resource Groundwater
All values are in ug/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 MSD Recovery outside of limits.

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

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

Sample: MW-05	Date	10/23/2014		2/11/2015		5/27/2015		8/4/2015		10/28/2015		2/10/2016		5/10/2016		8/31/2016		11/2/2016	
Parameter	Standards	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	ND^	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	0 0011	0 0010	ND^	0 0010	ND	0 0010	ND
Barium	2 0	0 0025	0 057	0 0025	0 078	0 0025	0 053	0 0025	0 060	0 0025	0 057	0 0025	0 063	0 0025	0 065	0 0025	0 066	0 0025	0 054
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 57	0 050	0 69	0 050	1 0	0 050	1 1	0 050	0 57	0 050	0 45	0 050	0 69	0 050	0 98	0 050	0 40
Cadmium	0 005	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	0 0014	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
Chloride	200 0	10	120	10	220	10	250	10	180	10	170	10	210	10	230	10	92	10	120
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	0 0035	0 0010	ND	0 0010	0 0052	0 0010	0 0014	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND
Copper	0 65	0 0020	ND	0 0020	0 013	0 0020	0 0026	0 0020	0 015	0 0020	0 0032	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND
Cyanide	0 2	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND
Fluoride	4 0	0 10	0 44	0 10	0 42	0 10	0 54	0 10	0 52	0 10	0 38	0 10	0 42	0 10	0 51	0 10	0 56	0 10	0 36
Iron	5 0	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	0 28	0 10	ND^	0 10	ND	0 10	ND
Lead	0 0075	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	0 00074	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
Manganese	0 15	0 0025	ND	0 0025	0 0076	0 0025	ND	0 0025	0 012	0 0025	0 0046	0 0025	0 0050	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 0035	0 0020	0 0092	0 0020	0 0055	0 0020	0 011	0 0020	0 0037	0 0020	0 0027	0 0020	0 0033	0 0020	0 0044	0 0020	ND
Nitrogen/Nitrate	10 0	0 10	1 2	0 10	1 7	0 10	1 5	0 10	0 18	0 10	1 0	0 10	1 1	0 10	1 7	0 10	0 86	0 10	1 1
Nitrogen/Nitrate, Nitrite	NA	0 10	1 2	0 10	1 7	0 10	1 5	0 10	0 18	0 10	1 0	0 10	1 1	0 10	1 7	0 10	0 86	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 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND
Selenium	0 05	0 0025	0 0097	0 0025	0 014	0 0025	0 025	0 0025	0 013	0 0025	0 0030	0 0025	ND	0 013	0 018^	0 0025	0 019	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	50	240	50	230	50	290	50	260	50	140	25	110	50	270	50	270	25	95
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	730	10	1000	10	1000	10	930	10	760	10	770	10	910	10	850	10	630
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	0 011	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	0 0008	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	0 0031	0 002	ND	0 002	0 0009	0 002	ND	0 002	ND
pH	6 5 - 9 0	NA	6 94	NA	7 49	NA	7 25	NA	7 31	NA	7 12	NA	7 25	NA	6 88	NA	6 81	NA	7 26
Temperature	NA	NA	16 69	NA	8 18	NA	18 15	NA	21 19	NA	14 30	NA	8 60	NA	14 22	NA	21 67	NA	17 16
Conductivity	NA	NA	1 17	NA	1 15	NA	1 49	NA	1 47	NA	1 31	NA	0 84	NA	1 24	NA	1 27	NA	0 99
Dissolved Oxygen	NA	NA	4 70	NA	4 99	NA	6 73	NA	2 77	NA	2 29	NA	4 11	NA	5 76	NA	4 62	NA	4 45
ORP	NA	NA	62 0	NA	85 8	NA	92 2	NA	-27 6	NA	107 2	NA	123 3	NA	78 3	NA	61 6	NA	73 3

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

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

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

Sample: MW-06	Date	10/23/2014		2/10/2015		5/28/2015		8/5/2015		10/27/2015		2/11/2016		5/12/2016		9/1/2016		11/3/2016	
Parameter	Standards	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 0010	0 0010	0 0016	0 0010	0 0017	0 0010	0 0016	0 0010	ND	0 0010	0 0016	0 0050	ND ^	0 0010	0 0012	0 0010	0 0012
Barium	2 0	0 0025	0 12	0 0025	0 14	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
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 22	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
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	100	10	150	10	270	10	140	10	130	10	230	10	250	10	79	10	85
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	0 0010	0 0010	0 0015	0 0010	0 0011	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND
Copper	0 65	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	0 0020	ND
Cyanide	0 2	0 010	ND	0 010	ND	0 010	0 054	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND
Fluoride	4 0	0 10	0 34	0 10	0 36	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
Iron	5 0	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 50	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
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	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 0022	0 0020	0 0027	0 0020	0 0034	0 0020	0 0023	0 0020	0 0026	0 0020	ND	0 0020	0 0032	0 0020	0 0027	0 0020	ND
Nitrogen/Nitrate	10 0	0 10	0 64	0 10	1 3	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
Nitrogen/Nitrate, Nitrite	NA	0 10	0 64	0 10	1 3	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
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 0039	0 0025	0 0045	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	ND
Silver	0 05	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND F1	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
Sulfate	400 0	25	140	50	140	25	94	50	110	25	120	50	140	50	160	50	97	25	97
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	530	10	710	10	870	10	680	10	650	10	820	10	880	10	530	10	590
Vanadium	0 049	0 0050	0 0057	0 0050	0 0063	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
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
BETX	11 705	0 002	ND	0 002	ND	0 002	0 00073	0 002	ND	0 002	ND	0 002	ND	0 002	0 0029	0 002	ND	0 002	0 0027
pH	6 5 - 9 0	NA	7 29	NA	7 78	NA	7 60	NA	7 79	NA	7 02	NA	7 30	NA	7 31	NA	7 36	NA	7 36
Temperature	NA	NA	13 92	NA	9 51	NA	16 30	NA	18 55	NA	14 11	NA	9 02	NA	13 65	NA	18 41	NA	15 80
Conductivity	NA	NA	0 88	NA	0 86	NA	1 19	NA	1 11	NA	1 12	NA	0 89	NA	1 16	NA	0 94	NA	0 78
Dissolved Oxygen	NA	NA	4 44	NA	7 08	NA	6 80	NA	5 23	NA	5 42	NA	6 28	NA	5 88	NA	5 35	NA	4 09
ORP	NA	NA	60 8	NA	88 5	NA	120 7	NA	-16 5	NA	164 8	NA	114 3	NA	50 1	NA	53 4	NA	22 7

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

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

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

Sample: MW-07	Date	10/23/2014		2/10/2015		5/28/2015		8/5/2015		10/27/2015		2/11/2016		5/12/2016		9/1/2016		11/3/2016	
Parameter	Standards	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	ND^	0 0010	ND	0 0010	0 0013	0 0010	0 0013	0 0010	ND	0 0010	0 0017	0 0050	ND^	0 0010	ND	0 0010	0 0011
Barium	2 0	0 0025	0 11	0 0025	0 18	0 0025	0 12	0 0025	0 10	0 0025	0 11	0 0025	0 15	0 0025	0 12	0 0025	0 084	0 0025	0 11
Beryllium	0 004	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND^	0 0010	ND	0 0010	ND^	0 0010	ND
Boron	2 0	0 050	0 17	0 050	0 21	0 050	0 16	0 050	0 20	0 050	0 19	0 050	0 16	0 050	0 20	0 050	0 23	0 050	0 23
Cadmium	0 005	0 00050	ND	0 00050	0 0041	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	98	10	210	10	260	10	130	10	110	10	240	10	240	10	77	10	84
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	0 0090	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 0020	0 0020	0 096	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 36	0 10	0 30	0 10	0 32	0 10	0 35	0 10	0 32	0 10	0 33	0 10	0 35	0 10	0 32	0 10	0 31
Iron	5 0	0 10	0 13	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	0 85	0 50	ND	0 10	ND	0 10	0 25
Lead	0 0075	0 00050	ND	0 00050	0 0072	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	0 00057	0 00050	ND	0 00050	ND	0 00050	ND
Manganese	0 15	0 0025	0 0091	0 0025	0 0048	0 0025	0 0026	0 0025	ND	0 0025	0 0041	0 0025	0 018	0 0025	0 010	0 0025	0 0025	0 0025	0 0093
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 0027	0 0020	0 016	0 0020	0 0034	0 0020	ND	0 0020	0 0020	0 0020	0 0030	0 0020	0 0036	0 0020	ND	0 0020	0 0022
Nitrogen/Nitrate	10 0	0 10	0 56	0 10	0 19	0 10	1 1	0 10	0 37	0 10	0 51	0 10	1 7	0 10	1 4	0 10	0 36	0 10	0 33
Nitrogen/Nitrate, Nitrite	NA	0 10	0 56	0 10	0 33	0 10	1 1	0 10	0 37	0 10	0 51	0 10	1 7	0 10	1 4	0 10	0 36	0 10	0 33
Nitrogen/Nitrite	NA	0 020	ND	0 020	0 14	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	120	50	260	25	80	25	99	50	110	50	140	50	180	25	75	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	520	10	1000	10	860	10	640	10	620	10	860	10	860	10	510	10	570
Vanadium	0 049	0 0050	ND	0 0050	0 0052	0 0050	ND	0 0050	0 0051	0 0050	ND	0 0050	0 0077	0 0050	ND	0 0050	ND	0 0050	0 0051
Zinc	5 0	0 020	ND	0 020	0 036	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	0 0018
BETX	11 705	0 002	ND	0 002	ND	0 002	ND	0 002	ND	0 002	ND	0 002	ND	0 002	0 0039	0 002	ND	0 002	0 0575
pH	6 5 - 9 0	NA	7 28	NA	7 52	NA	7 52	NA	7 75	NA	7 21	NA	7 35	NA	7 27	NA	6 96	NA	7 55
Temperature	NA	NA	16 49	NA	10 95	NA	17 16	NA	21 99	NA	14 87	NA	5 97	NA	13 22	NA	18 40	NA	17 87
Conductivity	NA	NA	0 91	NA	1 18	NA	1 30	NA	1 06	NA	1 04	NA	0 86	NA	1 12	NA	0 86	NA	0 78
Dissolved Oxygen	NA	NA	3 32	NA	1 15	NA	4 82	NA	1 80	NA	3 74	NA	6 33	NA	5 75	NA	4 17	NA	4 97
ORP	NA	NA	61 8	NA	78 4	NA	128 5	NA	-41 0	NA	147 0	NA	129 1	NA	74 0	NA	102 1	NA	24 2

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

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

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

Sample: MW-08	Date	10/23/2014		2/10/2015		5/27/2015		8/4/2015		10/27/2015		2/9/2016		5/11/2016		8/30/2016		11/1/2016	
Parameter	Standards	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	ND^	0 0010	0 0089	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	0 051	0 0025	0 22	0 0025	0 057	0 0025	0 044	0 0025	0 048	0 0025	0 055	0 0025	0 059	0 0025	0 044	0 0025	0 042
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 64	0 050	0 11	0 050	0 15	0 050	0 15	0 050	0 11	0 050	0 12	0 050	0 18	0 050	0 13
Cadmium	0 005	0 00050	ND	0 00050	0 00053	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
Chloride	200 0	10	140	50	470	10	270	10	130	2 0	70	10	190	10	300	2 0	69	2 0	67
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	0 13	0 0010	0 0018	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 0060	0 0020	0 0039	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	0 012	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND
Fluoride	4 0	0 10	0 36	0 10	0 51	0 10	0 44	0 10	0 39	0 10	0 32	0 10	0 36	0 10	0 42	0 10	0 33	0 10	0 32
Iron	5 0	0 10	ND	0 10	10	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	ND^	0 10	ND	0 10	ND
Lead	0 0075	0 00050	ND	0 00050	0 0034	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 0069	0 0025	1 1	0 0025	0 0044	0 0025	0 0029	0 0025	ND	0 0025	0 0034	0 0025	0 023	0 0025	0 0043	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 0036	0 0020	0 19	0 0020	0 0033	0 0020	0 0020	0 0020	ND	0 0020	ND	0 0020	0 0039	0 0020	ND	0 0020	ND
Nitrogen/Nitrate	10 0	0 10	1 3	0 10	ND	0 10	1 7	0 10	0 72	0 10	1 0	0 10	0 82	0 10	1 2	0 10	1 3	0 10	0 46
Nitrogen/Nitrate, Nitrite	NA	0 10	1 3	0 10	ND	0 10	1 7	0 10	0 72	0 10	1 0	0 10	0 82	0 10	1 2	0 10	1 3	0 10	0 46
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	0 040	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	0 0034	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	20	73	100	600	5 0	25	10	31	10	41	10	48	20	70	10	23	10	50
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	560	10	2000	10	760	10	540	10	470	10	740	10	810	10	450	10	450
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	0 026	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	0 002	0 0005	ND	0 0005	ND	0 0005	ND	0 0005	ND	0 0005	ND	0 0005	ND	0 0005	0 00059
BETX	11 705	0 002	ND	0 002	0 002	0 002	ND	0 002	ND	0 002	ND	0 002	ND	0 002	0 0016	0 002	ND	0 002	0 02269
pH	6 5 - 9 0	NA	7 19	NA	7 58	NA	7 26	NA	7 47	NA	6 95	NA	7 08	NA	7 05	NA	6 88	NA	7 04
Temperature	NA	NA	15 79	NA	9 48	NA	17 90	NA	22 19	NA	14 00	NA	7 88	NA	14 82	NA	21 32	NA	19 47
Conductivity	NA	NA	1 01	NA	2 80	NA	1 57	NA	0 98	NA	0 86	NA	0 81	NA	1 28	NA	1 16	NA	0 69
Dissolved Oxygen	NA	NA	3 52	NA	1 00	NA	3 82	NA	3 84	NA	3 86	NA	5 38	NA	5 09	NA	4 83	NA	3 68
ORP	NA	NA	28 8	NA	-114 1	NA	-9 9	NA	-19 0	NA	146 3	NA	41 1	NA	-15 4	NA	22 7	NA	65 0

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Potable Resource Groundwater
All values are in ug/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 MSD Recovery outside of limits.

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

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

Sample: MW-09	Date	10/23/2014		2/10/2015		5/27/2015		8/4/2015		10/27/2015		2/9/2016		5/11/2016		8/30/2016		11/1/2016	
Parameter	Standards	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	ND^	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	0 0014	0 0050	ND^	0 0010	0 0021	0 0010	0 0013
Barium	2 0	0 0025	0 017	0 0025	0 029	0 0025	0 018	0 0025	0 013	0 0025	0 014	0 0025	0 013	0 0025	0 017	0 0025	0 015	0 0025	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
Boron	2 0	0 050	0 24	0 050	0 30	0 050	0 37	0 050	0 38	0 050	0 33	0 050	0 36	0 050	0 40	0 050	0 72	0 050	0 47
Cadmium	0 005	0 00050	ND	0 00050	0 0019	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	230	50	390	10	340	10	230	10	220	10	170	2 0	23	2 0	19	10	110
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 0045	0 0010	0 047	0 0010	0 017	0 0010	0 011	0 0010	0 016	0 0010	0 034	0 0010	0 050	0 0010	0 034	0 0010	0 016
Copper	0 65	0 0020	ND	0 0020	0 011	0 0020	0 0023	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 55	0 10	0 51	0 10	0 44	0 10	0 27	0 10	0 35	0 10	0 45	0 10	0 31	0 10	0 26	0 10	0 30
Iron	5 0	0 10	45	0 10	23	0 10	140	0 10	ND	0 10	170	0 10	ND	2 0	3400	0 10	ND	1 0	900
Lead	0 0075	0 00050	ND	0 00050	0 0010	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 38	0 0025	0 54	0 0025	0 66	0 0025	1 4	0 0025	0 79	0 0025	2 3	0 050	6 0	0 0025	3 7	0 0025	1 6
Mercury	0 002	0 00020	ND	0 00020	ND	0 00020	ND	0 00020	ND *	0 00020	ND	0 00020	ND	0 00020	0 00032	0 00020	0 00096	0 00020	ND
Nickel	0 1	0 0020	0 0079	0 0020	0 039	0 0020	0 026	0 0020	0 021	0 0020	0 025	0 0020	0 071	0 0020	0 17	0 0020	0 14	0 0020	0 045
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
Nitrogen/Nitrate, 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
Nitrogen/Nitrite	NA	0 020	ND	0 020	ND	0 020	ND	0 020	0 020	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	0 080	ND	0 040	ND	0 0040	ND F1	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	250	960	250	820	500	1100	500	1900	500	1100	1000	3600	2500	12000	2500	8100	500	3600
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	1700	10	2400	17	3100	10	3900	10	2600	13	4700	50	19000	100	15000	17	6100
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	0 072	0 020	0 028	0 020	0 17	0 020	0 050	0 020	0 70	0 020	2 3	0 020	1 8	0 020	0 45
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
BETX	11 705	0 002	0 0006	0 002	ND	0 002	ND	0 002	ND	0 002	0 00093	0 002	ND	0 002	0 00062	0 002	ND	0 002	0 00823
pH	6 5 - 9 0	NA	6 93	NA	6 92	NA	6 59	NA	6 52	NA	6 37	NA	6 03	NA	5 73	NA	3 36	NA	6 19
Temperature	NA	NA	15 35	NA	10 12	NA	19 34	NA	22 72	NA	13 47	NA	7 31	NA	13 73	NA	22 44	NA	18 36
Conductivity	NA	NA	2 51	NA	2 50	NA	3 51	NA	4 04	NA	3 53	NA	3 29	NA	9 49	NA	8 79	NA	4 93
Dissolved Oxygen	NA	NA	0 76	NA	1 26	NA	0 81	NA	1 00	NA	0 95	NA	0 60	NA	1 90	NA	1 55	NA	0 52
ORP	NA	NA	-85 1	NA	-82 0	NA	-96 9	NA	-108 0	NA	-24 9	NA	-19 6	NA	-12 9	NA	332 9	NA	-94 2

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

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

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

Sample: MW-10	Date	10/23/2014		2/11/2015		5/28/2015		8/4/2015		10/28/2015		2/10/2016		5/12/2016		8/31/2016		11/2/2016	
Parameter	Standards	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	ND^	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0050	ND^	0 0010	ND	0 0010	ND
Barium	2 0	0 0025	0 044	0 0025	0 050	0 0025	0 046	0 0025	0 035	0 0025	0 041	0 0025	0 042	0 0025	0 055	0 0025	0 037	0 0025	0 034
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 56	0 050	0 52	0 050	0 35	0 050	0 32	0 050	0 44	0 050	0 43	0 050	0 32	0 050	0 34	0 050	0 49
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	170	10	210	10	320	10	180	10	210	10	200	10	290	10	150	10	120
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	ND	0 0020	ND	0 0020	0 0027	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 46	0 10	0 41	0 10	0 43	0 10	0 46	0 10	0 41	0 10	0 45	0 10	0 46	0 10	0 44	0 10	0 43
Iron	5 0	0 10	ND	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
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	0 0049	0 0025	ND	0 0025	ND	0 0025	ND	0 0025	0 0037	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 0020	0 0020	0 0037	0 0020	0 0023	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	0 0032	0 0020	ND	0 0020	ND
Nitrogen/Nitrate	10 0	0 10	1 7	0 10	2 4	0 10	2 9	0 10	1 5	0 10	2 4	0 10	2 2	0 10	2 6	0 10	1 4	0 10	2 3
Nitrogen/Nitrate, Nitrite	NA	0 10	1 7	0 20	2 4	0 20	2 9	0 10	1 5	0 20	2 4	0 20	2 2	0 20	2 6	0 10	1 4	0 50	2 3
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 0025	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	50	110	25	93	20	50	25	97	25	86	25	110	25	120	25	80	20	92
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	740	10	810	10	1100	10	710	10	810	10	800	10	920	10	670	10	690
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	0 00076
BETX	11 705	0 002	ND	0 002	ND	0 002	ND	0 002	ND	0 002	0 00075	0 002	ND	0 002	0 00069	0 002	ND	0 002	0 02226
pH	6 5 - 9 0	NA	7 12	NA	7 26	NA	7 27	NA	6 92	NA	7 04	NA	7 17	NA	7 02	NA	6 95	NA	6 99
Temperature	NA	NA	13 74	NA	6 83	NA	15 02	NA	17 42	NA	12 90	NA	7 17	NA	13 60	NA	19 33	NA	15 66
Conductivity	NA	NA	1 18	NA	0 92	NA	1 37	NA	1 19	NA	1 40	NA	0 85	NA	1 29	NA	1 25	NA	0 95
Dissolved Oxygen	NA	NA	6 16	NA	6 50	NA	7 41	NA	5 39	NA	6 49	NA	7 45	NA	6 76	NA	7 13	NA	5 97
ORP	NA	NA	77 3	NA	135 3	NA	134 8	NA	15 3	NA	113 8	NA	121 8	NA	54 2	NA	90 4	NA	86 8

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I Potable Resource Groundwater
All values are in ng/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 MSD Recovery outside of limits.

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

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

Sample: MW-11	Date	10/23/2014		2/11/2015		5/28/2015		8/4/2015		10/29/2015		2/11/2016		5/11/2016		9/1/2016		11/2/2016	
Parameter	Standards	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 0012	0 0010	ND	0 0010	0 0015	0 0010	0 0026	0 0010	ND	0 0010	0 0018	0 0010	0 0015	0 0010	0 0017	0 0010	0 0016
Barium	2 0	0 0025	0 059	0 0025	0 10	0 0025	0 059	0 0025	0 062	0 0025	0 069	0 0025	0 074	0 0025	0 066	0 0025	0 056	0 0025	0 062
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	2 0	0 050	1 1	0 050	1 0	0 050	1 4	0 050	0 78	0 050	1 4	0 050	1 5	0 050	1 6	0 050	1 6
Cadmium	0 005	0 00050	ND	0 00050	0 0077	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	84	10	270	10	290	10	150	10	120	10	230	10	240	10	110	10	93
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	0 033	0 0010	0 0016	0 0010	0 0015	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND
Copper	0 65	0 0020	ND	0 0020	0 16	0 0020	0 0073	0 0020	0 0022	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 38	0 10	0 33	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
Iron	5 0	0 10	ND	0 10	0 17	0 10	ND	0 10	ND	0 10	ND	0 10	0 12	0 10	ND	0 10	ND	0 10	ND
Lead	0 0075	0 00050	ND	0 00050	0 023	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 27	0 0025	ND	0 0025	0 49	0 0025	0 040	0 0025	0 0034	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 0020	0 0020	0 16	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	ND
Nitrogen/Nitrate	10 0	0 10	0 59	0 10	ND	0 10	1 1	0 10	0 15	0 10	0 48	0 10	1 8	0 10	1 4	0 10	0 69	0 10	0 58
Nitrogen/Nitrate, Nitrite	NA	0 10	0 59	0 10	ND	0 10	1 1	0 10	0 15	0 10	0 48	0 10	1 8	0 10	1 4	0 10	0 69	0 10	0 58
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	0 027	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 20	ND	0 0040	ND
Selenium	0 05	0 0025	0 0040	0 0025	ND	0 0025	0 0035	0 0025	0 0050	0 0025	ND	0 0025	0 0040	0 0025	0 0033	0 0025	0 0046	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	50	120	100	290	25	84	50	110	50	170	50	140	50	150	50	120	25	130
Thallium	0 002	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND
Total Dissolved Solids	1,200	10	580	10	1300	10	860	10	700	10	740	10	880	10	920	10	660	10	640
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	0 056	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	0 0016
BETX	11 705	0 002	ND	0 002	ND	0 002	ND	0 002	ND	0 002	0 00094	0 002	ND	0 002	0 0023	0 002	ND	0 002	0 0394
pH	6 5 - 9 0	NA	7 29	NA	7 16	NA	7 42	NA	7 40	NA	7 26	NA	7 15	NA	7 24	NA	7 20	NA	7 18
Temperature	NA	NA	15 17	NA	8 04	NA	17 77	NA	17 05	NA	12 34	NA	6 49	NA	14 15	NA	18 10	NA	16 36
Conductivity	NA	NA	0 95	NA	1 32	NA	1 45	NA	1 08	NA	1 13	NA	0 87	NA	1 19	NA	1 03	NA	0 88
Dissolved Oxygen	NA	NA	3 80	NA	2 98	NA	5 44	NA	1 52	NA	8 45	NA	8 32	NA	8 21	NA	6 22	NA	4 89
ORP	NA	NA	69 4	NA	108 2	NA	121 5	NA	-25 7	NA	86 5	NA	139 1	NA	48 6	NA	53 3	NA	73 7

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

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

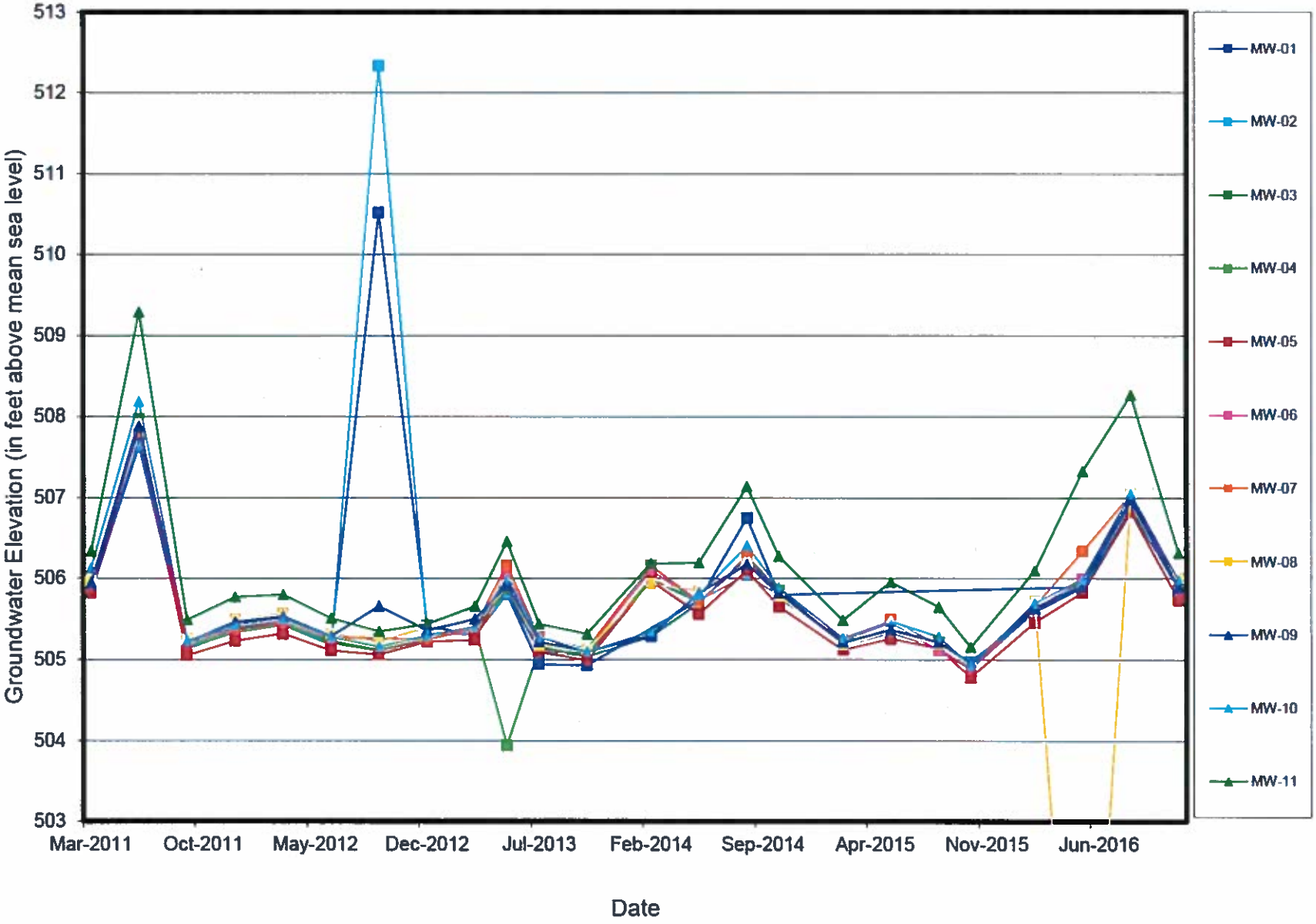
NR - Not Required
NS - Not Sampled
^ - Denotes instrument related QC exceeds the control limits
FI - MS and/or MSD Recovery outside of limits.

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

ATTACHMENT 1
Hydrograph

Midwest Generation Joliet Station #29, Joliet, IL

Groundwater Elevation vs Time



MWG13-15_58312

ATTACHMENT 2
Analytical Data Package

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: 500-119453-1
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:
11/16/2016 3:09:24 PM

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

Table of Contents

Job ID: 500-119453-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-119453-1

Comments
No additional comments.

Receipt
The samples were received on 11/2/2016 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.4° C, 1.3° C, 1.9° C, 4.3° C and 4.3° C.

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

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

General Chemistry
Method(s) 314.0: The low level check, MRL, at 4ppb failed to fall within control limits. (73% versus 75%-125%.) However, all samples were non-detect for the analyte of interest and all other QC parameters were within control limits. Data is being reported with this qualification. There should be no adverse impact on the data. Project manager was notified.

MW-02 (500-119453-1), MW-08 (500-119453-2), MW-09 (500-119453-3), Duplicate (500-119453-4), MW-03 (500-119453-5), MW-04 (500-119453-6), MW-05 (500-119453-7), MW-10 (500-119453-8), MW-11 (500-119453-9), MW-01 (500-119453-10), MW-06 (500-119453-11), MW-07 (500-119453-12), (CCB 320-137918/16), (CCB 320-137918/24), (CCV 320-137918/15), (CCV 320-137918/23), (ICB 320-137918/2), (ICV 320-137918/1), (INF 320-137918/3), (LCS 320-137918/6), (MB 320-137918/5), (MRL 320-137918/4), (500-119453-E-2 MS) and (500-119453-E-2 MSD)

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: 500-119453-1

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

Sample Summary

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

TestAmerica Job ID: 500-119453-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-119453-1	MW-02	Water	11/01/16 12:11	11/02/16 10:10
500-119453-2	MW-08	Water	11/01/16 15:50	11/02/16 10:10
500-119453-3	MW-09	Water	11/01/16 13:59	11/02/16 10:10
500-119453-4	Duplicate	Water	11/01/16 00:00	11/02/16 10:10
500-119453-5	MW-03	Water	11/02/16 15:30	11/03/16 10:20
500-119453-6	MW-04	Water	11/02/16 14:44	11/03/16 10:20
500-119453-7	MW-05	Water	11/02/16 09:55	11/03/16 10:20
500-119453-8	MW-10	Water	11/02/16 11:00	11/03/16 10:20
500-119453-9	MW-11	Water	11/02/16 12:40	11/03/16 10:20
500-119453-10	MW-01	Water	11/03/16 09:30	11/04/16 09:40
500-119453-11	MW-06	Water	11/03/16 11:19	11/04/16 09:40
500-119453-12	MW-07	Water	11/03/16 12:22	11/04/16 09:40
500-119453-13	Trip Blank	Water	11/03/16 00:00	11/04/16 09:40

Client Sample ID: MW-02

Date Collected: 11/01/16 12:11
Date Received: 11/02/16 10:10

Lab Sample ID: 500-119453-1

Matrix: Water

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			11/07/16 17:00	1
Toluene	**0.0068**		0.00050		mg/L			11/07/16 17:00	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/07/16 17:00	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/07/16 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*71 - 127*		*11/07/16 17:00*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*11/07/16 17:00*	*1*
4-Bromofluorobenzene (Surr)	*91*		*71 - 120*		*11/07/16 17:00*	*1*
Dibromofluoromethane	*108*		*70 - 120*		*11/07/16 17:00*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 16:59	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		11/08/16 09:20	11/08/16 12:53	1
Arsenic	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 12:53	1
Barium	**0.071**		0.0025		mg/L		11/08/16 09:20	11/08/16 12:53	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 17:59	1
Boron	**0.18**		0.050		mg/L		11/08/16 09:20	11/08/16 12:53	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 12:53	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 12:53	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 12:53	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 17:59	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 12:53	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 12:53	1
Manganese	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 12:53	1
Nickel	**0.0044**		0.0020		mg/L		11/08/16 09:20	11/08/16 12:53	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 12:53	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 17:59	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 12:53	1
Vanadium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 12:53	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 12:53	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:09	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:40	1
Sulfate	**41**		10		mg/L			11/10/16 08:24	2
Chloride	**97**		10		mg/L			11/11/16 00:55	5
Nitrogen, Nitrate	**0.79**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**570**		10		mg/L			11/05/16 19:16	1
Fluoride	**0.40**		0.10		mg/L			11/05/16 17:27	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/02/16 17:31	1
Nitrogen, Nitrate Nitrite	**0.79**		0.10		mg/L			11/10/16 03:36	1

Client Sample ID: MW-08

Date Collected: 11/01/16 15:50
Date Received: 11/02/16 10:10

Lab Sample ID: 500-119453-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00059**		0.00050		mg/L			11/07/16 17:27	1
Toluene	**0.019**		0.00050		mg/L			11/07/16 17:27	1
Ethylbenzene	**0.0017**		0.00050		mg/L			11/07/16 17:27	1
Xylenes, Total	**0.0014**		0.0010		mg/L			11/07/16 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*71 - 127*		*11/07/16 17:27*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/07/16 17:27*	*1*
4-Bromofluorobenzene (Surr)	*91*		*71 - 120*		*11/07/16 17:27*	*1*
Dibromofluoromethane	*109*		*70 - 120*		*11/07/16 17:27*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 17:18	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		11/08/16 09:20	11/08/16 12:57	1
Arsenic	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 12:57	1
Barium	**0.042**		0.0025		mg/L		11/08/16 09:20	11/08/16 12:57	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 18:03	1
Boron	**0.13**		0.050		mg/L		11/08/16 09:20	11/08/16 12:57	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 12:57	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 12:57	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 12:57	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 18:03	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 12:57	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 12:57	1
Manganese	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 12:57	1
Nickel	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 12:57	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 12:57	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 18:03	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 12:57	1
Vanadium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 12:57	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 12:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:15	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:41	1
Sulfate	**50**		10		mg/L			11/10/16 08:27	2
Chloride	**67**		2.0		mg/L			11/11/16 00:18	1
Nitrogen, Nitrate	**0.46**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**450**		10		mg/L			11/05/16 19:30	1
Fluoride	**0.32**		0.10		mg/L			11/05/16 17:30	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/02/16 17:32	1
Nitrogen, Nitrate Nitrite	**0.46**		0.10		mg/L			11/10/16 03:43	1

Client Sample ID: MW-09
Date Collected: 11/01/16 13:59
Date Received: 11/02/16 10:10

Lab Sample ID: 500-119453-3
Matrix: Water

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			11/07/16 17:53	1
Toluene	**0.0074**		0.00050		mg/L			11/07/16 17:53	1
Ethylbenzene	**0.00083**		0.00050		mg/L			11/07/16 17:53	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/07/16 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*71 - 127*		*11/07/16 17:53*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*11/07/16 17:53*	*1*
4-Bromofluorobenzene (Surr)	*91*		*71 - 120*		*11/07/16 17:53*	*1*
Dibromofluoromethane	*111*		*70 - 120*		*11/07/16 17:53*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 18:16	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		11/08/16 09:20	11/08/16 13:16	1
Arsenic	**0.0013**		0.0010		mg/L		11/08/16 09:20	11/08/16 13:16	1
Barium	**0.014**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:16	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 18:27	1
Boron	**0.47**		0.050		mg/L		11/08/16 09:20	11/08/16 13:16	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:16	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:16	1
Cobalt	**0.016**		0.0010		mg/L		11/08/16 09:20	11/08/16 13:16	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 18:27	1
Iron	**900**		1.0		mg/L		11/08/16 09:20	11/11/16 11:27	10
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:16	1
Manganese	**1.6**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:16	1
Nickel	**0.045**		0.0020		mg/L		11/08/16 09:20	11/08/16 13:16	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:16	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 18:27	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:16	1
Vanadium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:16	1
Zinc	**0.45**		0.020		mg/L		11/08/16 09:20	11/08/16 13:16	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:17	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:42	1
Sulfate	**3600**		500		mg/L			11/10/16 08:28	100
Chloride	**110**		10		mg/L			11/11/16 00:57	5
Nitrogen, Nitrate	<0.10		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**6100**		17		mg/L			11/05/16 19:35	1
Fluoride	**0.30**		0.10		mg/L			11/05/16 17:33	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/02/16 17:32	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			11/10/16 03:45	1

Client Sample ID: Duplicate

Date Collected: 11/01/16 00:00
Date Received: 11/02/16 10:10

Lab Sample ID: 500-119453-4

Matrix: Water

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			11/07/16 18:20	1
Toluene	**0.0083**		0.00050		mg/L			11/07/16 18:20	1
Ethylbenzene	**0.0011**		0.00050		mg/L			11/07/16 18:20	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/07/16 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 127*		*11/07/16 18:20*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/07/16 18:20*	*1*
4-Bromofluorobenzene (Surr)	*94*		*71 - 120*		*11/07/16 18:20*	*1*
Dibromofluoromethane	*104*		*70 - 120*		*11/07/16 18:20*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 18:36	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		11/08/16 09:20	11/08/16 13:19	1
Arsenic	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:19	1
Barium	**0.040**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:19	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 18:31	1
Boron	**0.14**		0.050		mg/L		11/08/16 09:20	11/08/16 13:19	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:19	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:19	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:19	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 18:31	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 13:19	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:19	1
Manganese	**0.0026**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:19	1
Nickel	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:19	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:19	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 18:31	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:19	1
Vanadium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:19	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 13:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:21	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:42	1
Sulfate	**50**		10		mg/L			11/10/16 08:29	2
Chloride	**67**		2.0		mg/L			11/11/16 00:21	1
Nitrogen, Nitrate	**0.45**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**540**		10		mg/L			11/05/16 19:39	1
Fluoride	**0.32**		0.10		mg/L			11/05/16 17:36	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/02/16 17:33	1
Nitrogen, Nitrate Nitrite	**0.45**		0.10		mg/L			11/10/16 03:47	1

Client Sample ID: MW-03
Date Collected: 11/02/16 15:30
Date Received: 11/03/16 10:20

Lab Sample ID: 500-119453-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00094**		0.00050		mg/L			11/07/16 18:47	1
Toluene	**0.026**		0.00050		mg/L			11/07/16 18:47	1
Ethylbenzene	**0.0015**		0.00050		mg/L			11/07/16 18:47	1
Xylenes, Total	**0.0014**		0.0010		mg/L			11/07/16 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 127*		*11/07/16 18:47*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/07/16 18:47*	*1*
4-Bromofluorobenzene (Surr)	*92*		*71 - 120*		*11/07/16 18:47*	*1*
Dibromofluoromethane	*106*		*70 - 120*		*11/07/16 18:47*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 18:55	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		11/08/16 09:20	11/08/16 13:31	1
Arsenic	**0.0013**		0.0010		mg/L		11/08/16 09:20	11/08/16 13:31	1
Barium	**0.089**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:31	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 18:46	1
Boron	**0.38**		0.050		mg/L		11/08/16 09:20	11/09/16 18:46	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:31	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:31	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:31	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 18:46	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 13:31	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:31	1
Manganese	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:31	1
Nickel	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:31	1
Selenium	**0.0031**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:31	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 18:46	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:31	1
Vanadium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:31	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 13:31	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:23	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:42	1
Sulfate	**87**		20		mg/L			11/10/16 08:30	4
Chloride	**170**		10		mg/L			11/11/16 01:01	5
Nitrogen, Nitrate	**1.9**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**800**		10		mg/L			11/05/16 19:44	1
Fluoride	**0.57**		0.10		mg/L			11/11/16 14:01	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/03/16 17:31	1
Nitrogen, Nitrate Nitrite	**1.9**		0.10		mg/L			11/10/16 03:49	1

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

TestAmerica Job ID: 500-119453-1

Client Sample ID: MW-04
Date Collected: 11/02/16 14:44
Date Received: 11/03/16 10:20

Lab Sample ID: 500-119453-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0010**		0.00050		mg/L			11/07/16 19:13	1
Toluene	**0.015**		0.00050		mg/L			11/07/16 19:13	1
Ethylbenzene	**0.00075**		0.00050		mg/L			11/07/16 19:13	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/07/16 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*71 - 127*		*11/07/16 19:13*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/07/16 19:13*	*1*
4-Bromofluorobenzene (Surr)	*96*		*71 - 120*		*11/07/16 19:13*	*1*
Dibromofluoromethane	*105*		*70 - 120*		*11/07/16 19:13*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 19:14	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		11/08/16 09:20	11/08/16 13:35	1
Arsenic	**0.0012**		0.0010		mg/L		11/08/16 09:20	11/08/16 13:35	1
Barium	**0.079**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:35	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 18:50	1
Boron	**0.32**		0.050		mg/L		11/08/16 09:20	11/09/16 18:50	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:35	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:35	1
Cobalt	**0.0029**		0.0010		mg/L		11/08/16 09:20	11/08/16 13:35	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 18:50	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 13:35	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:35	1
Manganese	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:35	1
Nickel	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:35	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:35	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 18:50	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:35	1
Vanadium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:35	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 13:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:24	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:43	1
Sulfate	**67**		25		mg/L			11/10/16 08:33	5
Chloride	**140**		10		mg/L			11/11/16 01:01	5
Nitrogen, Nitrate	**1.9**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**700**		10		mg/L			11/05/16 19:49	1
Fluoride	**0.46**		0.10		mg/L			11/11/16 14:04	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/03/16 17:31	1
Nitrogen, Nitrate Nitrite	**1.9**		0.10		mg/L			11/10/16 03:51	1

Client Sample ID: MW-05
Date Collected: 11/02/16 09:55
Date Received: 11/03/16 10:20

Lab Sample ID: 500-119453-7
Matrix: Water

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			11/07/16 19:40	1
Toluene	<0.00050		0.00050		mg/L			11/07/16 19:40	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/07/16 19:40	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/07/16 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*71 - 127*		*11/07/16 19:40*	*1*
Toluene-d8 (Surr)	*91*		*75 - 120*		*11/07/16 19:40*	*1*
4-Bromofluorobenzene (Surr)	*93*		*71 - 120*		*11/07/16 19:40*	*1*
Dibromofluoromethane	*108*		*70 - 120*		*11/07/16 19:40*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 20:13	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		11/08/16 09:20	11/08/16 13:39	1
Arsenic	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:39	1
Barium	**0.054**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:39	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 18:55	1
Boron	**0.40**		0.050		mg/L		11/08/16 09:20	11/09/16 18:55	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:39	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:39	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:39	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 18:55	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 13:39	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:39	1
Manganese	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:39	1
Nickel	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:39	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:39	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 18:55	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:39	1
Vanadium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:39	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 13:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:43	1
Sulfate	**95**		25		mg/L			11/10/16 08:34	5
Chloride	**120**		10		mg/L			11/11/16 01:02	5
Nitrogen, Nitrate	**1.1**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**630**		10		mg/L			11/05/16 19:53	1
Fluoride	**0.36**		0.10		mg/L			11/11/16 14:07	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/03/16 17:32	1
Nitrogen, Nitrate Nitrite	**1.1**		0.10		mg/L			11/10/16 03:53	1

Client Sample ID: MW-10
Date Collected: 11/02/16 11:00
Date Received: 11/03/16 10:20

Lab Sample ID: 500-119453-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00076**		0.00050		mg/L			11/07/16 20:07	1
Toluene	**0.020**		0.00050		mg/L			11/07/16 20:07	1
Ethylbenzene	**0.0015**		0.00050		mg/L			11/07/16 20:07	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/07/16 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*71 - 127*		*11/07/16 20:07*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*11/07/16 20:07*	*1*
4-Bromofluorobenzene (Surr)	*94*		*71 - 120*		*11/07/16 20:07*	*1*
Dibromofluoromethane	*110*		*70 - 120*		*11/07/16 20:07*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 20:32	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		11/08/16 09:20	11/08/16 13:43	1
Arsenic	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:43	1
Barium	**0.034**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:43	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 19:00	1
Boron	**0.49**		0.050		mg/L		11/08/16 09:20	11/09/16 19:00	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:43	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:43	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:43	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 19:00	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 13:43	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:43	1
Manganese	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:43	1
Nickel	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:43	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:43	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 19:00	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:43	1
Vanadium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:43	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 13:43	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:44	1
Sulfate	**92**		20		mg/L			11/10/16 08:35	4
Chloride	**120**		10		mg/L			11/11/16 01:02	5
Nitrogen, Nitrate	**2.3**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**690**		10		mg/L			11/05/16 19:58	1
Fluoride	**0.43**		0.10		mg/L			11/11/16 14:10	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/03/16 17:32	1
Nitrogen, Nitrate Nitrite	**2.3**		0.50		mg/L			11/10/16 04:46	5

Client Sample ID: MW-11
Date Collected: 11/02/16 12:40
Date Received: 11/03/16 10:20

Lab Sample ID: 500-119453-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0016**		0.00050		mg/L			11/07/16 20:34	1
Toluene	**0.034**		0.00050		mg/L			11/07/16 20:34	1
Ethylbenzene	**0.0019**		0.00050		mg/L			11/07/16 20:34	1
Xylenes, Total	**0.0019**		0.0010		mg/L			11/07/16 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*71 - 127*		*11/07/16 20:34*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/07/16 20:34*	*1*
4-Bromofluorobenzene (Surr)	*95*		*71 - 120*		*11/07/16 20:34*	*1*
Dibromofluoromethane	*105*		*70 - 120*		*11/07/16 20:34*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 20:51	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		11/08/16 09:20	11/08/16 13:46	1
Arsenic	**0.0016**		0.0010		mg/L		11/08/16 09:20	11/08/16 13:46	1
Barium	**0.062**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:46	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 19:04	1
Boron	**1.6**		0.050		mg/L		11/08/16 09:20	11/09/16 19:04	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:46	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:46	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:46	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 19:04	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 13:46	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:46	1
Manganese	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:46	1
Nickel	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:46	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:46	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 19:04	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:46	1
Vanadium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:46	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 13:46	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:29	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:44	1
Sulfate	**130**		25		mg/L			11/10/16 08:36	5
Chloride	**93**		10		mg/L			11/11/16 01:03	5
Nitrogen, Nitrate	**0.58**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**640**		10		mg/L			11/05/16 20:03	1
Fluoride	**0.31**		0.10		mg/L			11/11/16 14:13	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/03/16 17:32	1
Nitrogen, Nitrate Nitrite	**0.58**		0.10		mg/L			11/10/16 03:58	1

Client Sample ID: MW-01

Date Collected: 11/03/16 09:30
Date Received: 11/04/16 09:40

Lab Sample ID: 500-119453-10

Matrix: Water

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			11/07/16 21:00	1
Toluene	**0.0067**		0.00050		mg/L			11/07/16 21:00	1
Ethylbenzene	**0.00073**		0.00050		mg/L			11/07/16 21:00	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/07/16 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*71 - 127*		*11/07/16 21:00*	*1*
Toluene-d8 (Surr)	*91*		*75 - 120*		*11/07/16 21:00*	*1*
4-Bromofluorobenzene (Surr)	*91*		*71 - 120*		*11/07/16 21:00*	*1*
Dibromofluoromethane	*110*		*70 - 120*		*11/07/16 21:00*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 21:11	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		11/08/16 09:20	11/08/16 13:50	1
Arsenic	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:50	1
Barium	**0.12**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:50	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 19:09	1
Boron	**0.25**		0.050		mg/L		11/08/16 09:20	11/09/16 19:09	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:50	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:50	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:50	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 19:09	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 13:50	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:50	1
Manganese	**0.0032**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:50	1
Nickel	**0.0022**		0.0020		mg/L		11/08/16 09:20	11/08/16 13:50	1
Selenium	**0.0037**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:50	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 19:09	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:50	1
Vanadium	**0.0071**		0.0050		mg/L		11/08/16 09:20	11/08/16 13:50	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 13:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:30	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:45	1
Sulfate	**62**		20		mg/L			11/10/16 08:37	4
Chloride	**73**		10		mg/L			11/11/16 01:03	5
Nitrogen, Nitrate	**1.0**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**600**		10		mg/L			11/05/16 20:07	1
Fluoride	**0.35**		0.10		mg/L			11/05/16 17:39	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/04/16 20:37	1
Nitrogen, Nitrate Nitrite	**1.0**		0.10		mg/L			11/10/16 04:00	1

Client Sample ID: MW-06

Date Collected: 11/03/16 11:19
Date Received: 11/04/16 09:40

Lab Sample ID: 500-119453-11

Matrix: Water

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			11/07/16 21:28	1
Toluene	**0.0027**		0.00050		mg/L			11/07/16 21:28	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/07/16 21:28	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/07/16 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*71 - 127*		*11/07/16 21:28*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/07/16 21:28*	*1*
4-Bromofluorobenzene (Surr)	*93*		*71 - 120*		*11/07/16 21:28*	*1*
Dibromofluoromethane	*110*		*70 - 120*		*11/07/16 21:28*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 21:30	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		11/08/16 09:20	11/08/16 13:54	1
Arsenic	**0.0012**		0.0010		mg/L		11/08/16 09:20	11/08/16 13:54	1
Barium	**0.12**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:54	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 19:14	1
Boron	**0.25**		0.050		mg/L		11/08/16 09:20	11/09/16 19:14	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:54	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:54	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:54	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 19:14	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 13:54	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:54	1
Manganese	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:54	1
Nickel	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:54	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:54	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 19:14	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:54	1
Vanadium	**0.0066**		0.0050		mg/L		11/08/16 09:20	11/08/16 13:54	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 13:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:32	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:45	1
Sulfate	**97**		25		mg/L			11/10/16 08:38	5
Chloride	**85**		10		mg/L			11/11/16 01:04	5
Nitrogen, Nitrate	**0.31**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**590**		10		mg/L			11/05/16 20:12	1
Fluoride	**0.32**		0.10		mg/L			11/11/16 14:16	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/04/16 20:37	1
Nitrogen, Nitrate Nitrite	**0.31**		0.10		mg/L			11/10/16 04:07	1

Client Sample ID: MW-07

Date Collected: 11/03/16 12:22
Date Received: 11/04/16 09:40

Lab Sample ID: 500-119453-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0018**		0.00050		mg/L			11/07/16 21:55	1
Toluene	**0.050**		0.00050		mg/L			11/07/16 21:55	1
Ethylbenzene	**0.0028**		0.00050		mg/L			11/07/16 21:55	1
Xylenes, Total	**0.0029**		0.0010		mg/L			11/07/16 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*71 - 127*		*11/07/16 21:55*	*1*
Toluene-d8 (Surr)	*91*		*75 - 120*		*11/07/16 21:55*	*1*
4-Bromofluorobenzene (Surr)	*95*		*71 - 120*		*11/07/16 21:55*	*1*
Dibromofluoromethane	*109*		*70 - 120*		*11/07/16 21:55*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 21:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/08/16 09:20	11/08/16 13:58	1
Arsenic	**0.0011**		0.0010		mg/L		11/08/16 09:20	11/08/16 13:58	1
Barium	**0.11**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:58	1
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 19:18	1
Boron	**0.23**		0.050		mg/L		11/08/16 09:20	11/09/16 19:18	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:58	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 13:58	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 13:58	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 19:18	1
Iron	**0.25**		0.10		mg/L		11/08/16 09:20	11/08/16 13:58	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 13:58	1
Manganese	**0.0093**		0.0025		mg/L		11/08/16 09:20	11/08/16 13:58	1
Nickel	**0.0022**		0.0020		mg/L		11/08/16 09:20	11/08/16 13:58	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 13:58	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 19:18	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 13:58	1
Vanadium	**0.0051**		0.0050		mg/L		11/08/16 09:20	11/08/16 13:58	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 13:58	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:33	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:47	1
Sulfate	**100**		25		mg/L			11/10/16 08:39	5
Chloride	**84**		10		mg/L			11/11/16 01:04	5
Nitrogen, Nitrate	**0.33**		0.10		mg/L			11/10/16 16:46	1
Total Dissolved Solids	**570**		10		mg/L			11/05/16 20:17	1
Fluoride	**0.31**		0.10		mg/L			11/05/16 17:42	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/04/16 20:37	1
Nitrogen, Nitrate Nitrite	**0.33**		0.10		mg/L			11/10/16 04:08	1

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

TestAmerica Job ID: 500-119453-1

Client Sample ID: Trip Blank
Date Collected: 11/03/16 00:00
Date Received: 11/04/16 09:40

Lab Sample ID: 500-119453-13
Matrix: Water

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			11/07/16 22:21	1
Toluene	<0.00050		0.00050		mg/L			11/07/16 22:21	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/07/16 22:21	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/07/16 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*71 - 127*		*11/07/16 22:21*	*1*
Toluene-d8 (Surr)	*90*		*75 - 120*		*11/07/16 22:21*	*1*
4-Bromofluorobenzene (Surr)	*93*		*71 - 120*		*11/07/16 22:21*	*1*
Dibromofluoromethane	*106*		*70 - 120*		*11/07/16 22:21*	*1*

Qualifiers

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Analysis Batch: 359591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Total/NA	Water	8260B	
500-119453-2	MW-08	Total/NA	Water	8260B	
500-119453-3	MW-09	Total/NA	Water	8260B	
500-119453-4	Duplicate	Total/NA	Water	8260B	
500-119453-5	MW-03	Total/NA	Water	8260B	
500-119453-6	MW-04	Total/NA	Water	8260B	
500-119453-7	MW-05	Total/NA	Water	8260B	
500-119453-8	MW-10	Total/NA	Water	8260B	
500-119453-9	MW-11	Total/NA	Water	8260B	
500-119453-10	MW-01	Total/NA	Water	8260B	
500-119453-11	MW-06	Total/NA	Water	8260B	
500-119453-12	MW-07	Total/NA	Water	8260B	
500-119453-13	Trip Blank	Total/NA	Water	8260B	
MB 500-359591/7	Method Blank	Total/NA	Water	8260B	
LCS 500-359591/5	Lab Control Sample	Total/NA	Water	8260B	
500-119453-12 MS	MW-07	Total/NA	Water	8260B	
500-119453-12 MSD	MW-07	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 137918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Total/NA	Water	314.0	
500-119453-2	MW-08	Total/NA	Water	314.0	
500-119453-3	MW-09	Total/NA	Water	314.0	
500-119453-4	Duplicate	Total/NA	Water	314.0	
500-119453-5	MW-03	Total/NA	Water	314.0	
500-119453-6	MW-04	Total/NA	Water	314.0	
500-119453-7	MW-05	Total/NA	Water	314.0	
500-119453-8	MW-10	Total/NA	Water	314.0	
500-119453-9	MW-11	Total/NA	Water	314.0	
500-119453-10	MW-01	Total/NA	Water	314.0	
500-119453-11	MW-06	Total/NA	Water	314.0	
500-119453-12	MW-07	Total/NA	Water	314.0	
MB 320-137918/5	Method Blank	Total/NA	Water	314.0	
LCS 320-137918/6	Lab Control Sample	Total/NA	Water	314.0	
MRL 320-137918/4	Lab Control Sample	Total/NA	Water	314.0	
500-119453-2 MS	MW-08	Total/NA	Water	314.0	
500-119453-2 MSD	MW-08	Total/NA	Water	314.0	

Metals

Prep Batch: 359599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	7470A	
500-119453-2	MW-08	Dissolved	Water	7470A	
500-119453-3	MW-09	Dissolved	Water	7470A	
500-119453-4	Duplicate	Dissolved	Water	7470A	
500-119453-5	MW-03	Dissolved	Water	7470A	
500-119453-6	MW-04	Dissolved	Water	7470A	

Metals (Continued)

Prep Batch: 359599 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-7	MW-05	Dissolved	Water	7470A	
500-119453-8	MW-10	Dissolved	Water	7470A	
500-119453-9	MW-11	Dissolved	Water	7470A	
500-119453-10	MW-01	Dissolved	Water	7470A	
500-119453-11	MW-06	Dissolved	Water	7470A	
500-119453-12	MW-07	Dissolved	Water	7470A	
MB 500-359599/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-359599/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-119453-1 MS	MW-02	Dissolved	Water	7470A	
500-119453-1 MSD	MW-02	Dissolved	Water	7470A	
500-119453-1 DU	MW-02	Dissolved	Water	7470A	

Prep Batch: 359731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	Soluble Metals	
500-119453-2	MW-08	Dissolved	Water	Soluble Metals	
500-119453-3	MW-09	Dissolved	Water	Soluble Metals	
500-119453-4	Duplicate	Dissolved	Water	Soluble Metals	
500-119453-5	MW-03	Dissolved	Water	Soluble Metals	
500-119453-6	MW-04	Dissolved	Water	Soluble Metals	
500-119453-7	MW-05	Dissolved	Water	Soluble Metals	
500-119453-8	MW-10	Dissolved	Water	Soluble Metals	
500-119453-9	MW-11	Dissolved	Water	Soluble Metals	
500-119453-10	MW-01	Dissolved	Water	Soluble Metals	
500-119453-11	MW-06	Dissolved	Water	Soluble Metals	
500-119453-12	MW-07	Dissolved	Water	Soluble Metals	
MB 500-359731/1-A	Method Blank	Soluble	Water	Soluble Metals	
LCS 500-359731/2-A	Lab Control Sample	Soluble	Water	Soluble Metals	
500-119453-2 MS	MW-08	Dissolved	Water	Soluble Metals	
500-119453-2 MSD	MW-08	Dissolved	Water	Soluble Metals	
500-119453-2 DU	MW-08	Dissolved	Water	Soluble Metals	

Analysis Batch: 359793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	7470A	359599
500-119453-2	MW-08	Dissolved	Water	7470A	359599
500-119453-3	MW-09	Dissolved	Water	7470A	359599
500-119453-4	Duplicate	Dissolved	Water	7470A	359599
500-119453-5	MW-03	Dissolved	Water	7470A	359599
500-119453-6	MW-04	Dissolved	Water	7470A	359599
500-119453-7	MW-05	Dissolved	Water	7470A	359599
500-119453-8	MW-10	Dissolved	Water	7470A	359599
500-119453-9	MW-11	Dissolved	Water	7470A	359599
500-119453-10	MW-01	Dissolved	Water	7470A	359599
500-119453-11	MW-06	Dissolved	Water	7470A	359599
500-119453-12	MW-07	Dissolved	Water	7470A	359599
MB 500-359599/12-A	Method Blank	Total/NA	Water	7470A	359599
LCS 500-359599/13-A	Lab Control Sample	Total/NA	Water	7470A	359599
500-119453-1 MS	MW-02	Dissolved	Water	7470A	359599
500-119453-1 MSD	MW-02	Dissolved	Water	7470A	359599
500-119453-1 DU	MW-02	Dissolved	Water	7470A	359599

Analysis Batch: 359842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	6020A	359731
500-119453-2	MW-08	Dissolved	Water	6020A	359731
500-119453-3	MW-09	Dissolved	Water	6020A	359731
500-119453-4	Duplicate	Dissolved	Water	6020A	359731
500-119453-5	MW-03	Dissolved	Water	6020A	359731
500-119453-6	MW-04	Dissolved	Water	6020A	359731
500-119453-7	MW-05	Dissolved	Water	6020A	359731
500-119453-8	MW-10	Dissolved	Water	6020A	359731
500-119453-9	MW-11	Dissolved	Water	6020A	359731
500-119453-10	MW-01	Dissolved	Water	6020A	359731
500-119453-11	MW-06	Dissolved	Water	6020A	359731
500-119453-12	MW-07	Dissolved	Water	6020A	359731
MB 500-359731/1-A	Method Blank	Soluble	Water	6020A	359731
LCS 500-359731/2-A	Lab Control Sample	Soluble	Water	6020A	359731
500-119453-2 MS	MW-08	Dissolved	Water	6020A	359731
500-119453-2 MSD	MW-08	Dissolved	Water	6020A	359731
500-119453-2 DU	MW-08	Dissolved	Water	6020A	359731

Analysis Batch: 360204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	6020A	359731
500-119453-2	MW-08	Dissolved	Water	6020A	359731
500-119453-3	MW-09	Dissolved	Water	6020A	359731
500-119453-4	Duplicate	Dissolved	Water	6020A	359731
500-119453-5	MW-03	Dissolved	Water	6020A	359731
500-119453-6	MW-04	Dissolved	Water	6020A	359731
500-119453-7	MW-05	Dissolved	Water	6020A	359731
500-119453-8	MW-10	Dissolved	Water	6020A	359731
500-119453-9	MW-11	Dissolved	Water	6020A	359731
500-119453-10	MW-01	Dissolved	Water	6020A	359731
500-119453-11	MW-06	Dissolved	Water	6020A	359731
500-119453-12	MW-07	Dissolved	Water	6020A	359731
MB 500-359731/1-A	Method Blank	Soluble	Water	6020A	359731
LCS 500-359731/2-A	Lab Control Sample	Soluble	Water	6020A	359731
500-119453-2 MS	MW-08	Dissolved	Water	6020A	359731
500-119453-2 MSD	MW-08	Dissolved	Water	6020A	359731
500-119453-2 DU	MW-08	Dissolved	Water	6020A	359731

Analysis Batch: 360438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-3	MW-09	Dissolved	Water	6020A	359731

General Chemistry

Analysis Batch: 359158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	SM 4500 NO2 B	
500-119453-2	MW-08	Dissolved	Water	SM 4500 NO2 B	
500-119453-3	MW-09	Dissolved	Water	SM 4500 NO2 B	
500-119453-4	Duplicate	Dissolved	Water	SM 4500 NO2 B	
MB 500-359158/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	
LCS 500-359158/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	
500-119453-4 MS	Duplicate	Dissolved	Water	SM 4500 NO2 B	

General Chemistry (Continued)

Analysis Batch: 359158 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-4 MSD	Duplicate	Dissolved	Water	SM 4500 NO2 B	

Analysis Batch: 359470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	SM 2540C	
500-119453-2	MW-08	Dissolved	Water	SM 2540C	
500-119453-3	MW-09	Dissolved	Water	SM 2540C	
500-119453-4	Duplicate	Dissolved	Water	SM 2540C	
500-119453-5	MW-03	Dissolved	Water	SM 2540C	
500-119453-6	MW-04	Dissolved	Water	SM 2540C	
500-119453-7	MW-05	Dissolved	Water	SM 2540C	
500-119453-8	MW-10	Dissolved	Water	SM 2540C	
500-119453-9	MW-11	Dissolved	Water	SM 2540C	
500-119453-10	MW-01	Dissolved	Water	SM 2540C	
500-119453-11	MW-06	Dissolved	Water	SM 2540C	
500-119453-12	MW-07	Dissolved	Water	SM 2540C	
MB 500-359470/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-359470/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-119453-1 MS	MW-02	Dissolved	Water	SM 2540C	
500-119453-1 DU	MW-02	Dissolved	Water	SM 2540C	

Analysis Batch: 359614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	SM 4500 F C	
500-119453-2	MW-08	Dissolved	Water	SM 4500 F C	
500-119453-3	MW-09	Dissolved	Water	SM 4500 F C	
500-119453-4	Duplicate	Dissolved	Water	SM 4500 F C	
500-119453-10	MW-01	Dissolved	Water	SM 4500 F C	
500-119453-12	MW-07	Dissolved	Water	SM 4500 F C	
MB 500-359614/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-359614/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 359947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-5	MW-03	Dissolved	Water	SM 4500 NO2 B	
500-119453-6	MW-04	Dissolved	Water	SM 4500 NO2 B	
500-119453-7	MW-05	Dissolved	Water	SM 4500 NO2 B	
500-119453-8	MW-10	Dissolved	Water	SM 4500 NO2 B	
500-119453-9	MW-11	Dissolved	Water	SM 4500 NO2 B	
MB 500-359947/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	
LCS 500-359947/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	

Analysis Batch: 359957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-10	MW-01	Dissolved	Water	SM 4500 NO2 B	
500-119453-11	MW-06	Dissolved	Water	SM 4500 NO2 B	
500-119453-12	MW-07	Dissolved	Water	SM 4500 NO2 B	
MB 500-359957/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	
LCS 500-359957/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	

General Chemistry (Continued)

Analysis Batch: 360173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	9038	
500-119453-2	MW-08	Dissolved	Water	9038	
500-119453-3	MW-09	Dissolved	Water	9038	
500-119453-4	Duplicate	Dissolved	Water	9038	
500-119453-5	MW-03	Dissolved	Water	9038	
500-119453-6	MW-04	Dissolved	Water	9038	
500-119453-7	MW-05	Dissolved	Water	9038	
500-119453-8	MW-10	Dissolved	Water	9038	
500-119453-9	MW-11	Dissolved	Water	9038	
500-119453-10	MW-01	Dissolved	Water	9038	
500-119453-11	MW-06	Dissolved	Water	9038	
500-119453-12	MW-07	Dissolved	Water	9038	
MB 500-360173/3	Method Blank	Total/NA	Water	9038	
LCS 500-360173/4	Lab Control Sample	Total/NA	Water	9038	
500-119453-1 MS	MW-02	Dissolved	Water	9038	
500-119453-1 MSD	MW-02	Dissolved	Water	9038	

Analysis Batch: 360254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	SM 4500 NO3 F	
500-119453-2	MW-08	Dissolved	Water	SM 4500 NO3 F	
500-119453-3	MW-09	Dissolved	Water	SM 4500 NO3 F	
500-119453-4	Duplicate	Dissolved	Water	SM 4500 NO3 F	
500-119453-5	MW-03	Dissolved	Water	SM 4500 NO3 F	
500-119453-6	MW-04	Dissolved	Water	SM 4500 NO3 F	
500-119453-7	MW-05	Dissolved	Water	SM 4500 NO3 F	
500-119453-8	MW-10	Dissolved	Water	SM 4500 NO3 F	
500-119453-9	MW-11	Dissolved	Water	SM 4500 NO3 F	
500-119453-10	MW-01	Dissolved	Water	SM 4500 NO3 F	
500-119453-11	MW-06	Dissolved	Water	SM 4500 NO3 F	
500-119453-12	MW-07	Dissolved	Water	SM 4500 NO3 F	
MB 500-360254/31	Method Blank	Total/NA	Water	SM 4500 NO3 F	
LCS 500-360254/32	Lab Control Sample	Total/NA	Water	SM 4500 NO3 F	
500-119453-10 MS	MW-01	Dissolved	Water	SM 4500 NO3 F	
500-119453-10 MSD	MW-01	Dissolved	Water	SM 4500 NO3 F	

Analysis Batch: 360272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	Nitrate by calc	
500-119453-2	MW-08	Dissolved	Water	Nitrate by calc	
500-119453-3	MW-09	Dissolved	Water	Nitrate by calc	
500-119453-4	Duplicate	Dissolved	Water	Nitrate by calc	
500-119453-5	MW-03	Dissolved	Water	Nitrate by calc	
500-119453-6	MW-04	Dissolved	Water	Nitrate by calc	
500-119453-7	MW-05	Dissolved	Water	Nitrate by calc	
500-119453-8	MW-10	Dissolved	Water	Nitrate by calc	
500-119453-9	MW-11	Dissolved	Water	Nitrate by calc	
500-119453-10	MW-01	Dissolved	Water	Nitrate by calc	
500-119453-11	MW-06	Dissolved	Water	Nitrate by calc	
500-119453-12	MW-07	Dissolved	Water	Nitrate by calc	

General Chemistry (Continued)

Analysis Batch: 360497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-5	MW-03	Dissolved	Water	SM 4500 F C	
500-119453-6	MW-04	Dissolved	Water	SM 4500 F C	
500-119453-7	MW-05	Dissolved	Water	SM 4500 F C	
500-119453-8	MW-10	Dissolved	Water	SM 4500 F C	
500-119453-9	MW-11	Dissolved	Water	SM 4500 F C	
500-119453-11	MW-06	Dissolved	Water	SM 4500 F C	
MB 500-360497/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-360497/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 360501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	9251	
500-119453-2	MW-08	Dissolved	Water	9251	
500-119453-3	MW-09	Dissolved	Water	9251	
500-119453-4	Duplicate	Dissolved	Water	9251	
500-119453-5	MW-03	Dissolved	Water	9251	
500-119453-6	MW-04	Dissolved	Water	9251	
500-119453-7	MW-05	Dissolved	Water	9251	
500-119453-8	MW-10	Dissolved	Water	9251	
500-119453-9	MW-11	Dissolved	Water	9251	
500-119453-10	MW-01	Dissolved	Water	9251	
500-119453-11	MW-06	Dissolved	Water	9251	
500-119453-12	MW-07	Dissolved	Water	9251	
MB 500-360501/12	Method Blank	Total/NA	Water	9251	
LCS 500-360501/13	Lab Control Sample	Total/NA	Water	9251	
500-119453-2 MS	MW-08	Dissolved	Water	9251	
500-119453-2 MSD	MW-08	Dissolved	Water	9251	

Prep Batch: 360546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	9010B	
500-119453-2	MW-08	Dissolved	Water	9010B	
500-119453-3	MW-09	Dissolved	Water	9010B	
500-119453-4	Duplicate	Dissolved	Water	9010B	
500-119453-5	MW-03	Dissolved	Water	9010B	
500-119453-6	MW-04	Dissolved	Water	9010B	
500-119453-7	MW-05	Dissolved	Water	9010B	
500-119453-8	MW-10	Dissolved	Water	9010B	
500-119453-9	MW-11	Dissolved	Water	9010B	
500-119453-10	MW-01	Dissolved	Water	9010B	
500-119453-11	MW-06	Dissolved	Water	9010B	
500-119453-12	MW-07	Dissolved	Water	9010B	
MB 500-360546/1-A	Method Blank	Total/NA	Water	9010B	
LCS 500-360546/2-A	Lab Control Sample	Total/NA	Water	9010B	

Analysis Batch: 360601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-1	MW-02	Dissolved	Water	9014	360546
500-119453-2	MW-08	Dissolved	Water	9014	360546
500-119453-3	MW-09	Dissolved	Water	9014	360546
500-119453-4	Duplicate	Dissolved	Water	9014	360546

General Chemistry (Continued)

Analysis Batch: 360601 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119453-5	MW-03	Dissolved	Water	9014	360546
500-119453-6	MW-04	Dissolved	Water	9014	360546
500-119453-7	MW-05	Dissolved	Water	9014	360546
500-119453-8	MW-10	Dissolved	Water	9014	360546
500-119453-9	MW-11	Dissolved	Water	9014	360546
500-119453-10	MW-01	Dissolved	Water	9014	360546
500-119453-11	MW-06	Dissolved	Water	9014	360546
500-119453-12	MW-07	Dissolved	Water	9014	360546
MB 500-360546/1-A	Method Blank	Total/NA	Water	9014	360546
LCS 500-360546/2-A	Lab Control Sample	Total/NA	Water	9014	360546

Surrogate Summary

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

TestAmerica Job ID: 500-119453-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (71-127)	TOL (75-120)	BFB (71-120)	DBFM (70-120)
500-119453-1	MW-02	115	93	91	108
500-119453-2	MW-08	118	92	91	109
500-119453-3	MW-09	118	93	91	111
500-119453-4	Duplicate	114	92	94	104
500-119453-5	MW-03	114	92	92	106
500-119453-6	MW-04	117	92	96	105
500-119453-7	MW-05	116	91	93	108
500-119453-8	MW-10	118	94	94	110
500-119453-9	MW-11	116	92	95	105
500-119453-10	MW-01	119	91	91	110
500-119453-11	MW-06	121	92	93	110
500-119453-12	MW-07	115	91	95	109
500-119453-12 MS	MW-07	116	93	97	114
500-119453-12 MSD	MW-07	115	93	93	113
500-119453-13	Trip Blank	115	90	93	106
LCS 500-359591/5	Lab Control Sample	108	94	96	109
MB 500-359591/7	Method Blank	110	92	96	108

Surrogate Legend

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

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

Lab Sample ID: MB 500-359591/7
Matrix: Water
Analysis Batch: 359591

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00050		0.00050		mg/L			11/07/16 14:19	1
Toluene	<0.00050		0.00050		mg/L			11/07/16 14:19	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/07/16 14:19	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/07/16 14:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 127*		*11/07/16 14:19*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/07/16 14:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*71 - 120*		*11/07/16 14:19*	*1*
Dibromofluoromethane	*108*		*70 - 120*		*11/07/16 14:19*	*1*

Lab Sample ID: LCS 500-359591/5
Matrix: Water
Analysis Batch: 359591

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0454		mg/L		91	70 - 125
Toluene	0.0500	0.0474		mg/L		95	70 - 125
Ethylbenzene	0.0500	0.0479		mg/L		96	70 - 125
Xylenes, Total	0.100	0.0964		mg/L		96	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 127*
Toluene-d8 (Surr)	*94*		*75 - 120*
4-Bromofluorobenzene (Surr)	*96*		*71 - 120*
Dibromofluoromethane	*109*		*70 - 120*

Lab Sample ID: 500-119453-12 MS
Matrix: Water
Analysis Batch: 359591

Client Sample ID: MW-07
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0018		0.0500	0.0525		mg/L		101	70 - 125
Toluene	0.050		0.0500	0.0997		mg/L		99	70 - 125
Ethylbenzene	0.0028		0.0500	0.0541		mg/L		103	70 - 125
Xylenes, Total	0.0029		0.100	0.107		mg/L		104	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*71 - 127*
Toluene-d8 (Surr)	*93*		*75 - 120*
4-Bromofluorobenzene (Surr)	*97*		*71 - 120*
Dibromofluoromethane	*114*		*70 - 120*

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

Lab Sample ID: 500-119453-12 MSD
Matrix: Water
Analysis Batch: 359591

Client Sample ID: MW-07
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0018		0.0500	0.0524		mg/L		101	70 - 125	0	20
Toluene	0.050		0.0500	0.0982		mg/L		96	70 - 125	2	20
Ethylbenzene	0.0028		0.0500	0.0524		mg/L		99	70 - 125	3	20
Xylenes, Total	0.0029		0.100	0.104		mg/L		101	70 - 125	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*71 - 127*
Toluene-d8 (Surr)	*93*		*75 - 120*
4-Bromofluorobenzene (Surr)	*93*		*71 - 120*
Dibromofluoromethane	*113*		*70 - 120*

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 320-137918/5
Matrix: Water
Analysis Batch: 137918

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/14/16 16:20	1

Lab Sample ID: LCS 320-137918/6
Matrix: Water
Analysis Batch: 137918

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	0.0500	0.0514		mg/L		103	85 - 115

Lab Sample ID: MRL 320-137918/4
Matrix: Water
Analysis Batch: 137918

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	4.00	<4.0	^	ug/L		73	75 - 125

Lab Sample ID: 500-119453-2 MS
Matrix: Water
Analysis Batch: 137918

Client Sample ID: MW-08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	<0.0040		0.0500	0.0495		mg/L		99	80 - 120

Lab Sample ID: 500-119453-2 MSD
Matrix: Water
Analysis Batch: 137918

Client Sample ID: MW-08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	<0.0040		0.0500	0.0517		mg/L		103	80 - 120	4	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: 500-119453-2 MS
Matrix: Water
Analysis Batch: 359842

Client Sample ID: MW-08
Prep Type: Dissolved
Prep Batch: 359731

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0030		0.500	0.516		mg/L		103	75 - 125
Arsenic	<0.0010		0.100	0.104		mg/L		104	75 - 125
Barium	0.042		0.500	0.545		mg/L		101	75 - 125
Boron	0.13		1.00	1.21		mg/L		107	75 - 125
Cadmium	<0.00050		0.0500	0.0509		mg/L		102	75 - 125
Chromium	<0.0050		0.200	0.203		mg/L		102	75 - 125
Cobalt	<0.0010		0.500	0.511		mg/L		102	75 - 125
Iron	<0.10		1.00	1.08		mg/L		108	75 - 125
Lead	<0.00050		0.100	0.112		mg/L		112	75 - 125
Manganese	<0.0025		0.500	0.516		mg/L		103	75 - 125
Nickel	<0.0020		0.500	0.511		mg/L		102	75 - 125
Selenium	<0.0025		0.100	0.109		mg/L		109	75 - 125
Thallium	<0.0020		0.100	0.113		mg/L		113	75 - 125
Vanadium	<0.0050		0.500	0.512		mg/L		102	75 - 125
Zinc	<0.020		0.500	0.501		mg/L		100	75 - 125

Lab Sample ID: 500-119453-2 MS
Matrix: Water
Analysis Batch: 360204

Client Sample ID: MW-08
Prep Type: Dissolved
Prep Batch: 359731

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	<0.0010		0.0500	0.0540		mg/L		108	75 - 125
Copper	<0.0020		0.250	0.255		mg/L		102	75 - 125
Silver	<0.00050		0.0500	0.0503		mg/L		101	75 - 125

Lab Sample ID: 500-119453-2 MSD
Matrix: Water
Analysis Batch: 359842

Client Sample ID: MW-08
Prep Type: Dissolved
Prep Batch: 359731

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.0030		0.500	0.535		mg/L		107	75 - 125	4	20
Arsenic	<0.0010		0.100	0.108		mg/L		108	75 - 125	4	20
Barium	0.042		0.500	0.552		mg/L		102	75 - 125	1	20
Boron	0.13		1.00	1.20		mg/L		106	75 - 125	1	20
Cadmium	<0.00050		0.0500	0.0531		mg/L		106	75 - 125	4	20
Chromium	<0.0050		0.200	0.205		mg/L		102	75 - 125	1	20
Cobalt	<0.0010		0.500	0.513		mg/L		103	75 - 125	0	20
Iron	<0.10		1.00	1.09		mg/L		109	75 - 125	1	20
Lead	<0.00050		0.100	0.115		mg/L		115	75 - 125	2	20
Manganese	<0.0025		0.500	0.513		mg/L		102	75 - 125	0	20
Nickel	<0.0020		0.500	0.515		mg/L		103	75 - 125	1	20
Selenium	<0.0025		0.100	0.112		mg/L		112	75 - 125	2	20
Thallium	<0.0020		0.100	0.115		mg/L		115	75 - 125	2	20
Vanadium	<0.0050		0.500	0.514		mg/L		103	75 - 125	0	20
Zinc	<0.020		0.500	0.520		mg/L		104	75 - 125	4	20

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

Lab Sample ID: 500-119453-2 MSD
Matrix: Water
Analysis Batch: 360204

Client Sample ID: MW-08
Prep Type: Dissolved
Prep Batch: 359731

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	<0.0010		0.0500	0.0536		mg/L		107	75 - 125	1	20
Copper	<0.0020		0.250	0.257		mg/L		103	75 - 125	1	20
Silver	<0.00050		0.0500	0.0503		mg/L		101	75 - 125	0	20

Lab Sample ID: 500-119453-2 DU
Matrix: Water
Analysis Batch: 359842

Client Sample ID: MW-08
Prep Type: Dissolved
Prep Batch: 359731

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0030		<0.0030		mg/L		NC	20
Arsenic	<0.0010		<0.0010		mg/L		NC	20
Barium	0.042		0.0405		mg/L		3	20
Boron	0.13		0.136		mg/L		2	20
Cadmium	<0.00050		<0.00050		mg/L		NC	20
Chromium	<0.0050		<0.0050		mg/L		NC	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Iron	<0.10		<0.10		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Manganese	<0.0025		<0.0025		mg/L		NC	20
Nickel	<0.0020		<0.0020		mg/L		NC	20
Selenium	<0.0025		<0.0025		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20
Vanadium	<0.0050		<0.0050		mg/L		NC	20
Zinc	<0.020		<0.020		mg/L		NC	20

Lab Sample ID: 500-119453-2 DU
Matrix: Water
Analysis Batch: 360204

Client Sample ID: MW-08
Prep Type: Dissolved
Prep Batch: 359731

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Copper	<0.0020		<0.0020		mg/L		NC	20
Silver	<0.00050		<0.00050		mg/L		NC	20

Lab Sample ID: MB 500-359731/1-A
Matrix: Water
Analysis Batch: 359842

Client Sample ID: Method Blank
Prep Type: Soluble
Prep Batch: 359731

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/08/16 09:20	11/08/16 12:46	1
Arsenic	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 12:46	1
Barium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 12:46	1
Boron	<0.050		0.050		mg/L		11/08/16 09:20	11/08/16 12:46	1
Cadmium	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 12:46	1
Chromium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 12:46	1
Cobalt	<0.0010		0.0010		mg/L		11/08/16 09:20	11/08/16 12:46	1
Iron	<0.10		0.10		mg/L		11/08/16 09:20	11/08/16 12:46	1
Lead	<0.00050		0.00050		mg/L		11/08/16 09:20	11/08/16 12:46	1
Manganese	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 12:46	1

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

Lab Sample ID: MB 500-359731/1-A
Matrix: Water
Analysis Batch: 359842

Client Sample ID: Method Blank
Prep Type: Soluble
Prep Batch: 359731

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 12:46	1
Selenium	<0.0025		0.0025		mg/L		11/08/16 09:20	11/08/16 12:46	1
Thallium	<0.0020		0.0020		mg/L		11/08/16 09:20	11/08/16 12:46	1
Vanadium	<0.0050		0.0050		mg/L		11/08/16 09:20	11/08/16 12:46	1
Zinc	<0.020		0.020		mg/L		11/08/16 09:20	11/08/16 12:46	1

Lab Sample ID: MB 500-359731/1-A
Matrix: Water
Analysis Batch: 360204

Client Sample ID: Method Blank
Prep Type: Soluble
Prep Batch: 359731

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0010		0.0010		mg/L		11/08/16 09:20	11/09/16 17:49	1
Copper	<0.0020		0.0020		mg/L		11/08/16 09:20	11/09/16 17:49	1
Silver	<0.00050		0.00050		mg/L		11/08/16 09:20	11/09/16 17:49	1

Lab Sample ID: LCS 500-359731/2-A
Matrix: Water
Analysis Batch: 359842

Client Sample ID: Lab Control Sample
Prep Type: Soluble
Prep Batch: 359731

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.486		mg/L		97	80 - 120
Arsenic	0.100	0.0943		mg/L		94	80 - 120
Barium	0.500	0.493		mg/L		99	80 - 120
Boron	1.00	1.10		mg/L		110	80 - 120
Cadmium	0.0500	0.0497		mg/L		99	80 - 120
Chromium	0.200	0.204		mg/L		102	80 - 120
Cobalt	0.500	0.532		mg/L		106	80 - 120
Iron	1.00	1.02		mg/L		102	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Manganese	0.500	0.516		mg/L		103	80 - 120
Nickel	0.500	0.533		mg/L		107	80 - 120
Selenium	0.100	0.0924		mg/L		92	80 - 120
Thallium	0.100	0.101		mg/L		101	80 - 120
Vanadium	0.500	0.505		mg/L		101	80 - 120
Zinc	0.500	0.482		mg/L		96	80 - 120

Lab Sample ID: LCS 500-359731/2-A
Matrix: Water
Analysis Batch: 360204

Client Sample ID: Lab Control Sample
Prep Type: Soluble
Prep Batch: 359731

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.0500	0.0530		mg/L		106	80 - 120
Copper	0.250	0.259		mg/L		103	80 - 120
Silver	0.0500	0.0516		mg/L		103	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-359599/12-A
Matrix: Water
Analysis Batch: 359793

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 359599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/16 11:30	11/08/16 11:06	1

Lab Sample ID: LCS 500-359599/13-A
Matrix: Water
Analysis Batch: 359793

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 359599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00193		mg/L		96	80 - 120

Lab Sample ID: 500-119453-1 MS
Matrix: Water
Analysis Batch: 359793

Client Sample ID: MW-02
Prep Type: Dissolved
Prep Batch: 359599

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00020		0.00100	0.000975		mg/L		98	75 - 125

Lab Sample ID: 500-119453-1 MSD
Matrix: Water
Analysis Batch: 359793

Client Sample ID: MW-02
Prep Type: Dissolved
Prep Batch: 359599

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.00101		mg/L		101	75 - 125	3	20

Lab Sample ID: 500-119453-1 DU
Matrix: Water
Analysis Batch: 359793

Client Sample ID: MW-02
Prep Type: Dissolved
Prep Batch: 359599

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

Method: 9014 - Cyanide

Lab Sample ID: MB 500-360546/1-A
Matrix: Water
Analysis Batch: 360601

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 360546

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/16 09:55	11/12/16 13:35	1

Lab Sample ID: LCS 500-360546/2-A
Matrix: Water
Analysis Batch: 360601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 360546

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0957		mg/L		96	80 - 120

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 500-360173/3
Matrix: Water
Analysis Batch: 360173

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			11/10/16 08:21	1

Lab Sample ID: LCS 500-360173/4
Matrix: Water
Analysis Batch: 360173

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	19.3		mg/L		96	80 - 120

Lab Sample ID: 500-119453-1 MS
Matrix: Water
Analysis Batch: 360173

Client Sample ID: MW-02
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	41		80.0	113		mg/L		91	75 - 125

Lab Sample ID: 500-119453-1 MSD
Matrix: Water
Analysis Batch: 360173

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	41		80.0	121		mg/L		100	75 - 125	6	20

Method: 9251 - Chloride

Lab Sample ID: MB 500-360501/12
Matrix: Water
Analysis Batch: 360501

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			11/11/16 00:15	1

Lab Sample ID: LCS 500-360501/13
Matrix: Water
Analysis Batch: 360501

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.7		mg/L		99	80 - 120

Lab Sample ID: 500-119453-2 MS
Matrix: Water
Analysis Batch: 360501

Client Sample ID: MW-08
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	67		50.0	105		mg/L		77	75 - 125

Method: 9251 - Chloride (Continued)

Lab Sample ID: 500-119453-2 MSD
Matrix: Water
Analysis Batch: 360501

Client Sample ID: MW-08
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	67		50.0	105		mg/L		76	75 - 125	1	20

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

Lab Sample ID: MB 500-359470/1
Matrix: Water
Analysis Batch: 359470

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			11/05/16 19:07	1

Lab Sample ID: LCS 500-359470/2
Matrix: Water
Analysis Batch: 359470

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	268		mg/L		107	80 - 120

Lab Sample ID: 500-119453-1 MS
Matrix: Water
Analysis Batch: 359470

Client Sample ID: MW-02
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	570		250	816		mg/L		98	75 - 125

Lab Sample ID: 500-119453-1 DU
Matrix: Water
Analysis Batch: 359470

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	570		578		mg/L		1	5

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-359614/31
Matrix: Water
Analysis Batch: 359614

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			11/05/16 16:17	1

Lab Sample ID: LCS 500-359614/32
Matrix: Water
Analysis Batch: 359614

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.5		mg/L		105	80 - 120

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 500-360497/3
Matrix: Water
Analysis Batch: 360497

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			11/11/16 13:13	1

Lab Sample ID: LCS 500-360497/4
Matrix: Water
Analysis Batch: 360497

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.3		mg/L		103	80 - 120

Method: SM 4500 NO2 B - Nitrogen, Nitrite

Lab Sample ID: MB 500-359158/3
Matrix: Water
Analysis Batch: 359158

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			11/02/16 17:30	1

Lab Sample ID: LCS 500-359158/4
Matrix: Water
Analysis Batch: 359158

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	0.100		mg/L		100	80 - 120

Lab Sample ID: MB 500-359947/3
Matrix: Water
Analysis Batch: 359947

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			11/03/16 17:30	1

Lab Sample ID: LCS 500-359947/4
Matrix: Water
Analysis Batch: 359947

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	0.101		mg/L		101	80 - 120

Lab Sample ID: MB 500-359957/3
Matrix: Water
Analysis Batch: 359957

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			11/04/16 20:36	1

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

Lab Sample ID: LCS 500-359957/4
Matrix: Water
Analysis Batch: 359957

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrite	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: 500-119453-4 MS
Matrix: Water
Analysis Batch: 359158

Client Sample ID: Duplicate
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	0.0973		mg/L		97	75 - 125

Lab Sample ID: 500-119453-4 MSD
Matrix: Water
Analysis Batch: 359158

Client Sample ID: Duplicate
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, 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 500-360254/31
Matrix: Water
Analysis Batch: 360254

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			11/10/16 03:24	1

Lab Sample ID: LCS 500-360254/32
Matrix: Water
Analysis Batch: 360254

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	0.809		mg/L		81	80 - 120

Lab Sample ID: 500-119453-10 MS
Matrix: Water
Analysis Batch: 360254

Client Sample ID: MW-01
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	1.0		1.00	1.92		mg/L		88	75 - 125

Lab Sample ID: 500-119453-10 MSD
Matrix: Water
Analysis Batch: 360254

Client Sample ID: MW-01
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate Nitrite	1.0		1.00	2.15		mg/L		111	75 - 125	11	20

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	Contact:	
Company:	KPRG & Associates Inc.	Company:	
Address:	14665 W. Lisbon Rd. Suite 2B	Address:	500-119453 COC
	Brookfield, WI		
Phone:	262-781-0475	Phone:	
Fax:		Fax:	
Email:	richardg@kprginc.com	PO #:	

Lab Lot # 500-119453

Package Sealed	Samples Sealed
(Yes) No	Yes (No)
Received on Ice	**Samples Intact**
(Yes) No	(Yes) No N/A
Temperature °C of Cooler	1.3
Within Hold Time	**Preserv. Indicated**
(Yes) No	(Yes) No N/A
pH Check OK	**Res Cl_2 Check OK**
(Yes) No	(Yes) No N/A
Sample Labels and COC Agree	
(Yes) No	COC not present

Sampler Name:	Client Project #	Refrg #													
Ian John Howieson	12313.0	Cmp/Grb													
Project Name:	**TestAmerica Project Number:**	Volume													
Joliet #29 Station Ash Ponds	50005078	Preserv.	7												
Project Location:	**Date Required**														
Joliet IL	Hard Copy: ___/___/___														
Lab PM: Eric Lang	Fax: ___/___/___														

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	# of Cont	NO2	Additional Analyses / Remarks
1		MW-02	11-1-16	12:11	W	1	X	
2		MW-08	11-1-16	15:50	W	1	X	
3		MW-09	11-1-16	13:59	W	1	X	
4		DUPLICATE	11-1-16	—	W	1	X	

RELINQUISHED BY:	COMPANY:	DATE:	TIME:	RECEIVED BY:	COMPANY:	DATE:	TIME:
TSH	KPRG	11-1-16	18:00	FEDEX			
RELINQUISHED BY:	COMPANY:	DATE:	TIME:	RECEIVED BY:	COMPANY:	DATE:	TIME:
				SVK	TA	11/2/16	1010

Matrix Key
WW = Wastewater, W = Water, S = Soil, SL = Sludge, MS = Miscellaneous, OL = Oil, A = Air, SE = Sediment, SO = Solid, DL = Drum Liquid, DS = Drum Solid, L = Leachate, W = Wipe, O = _____

Container Key
1. Plastic
2. VOA Vial
3. Sterile Plastic
4. Amber Glass
5. Widemouth Glass
6. Other _____

Preservative Key
1. HCl, Cool to 4°
2. H_2SO_4, Cool to 4°
3. HNO_3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. Cool to 4°
7. None

COMMENTS:

Date Received: 11,2,16
Courier: FX
Hand Delivered: ☐
Bill of Lading:

PAGE 1 of 1

STL-8208 (0800)

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

500-119453 COC

Lab Lot # 500- 119453

Package Sealed	Samples Sealed
Yes No	Yes No
Received on Ice	Samples Intact
Yes No	Yes No N/A

Temperature °C of Cooler 1.9

Within Hold Time	Preserv. Indicated
Yes No	Yes No N/A
pH Check OK	Res Cl_2 Check OK
Yes No	Yes No N/A

Sample Labels and COC Agree
Yes No COC not present

Sampler Name:	Client Project #	Refrg #	
Ian John Howieson	12313.0	Cmp/Grb	
Project Name:	TestAmerica Project Number:	Volume	
Joliet #29 Station Ash Ponds	50005078	Preserv.	7
Project Location:	Date Required		
Joliet IL	Hard Copy: ___/___/___		
Lab PM: Eric Lang	Fax: ___/___/___		

	Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	# of Cont	NO2	Additional Analyses / Remarks
5	1		MW-03	11-2-16	15:30	W	1	X	
6	2		MW-04	11-2-16	14:44	W	1	X	
7	3		MW-05	11-2-16	09:55	W	1	X	
8	4		MW-10	11-2-16	11:00	W	1	X	
9	5		MW-11	11-2-16	12:40	W	1	X	

RELINQUISHED BY:	COMPANY:	DATE:	TIME:	RECEIVED BY:	COMPANY:	DATE:	TIME:
IBH	KPRG	11-2-16	17:45	FEDEX			1020
RELINQUISHED BY:	COMPANY:	DATE:	TIME:	RECEIVED BY:	COMPANY:	DATE:	TIME:
					TA	11/3/16	1020

Matrix Key
WW = Wastewater; SE = Sediment; W = Water; SO = Solid; S = Soil; DL = Drum Liquid; SL = Sludge; DS = Drum-Solid; MS = Miscellaneous; L = Leachate; OL = Oil; W = Wipe; A = Air; O = _____

Container Key
1. Plastic; 2. VOA Vial; 3. Sterile Plastic; 4. Amber Glass; 5. Widemouth Glass; 6. Other _____

Preservative Key
1. HCl, Cool to 4°; 2. H_2SO_4, Cool to 4°; 3. HNO_3, Cool to 4°; 4. NaOH, Cool to 4°; 5. NaOH/Zn, Cool to 4°; 6. Cool to 4°; 7. None

COMMENTS:

Date Received 11, 3, 16
Courier: FX
Hand Delivered ☐
Bill of Lading:
PAGE 1 of 1

STL-8208 (0600)

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

500-119453 COC

Lab Lot # 500-119453

Package Sealed	Samples Sealed
Yes (No)	Yes (No)
Received on Ice	**Samples Intact**
(Yes) No	(Yes) No N/A

Temperature °C of Cooler: (0.4), 4.3, 4.3

Within Hold Time	Preserv. Indicated
(Yes) No	(Yes) No N/A
pH Check OK	**Res Cl_2 Check OK**
(Yes) No	(Yes) No N/A

Sample Labels and COC Agree: (Yes) No — COC not present

Sampler Name:	Client Project #	Refrg #
Ian John Howieson	12313.0	Cmp/Grb
Project Name:	**TestAmerica Project Number:**	Volume
Joliet #29 Station Ash Ponds	50005078	Preserv.
Project Location:	**Date Required**	
Joliet, Illinois.	Hard Copy: ___/___/___	
Lab PM: Eric Lang	Fax: ___/___/___	

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	# OF Containers	Metals dissolved	Cl, TDS, SO4, Fl, dissolved	NO2, dissolved	NO3+NO2, dissolved	Cyanide, dissolved	BTEX	Perchlorate	Additional Analyses / Remarks
10		MW-01	11-3-16	09:30	W	9	X	X	X	X	X	X	X	
1		MW-02	11-1-16	12:11	W	8	X	X	X	X	X	X	X	
5		MW-03	11-2-16	15:30	W	8	X	X	X	X	X	X	X	
6		MW-04	11-2-16	14:44	W	8	X	X	X	X	X	X	X	
7		MW-05	11-2-16	09:55	W	8	X	X	X	X	X	X	X	
11		MW-06	11-3-16	11:19	W	9	X	X	X	X	X	X	X	
12		MW-07	11-3-16	12:22	W	9	X	X	X	X	X	X	X	
2		MW-08	11-1-16	15:50	W	8	X	X	X	X	X	X	X	
3		MW-09	11-1-16	13:59	W	8	X	X	X	X	X	X	X	
8		MW-10	11-2-16	11:00	W	8	X	X	X	X	X	X	X	
9		MW-11	11-2-16	12:40	W	8	X	X	X	X	X	X	X	
4		Duplicates	11-1-16	N/A	W	8	X	X	X	X	X	X	X	
13		Trip Blank	N/A	N/A	W	2								

RELINQUISHED BY:	COMPANY:	DATE:	TIME:	RECEIVED BY:	COMPANY:	DATE:	TIME:
IJH	KPRG	11-4-16	09:40		TACHS	11/4/16	0940
RELINQUISHED BY:	COMPANY:	DATE:	TIME:	RECEIVED BY:	COMPANY:	DATE:	TIME:

Matrix Key
WW = Wastewater; SE = Sediment; W = Water; SO = Solid; S = Soil; DL = Drum Liquid; SL = Sludge; DS = Drum Solid; MS = Miscellaneous; L = Leachate; OL = Oil; W = Wipe; A = Air; O = _____

Container Key
1. Plastic; 2. VOA Vial; 3. Sterile Plastic; 4. Amber Glass; 5. Widemouth Glass; 6. Other _____

Preservative Key
1. HCl, Cool to 4°; 2. H_2SO_4, Cool to 4°; 3. HNO_3, Cool to 4°; 4. NaOH, Cool to 4°; 5. NaOH/Zn, Cool to 4°; 6. Cool to 4°; 7 None

COMMENTS:

Date Received: 11/07/16
Courier:
Hand Delivered ☐
Bill of Lading:
PAGE ___1___of___1___

STL-8208 (0600) MWG13-15_58353

Recipient's Name *Please print.*

Phone Number

Company

RT 519 5 A
ST 21 15:00 7060
11.02

ORIGIN ID:DPAA (630) 325-1L
IAN JOHN HOWIESON
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

ACTWGT: 19.60 LB
CAD: 6991054/SSFO1722
DIMS: 15x15x10 IN

BILL THIRD PARTY

TO ERIC LANG
TEST AMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 60484

(708) 534-5200

500-119453 Waybill

INV:
PO:
REF:
DEPT:

FedEx Express

TRK# 0201 7845 2335 7060

WED - 02 NOV 3:00P
STANDARD OVERNIGHT

79 JOTA

60484
IL-US ORD

MWG13-15_58354 11/16/2016

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)	Sampler	Lab PM: Lang, Eric A	Carrier Tracking No(s):	COC No: 500-80030.1
Client Contact: Shipping/Receiving	Phone	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Illinois		Job #: 500-119453-1
Address: 880 Riverside Parkway,	Due Date Requested: 11/16/2016			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Joliet #29 Station Ash Ponds (CCA)	Project #: 50005078			
Site:	SSOW#			

Analysis Requested

Preservation Codes:
A - HCl; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, s=solid, o=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	314.0 / Perchlorate	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-02 (500-119453-1)	11/1/16	12:11 Central		Water			X	1	
MW-08 (500-119453-2)	11/1/16	15:50 Central		Water			X	1	
MW-09 (500-119453-3)	11/1/16	13:59 Central		Water			X	1	
Duplicate (500-119453-4)	11/1/16	Central		Water			X	1	
MW-03 (500-119453-5)	11/2/16	15:30 Central		Water			X	1	
MW-04 (500-119453-6)	11/2/16	14:44 Central		Water			X	1	
MW-05 (500-119453-7)	11/2/16	09:55 Central		Water			X	1	
MW-10 (500-119453-8)	11/2/16	11:00 Central		Water			X	1	
MW-11 (500-119453-9)	11/2/16	12:40 Central		Water			X	1	

Page 42 of 43

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	11/04/16 1600	TA		11-5-16 0740	TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.4

11/16/2016

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)	Sampler:	Lab PM: Lang, Eric A	Carrier Tracking No(s):	COC No: 500-80030.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Illinois		Job #: 500-119453-1
Address: 880 Riverside Parkway	Due Date Requested: 11/16/2016	Analysis Requested		Preservation Codes:
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #29 Station Ash Ponds (CCA)	Project #: 50005078			
Site:	SSOW#:			

Preservation Codes:
A - HCl, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	314.0/ Perchlorate	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
MW-01 (500-119453-10)	11/3/16	09:30 Central		Water			X	1	
MW-06 (500-119453-11)	11/3/16	11:19 Central		Water			X	1	
MW-07 (500-119453-12)	11/3/16	12:22 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification
Unconfirmed

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

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	11/04/16 1600	TA	[signature]	10-5-16 970	[signature]
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-119453-1

Login Number: 119453
List Number: 1
Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago

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	(1.3)(1.9)(0.4)(4.3)(4.3)c
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: 500-119453-1

Login Number: 119453
List Number: 2
Creator: Hytrek, Cheryl

List Source: TestAmerica Sacramento
List Creation: 11/05/16 03:38 PM

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.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (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.	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

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

TestAmerica Job ID: 500-119453-1

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

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

Laboratory: TestAmerica Sacramento

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	200060	03-17-17

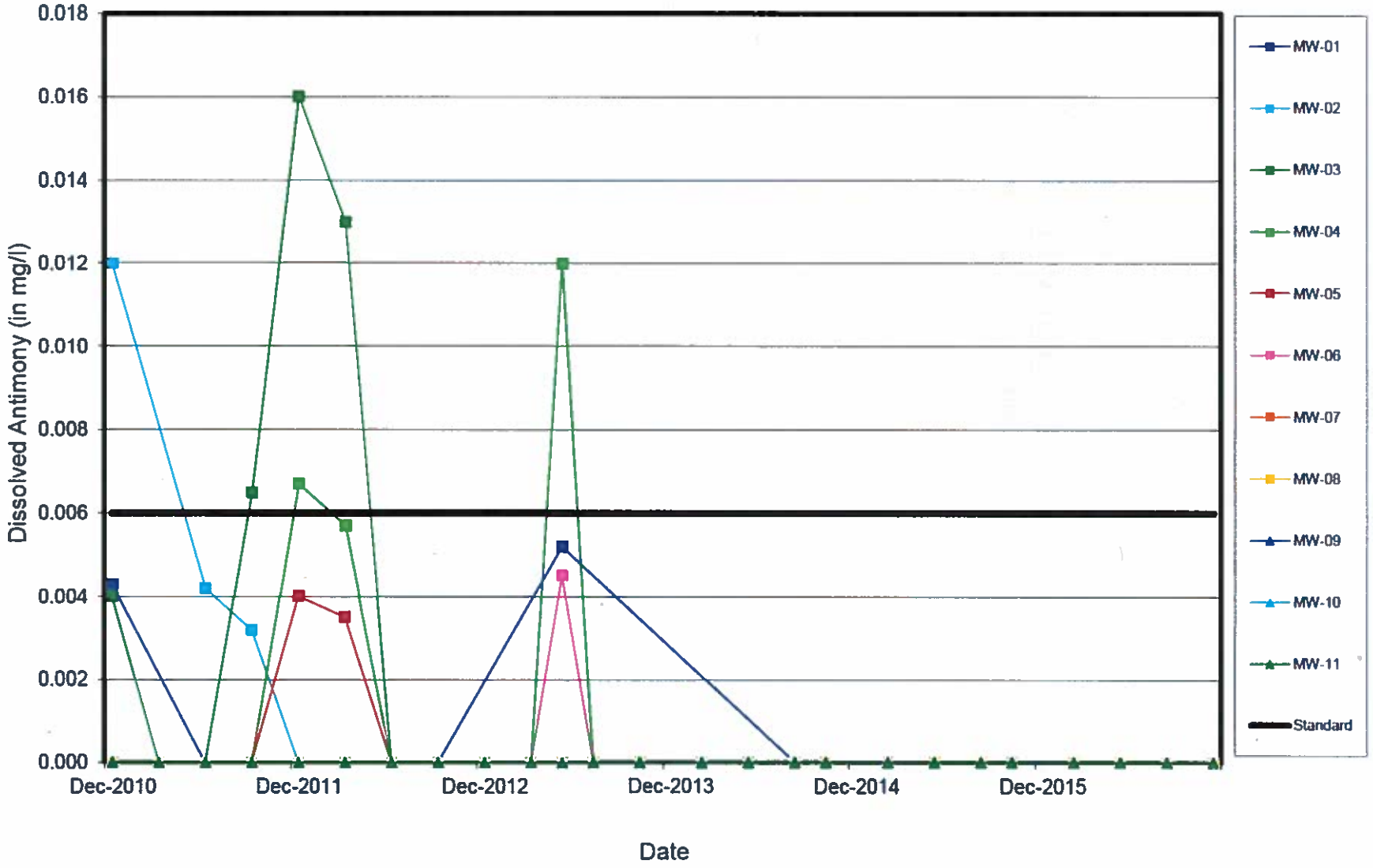
The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
314.0		Water	Perchlorate

ATTACHMENT 3
Time Vs. Concentration Curves

Midwest Generation Joliet Station #29, Joliet, IL

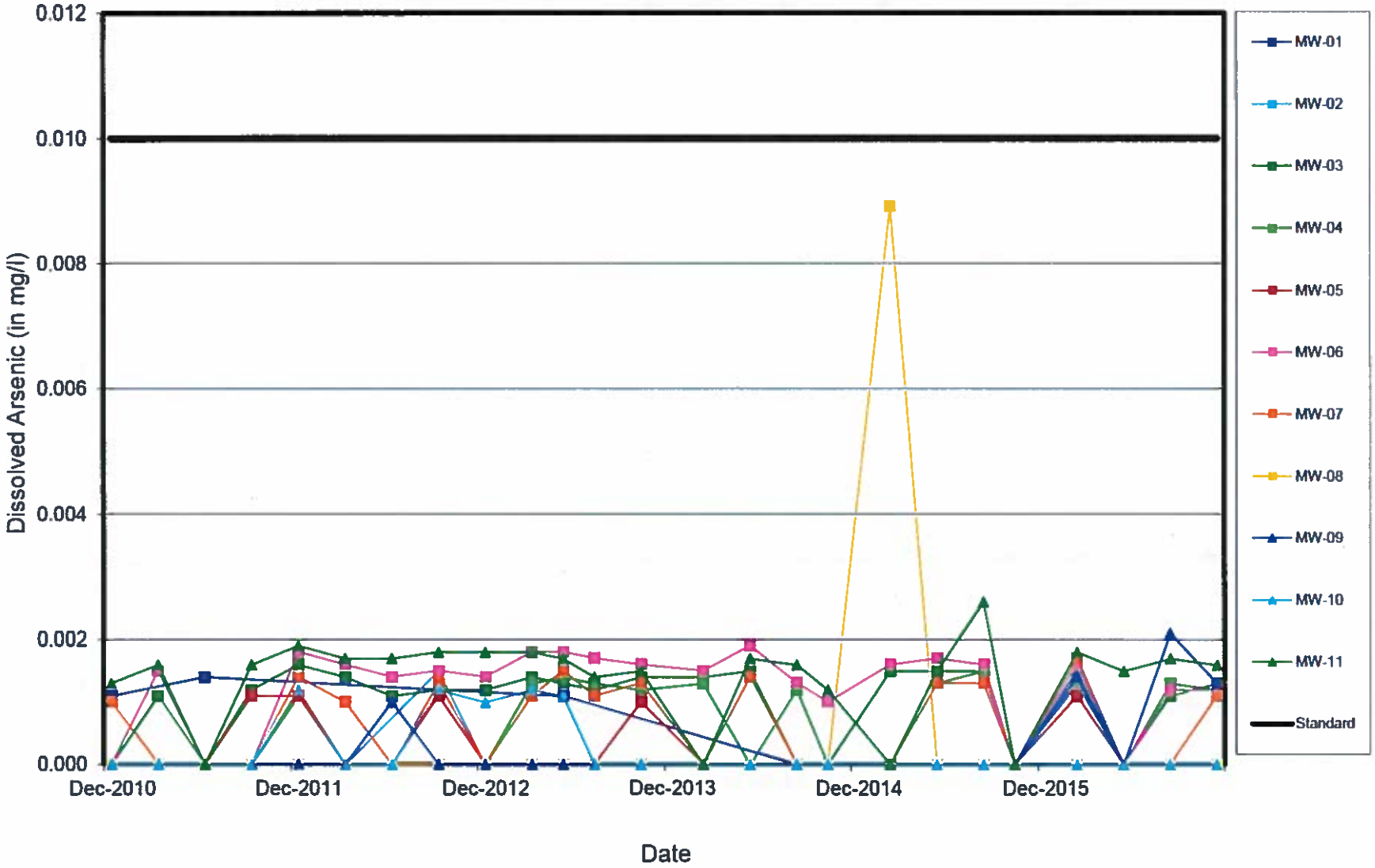
Dissolved Antimony vs. Time



MWG13-15_58361

Midwest Generation Joliet Station #29, Joliet, IL

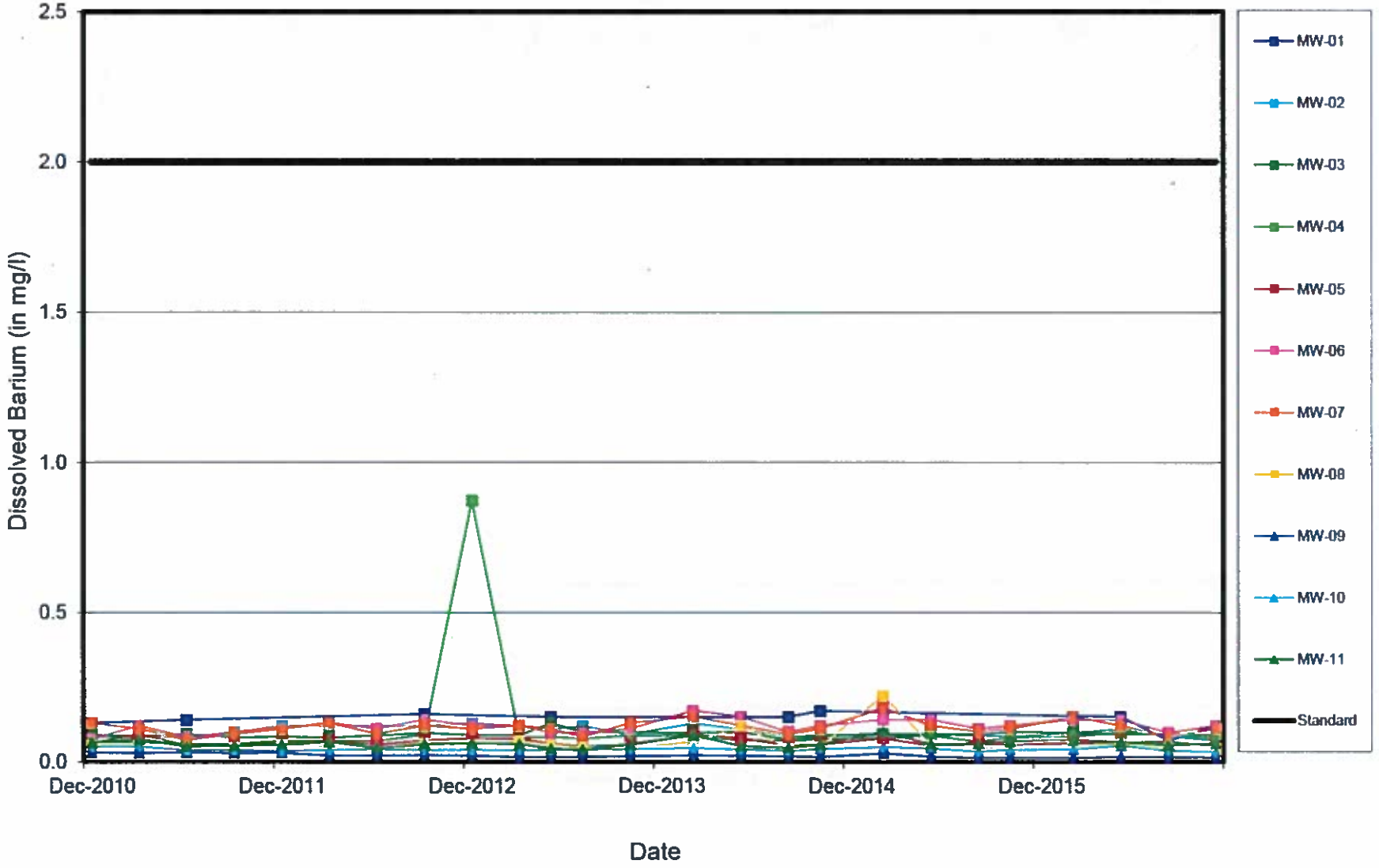
Dissolved Arsenic vs. Time



MWG13-15_58362

Midwest Generation Joliet Station #29, Joliet, IL

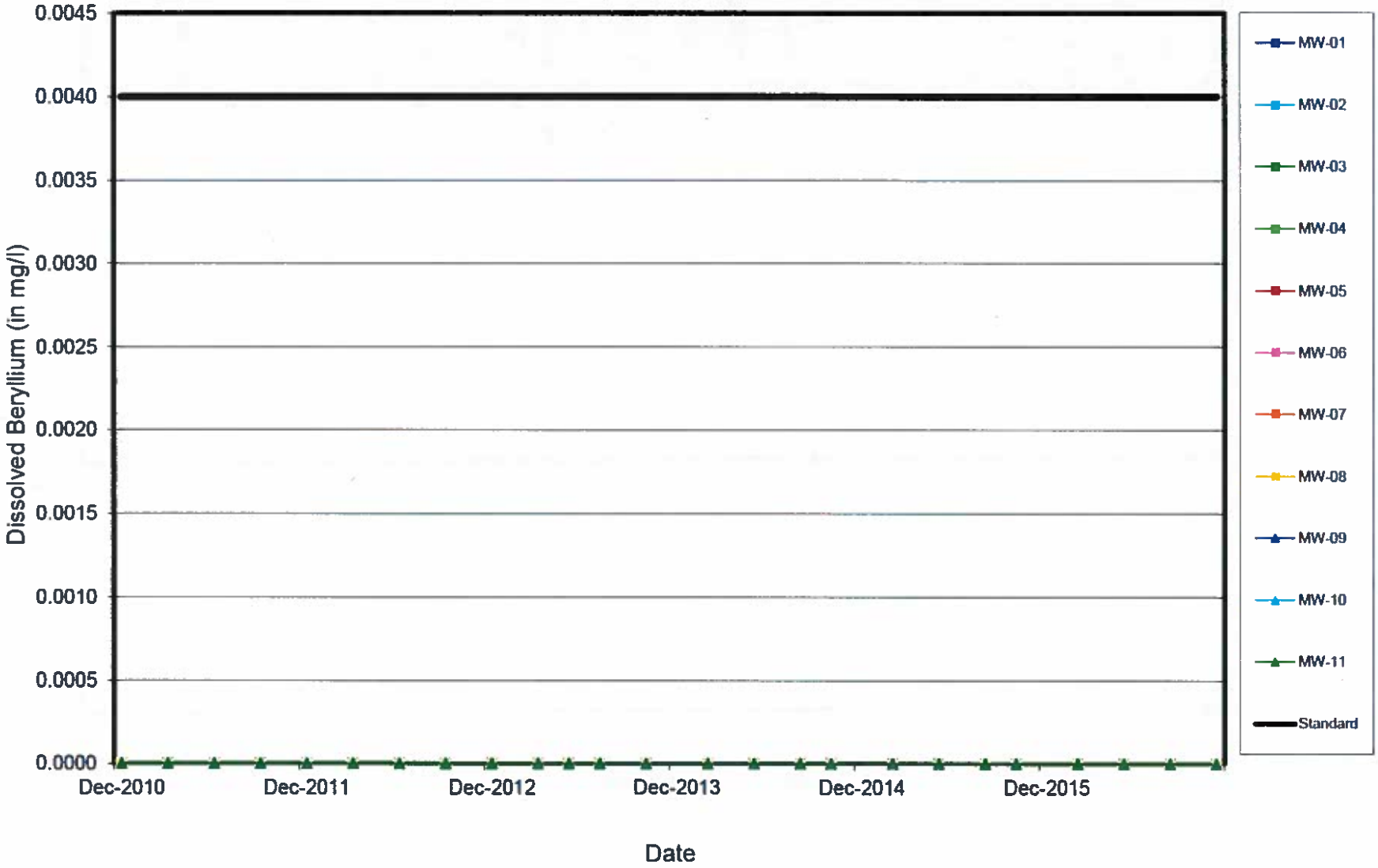
Dissolved Barium vs. Time



MWG13-15_58363

Midwest Generation Joliet Station #29, Joliet, IL

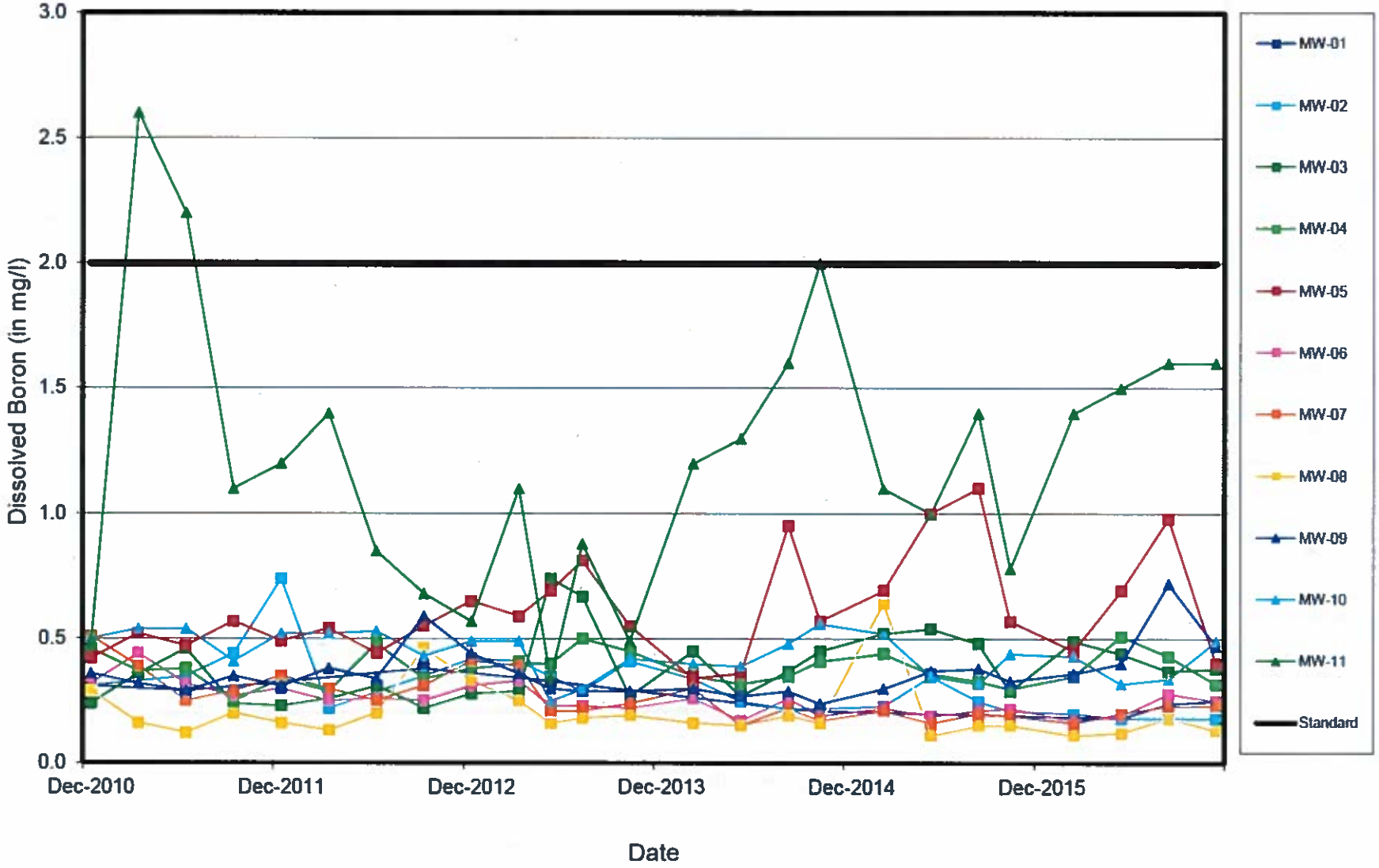
Dissolved Beryllium vs. Time



MWG13-15_58364

Midwest Generation Joliet Station #29, Joliet, IL

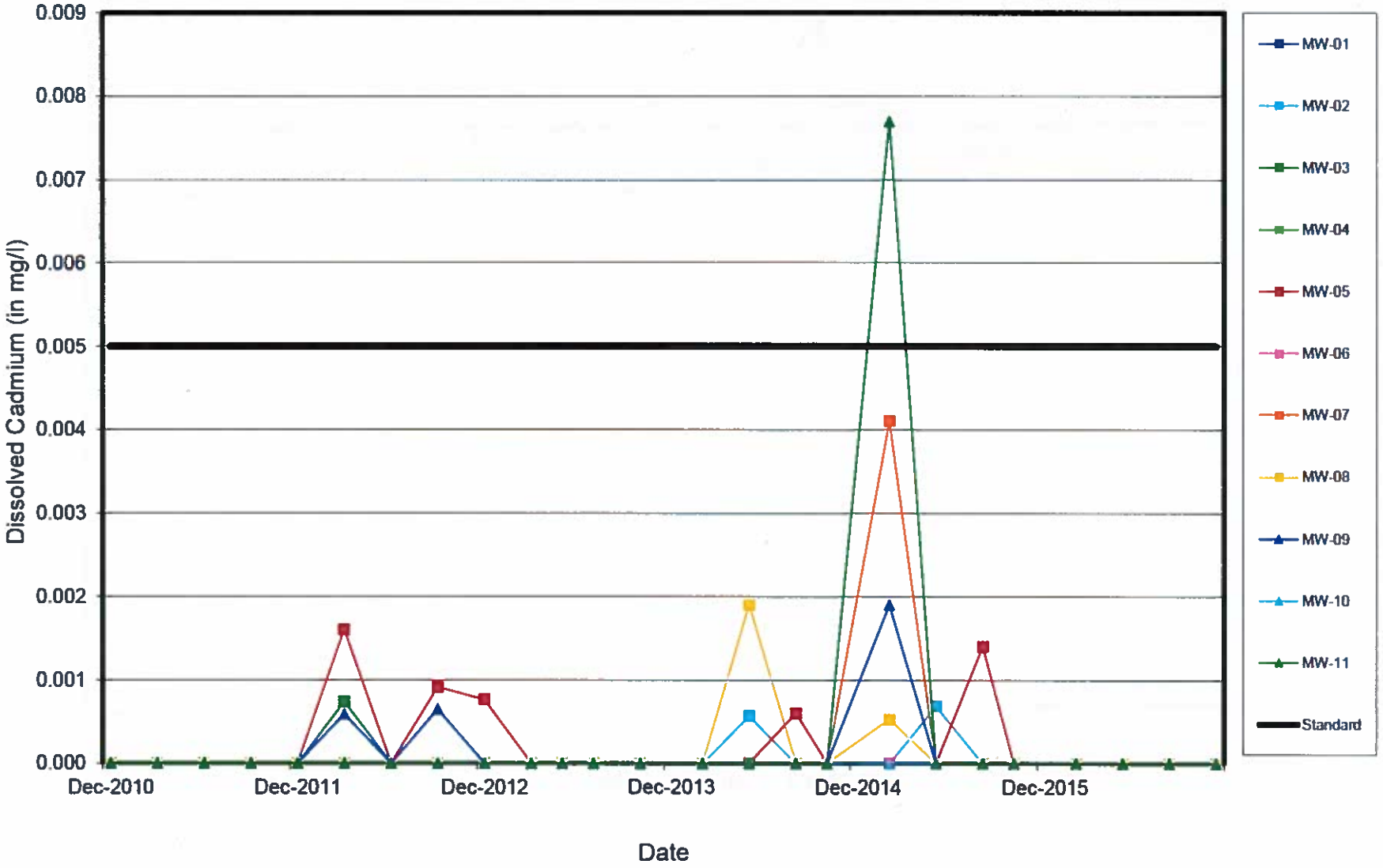
Dissolved Boron vs. Time



MWG13-15_58365

Midwest Generation Joliet Station #29, Joliet, IL

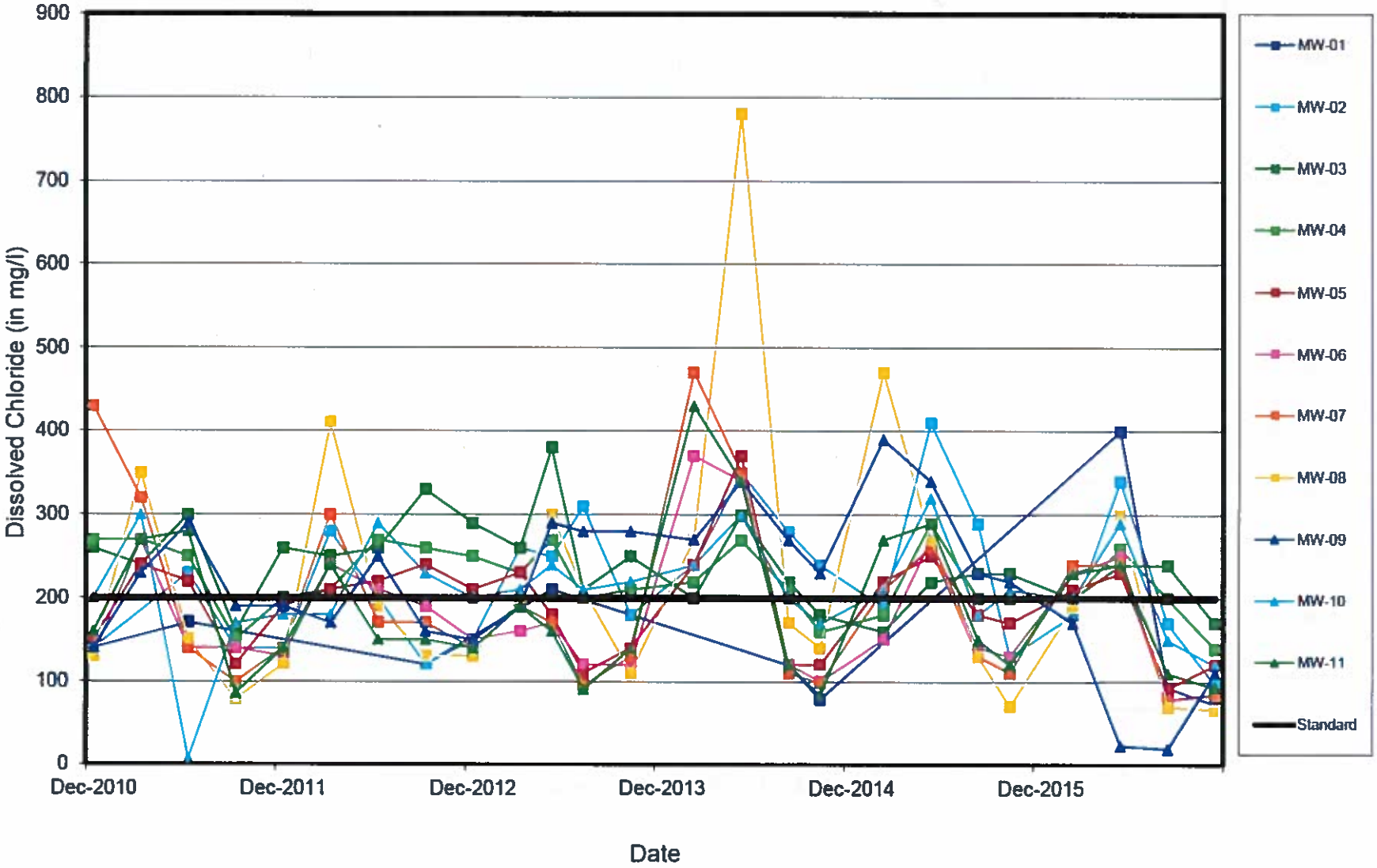
Dissolved Cadmium vs. Time



MWG13-15_58366

Midwest Generation Joliet Station #29, Joliet, IL

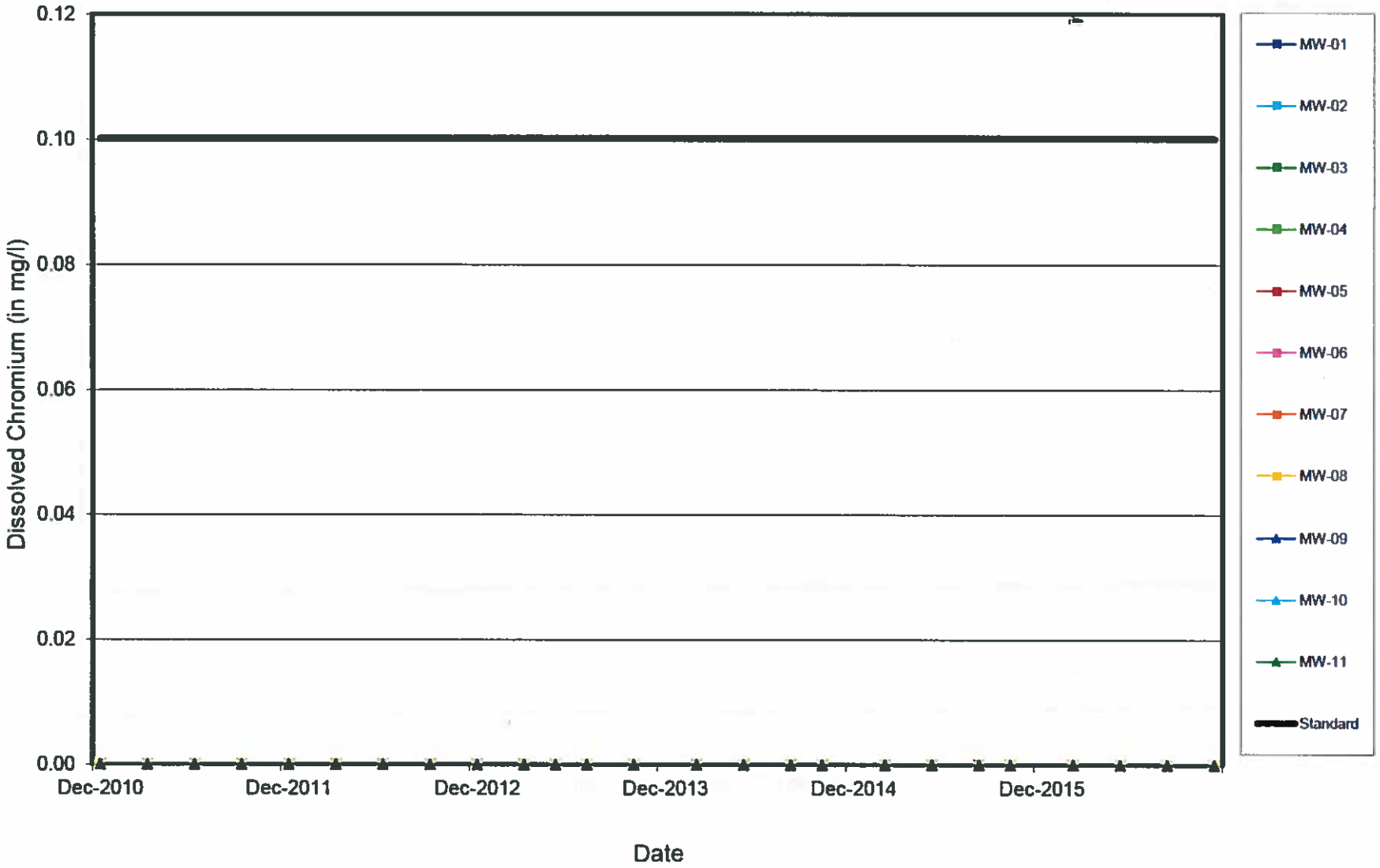
Dissolved Chloride vs. Time



MWG13-15_58367

Midwest Generation Joliet Station #29, Joliet, IL

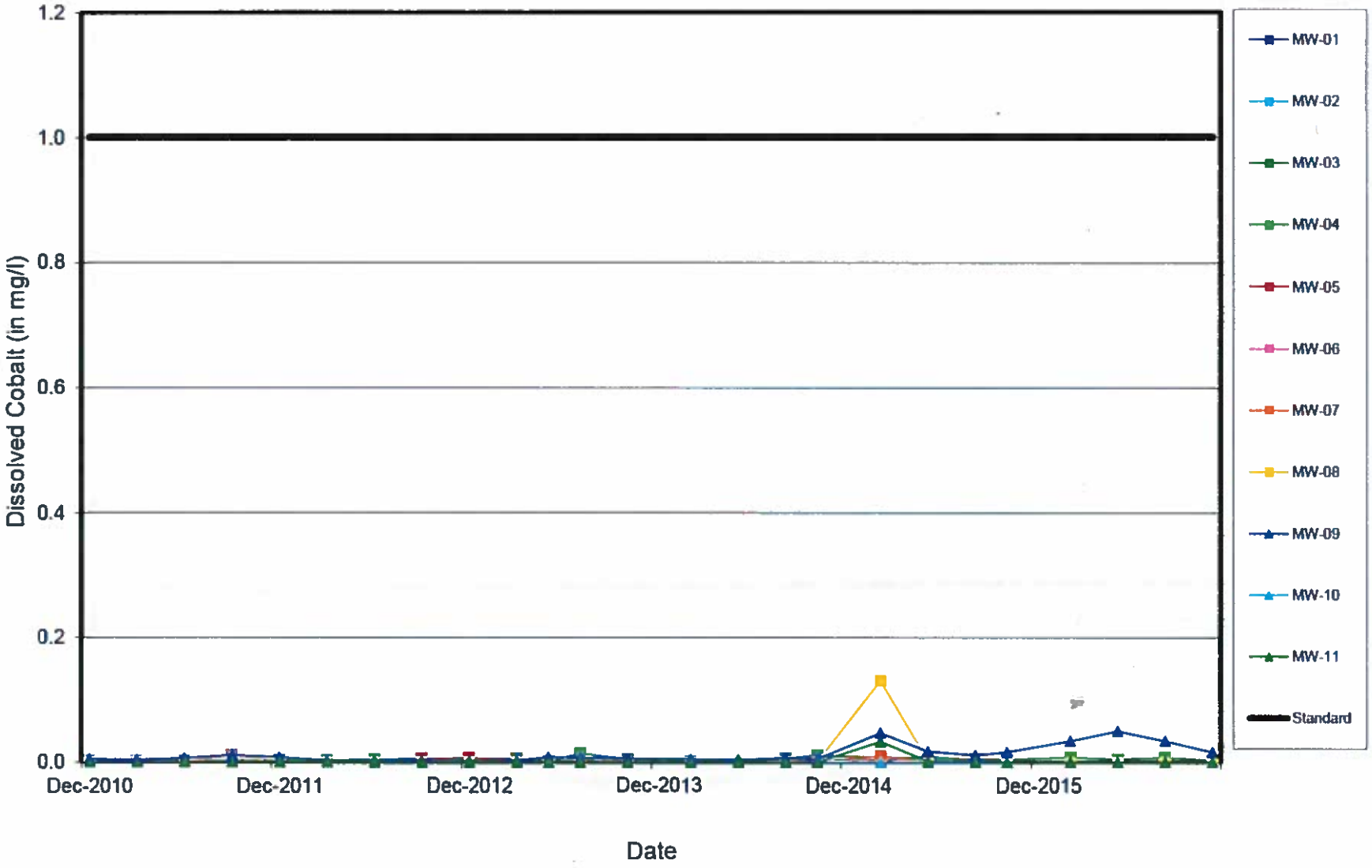
Dissolved Chromium vs. Time



MWG13-15_58368

Midwest Generation Joliet Station #29, Joliet, IL

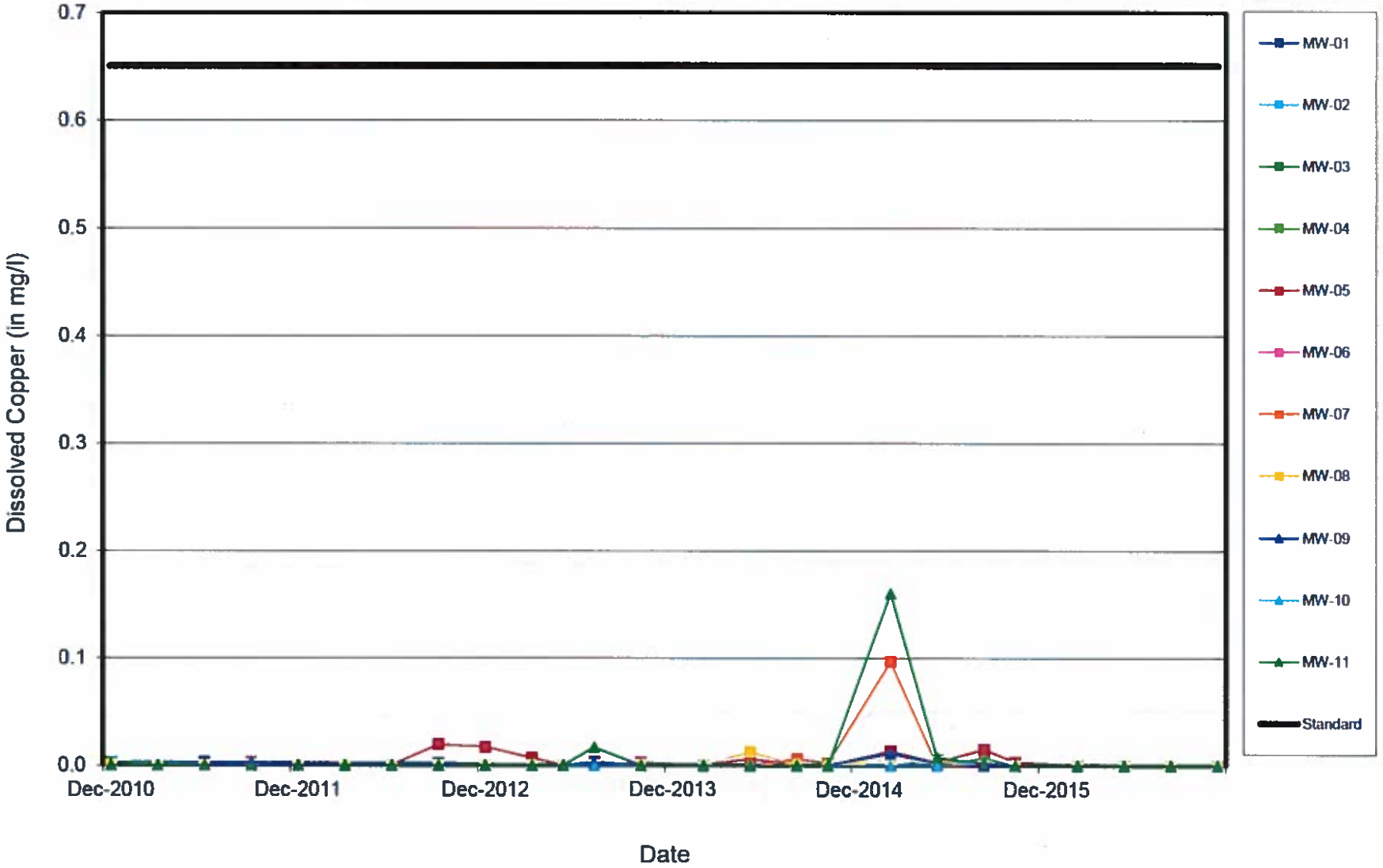
Dissolved Cobalt vs. Time



MWG13-15_58369

Midwest Generation Joliet Station #29, Joliet, IL

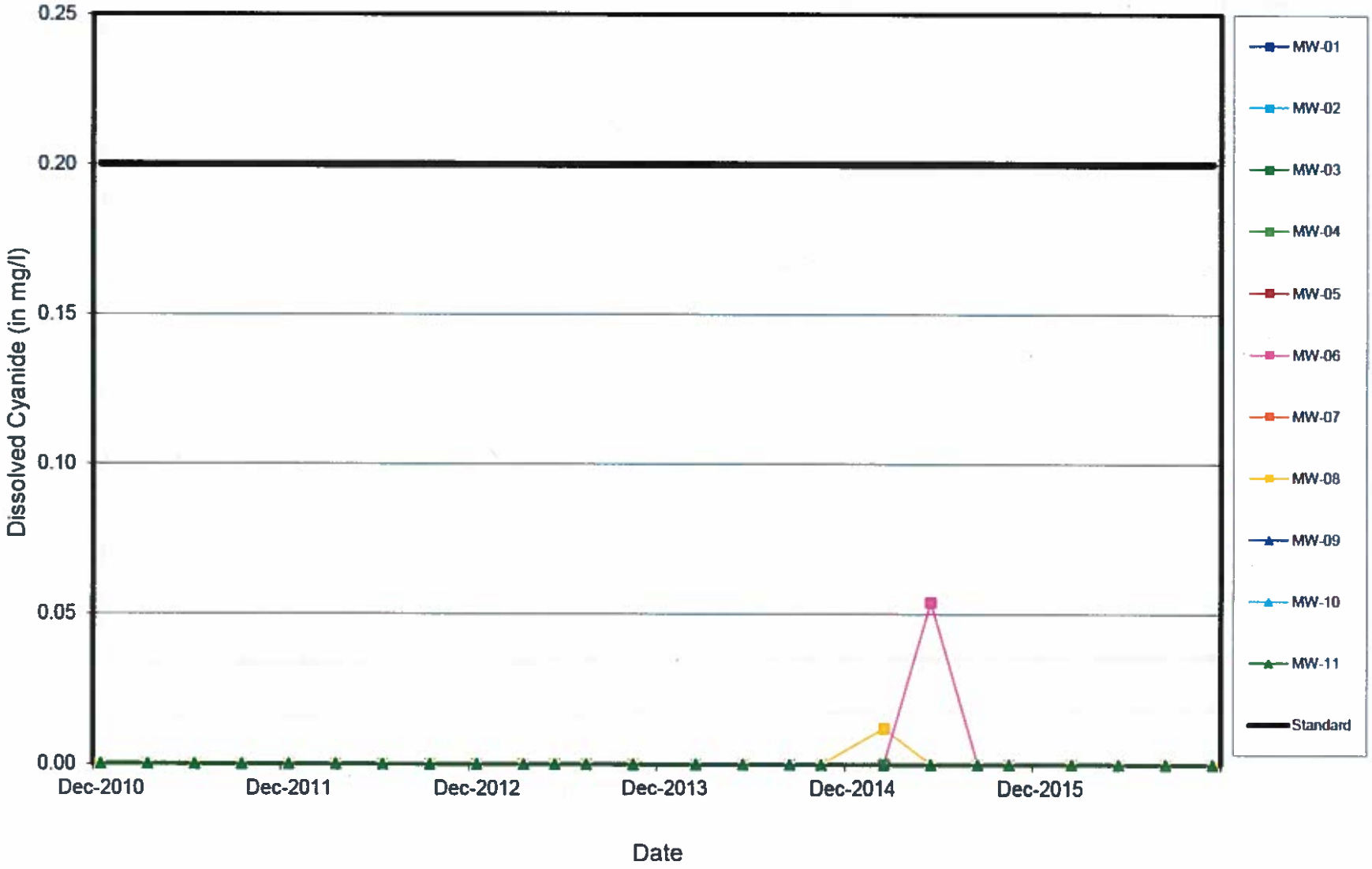
Dissolved Copper vs. Time



MWG13-15_58370

Midwest Generation Joliet Station #29, Joliet, IL

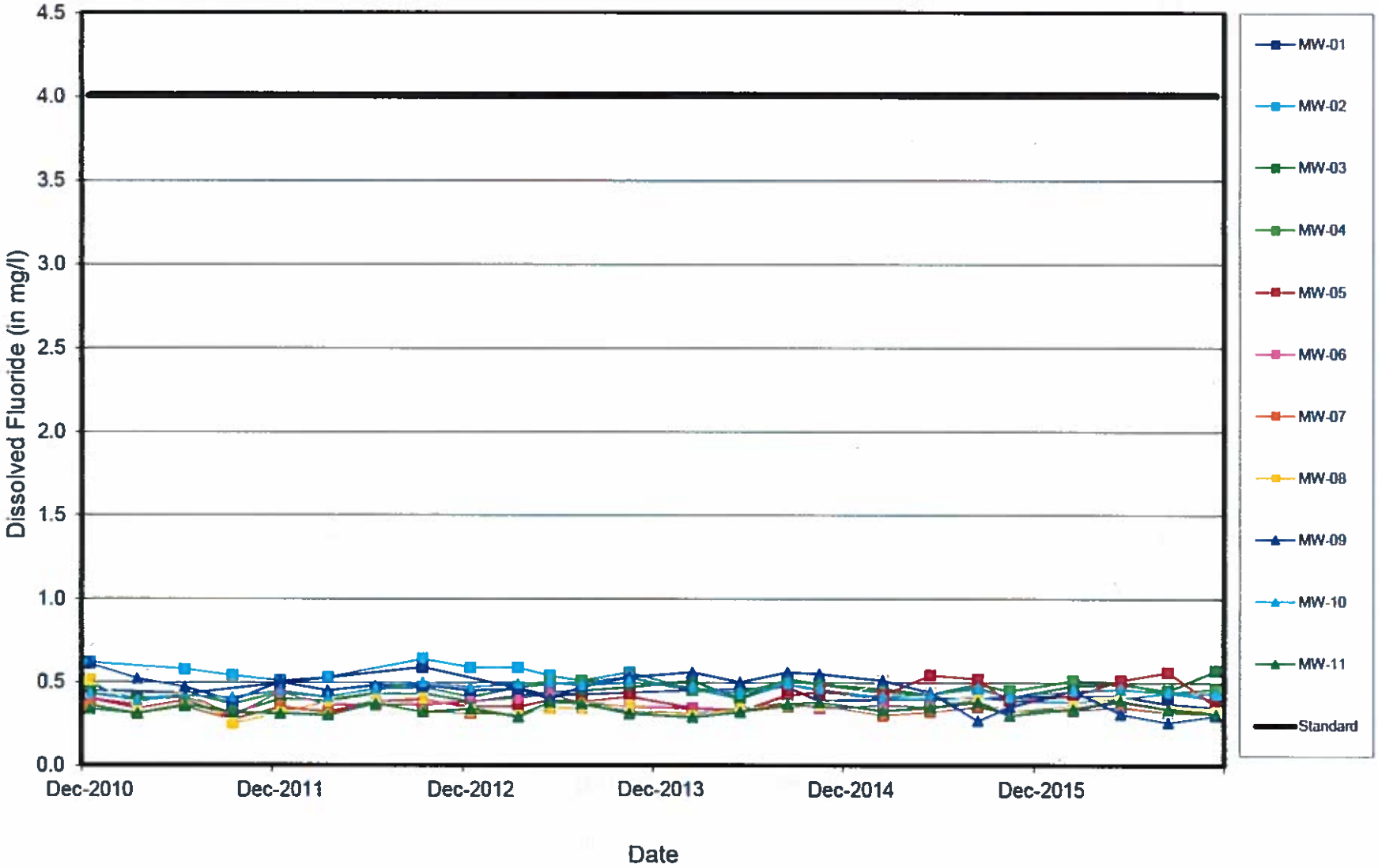
Dissolved Cyanide vs. Time



MWG13-15_58371

Midwest Generation Joliet Station #29, Joliet, IL

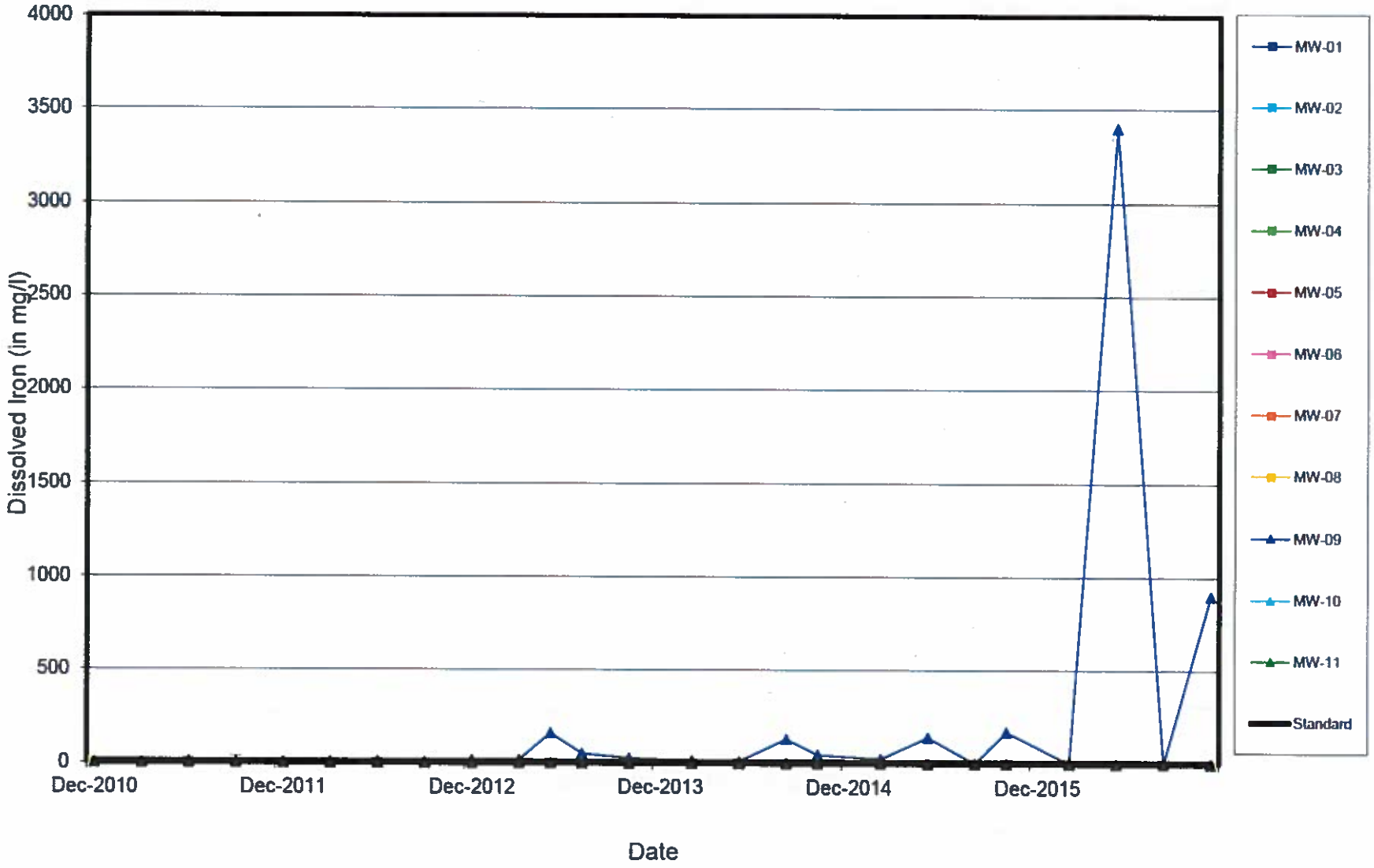
Dissolved Fluoride vs. Time



MWG13-15_58372

Midwest Generation Joliet Station #29, Joliet, IL

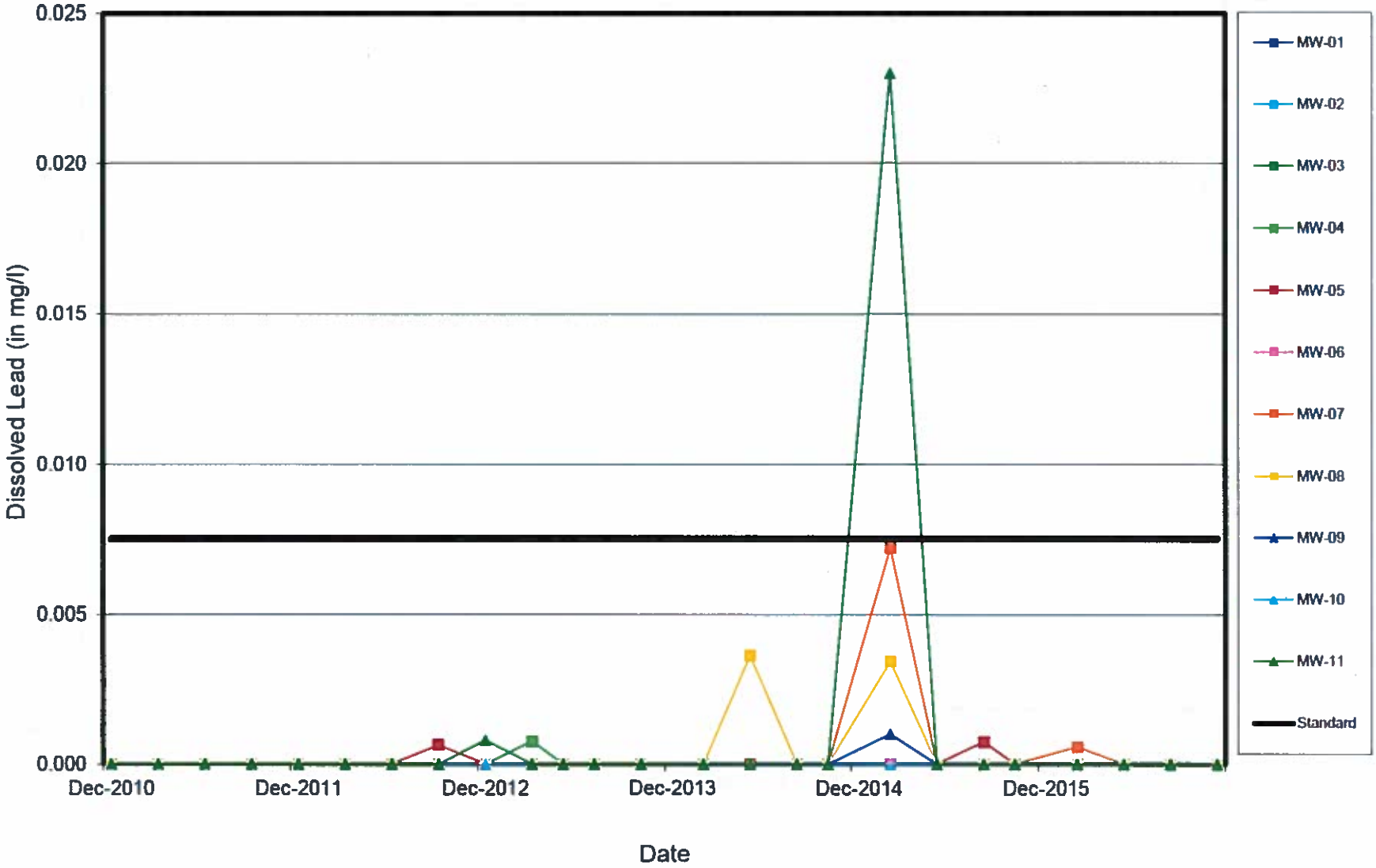
Dissolved Iron vs. Time



MWG13-15_58373

Midwest Generation Joliet Station #29, Joliet, IL

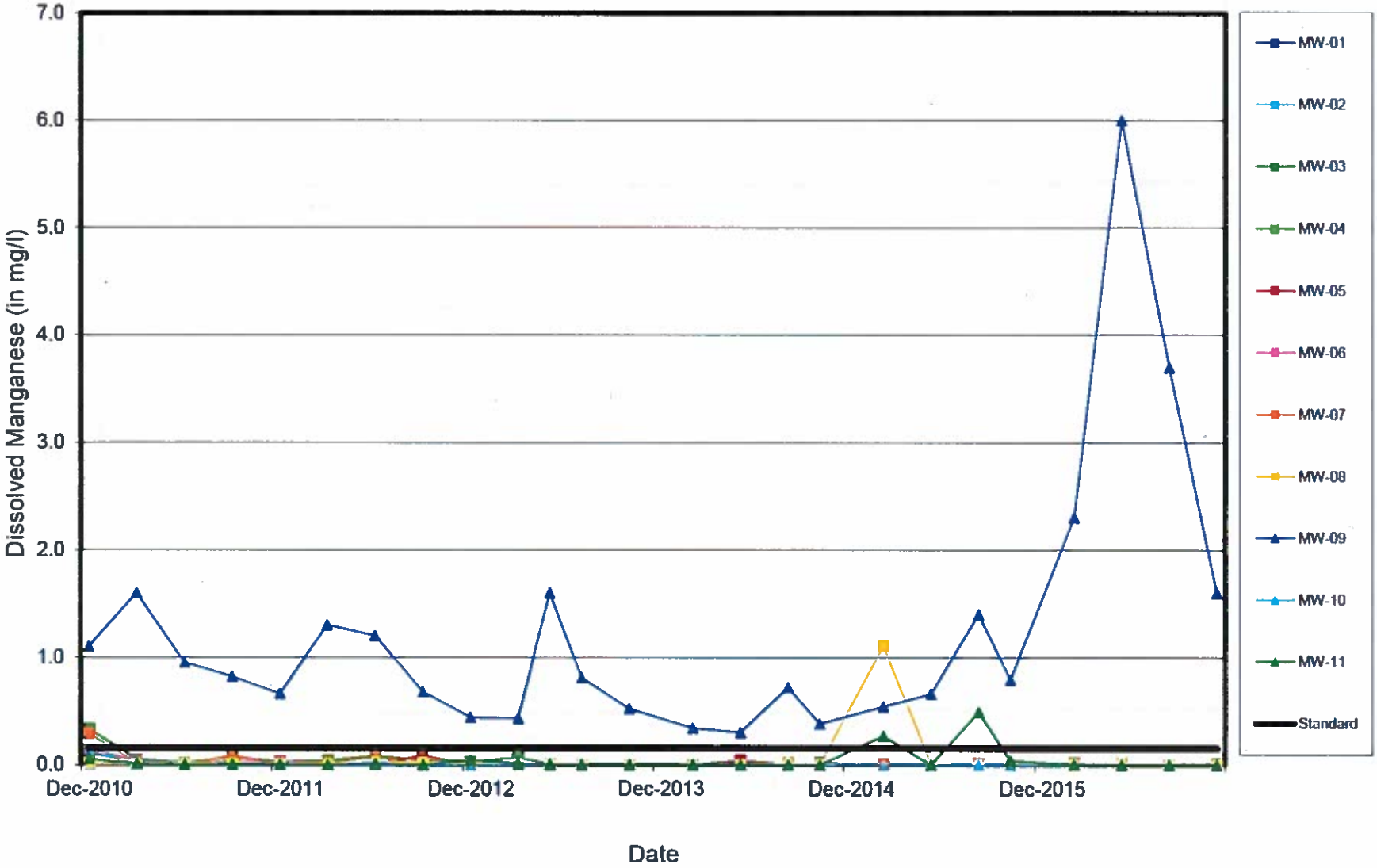
Dissolved Lead vs. Time



MWG13-15_58374

Midwest Generation Joliet Station #29, Joliet, IL

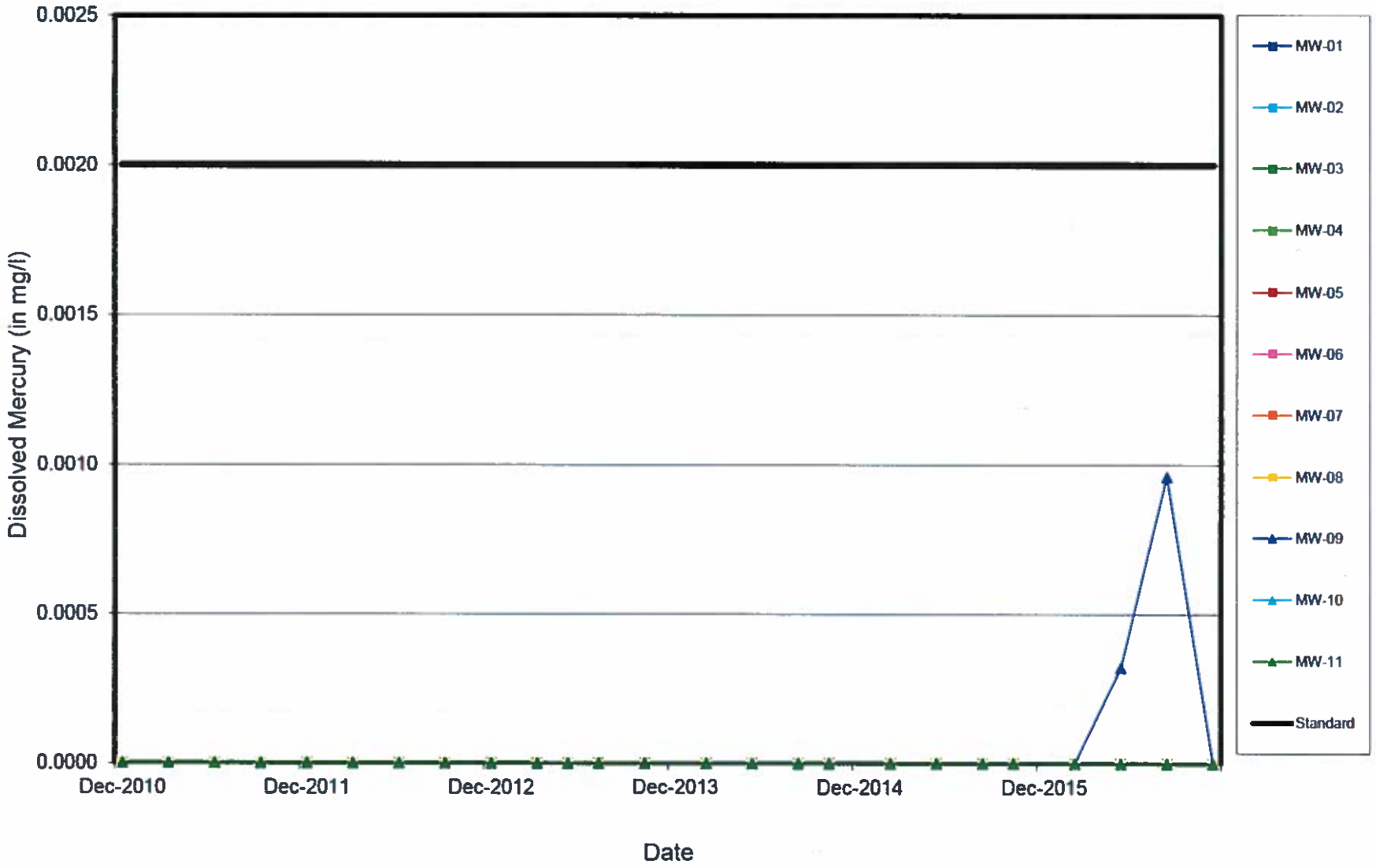
Dissolved Manganese vs. Time



MWG13-15_58375

Midwest Generation Joliet Station #29, Joliet, IL

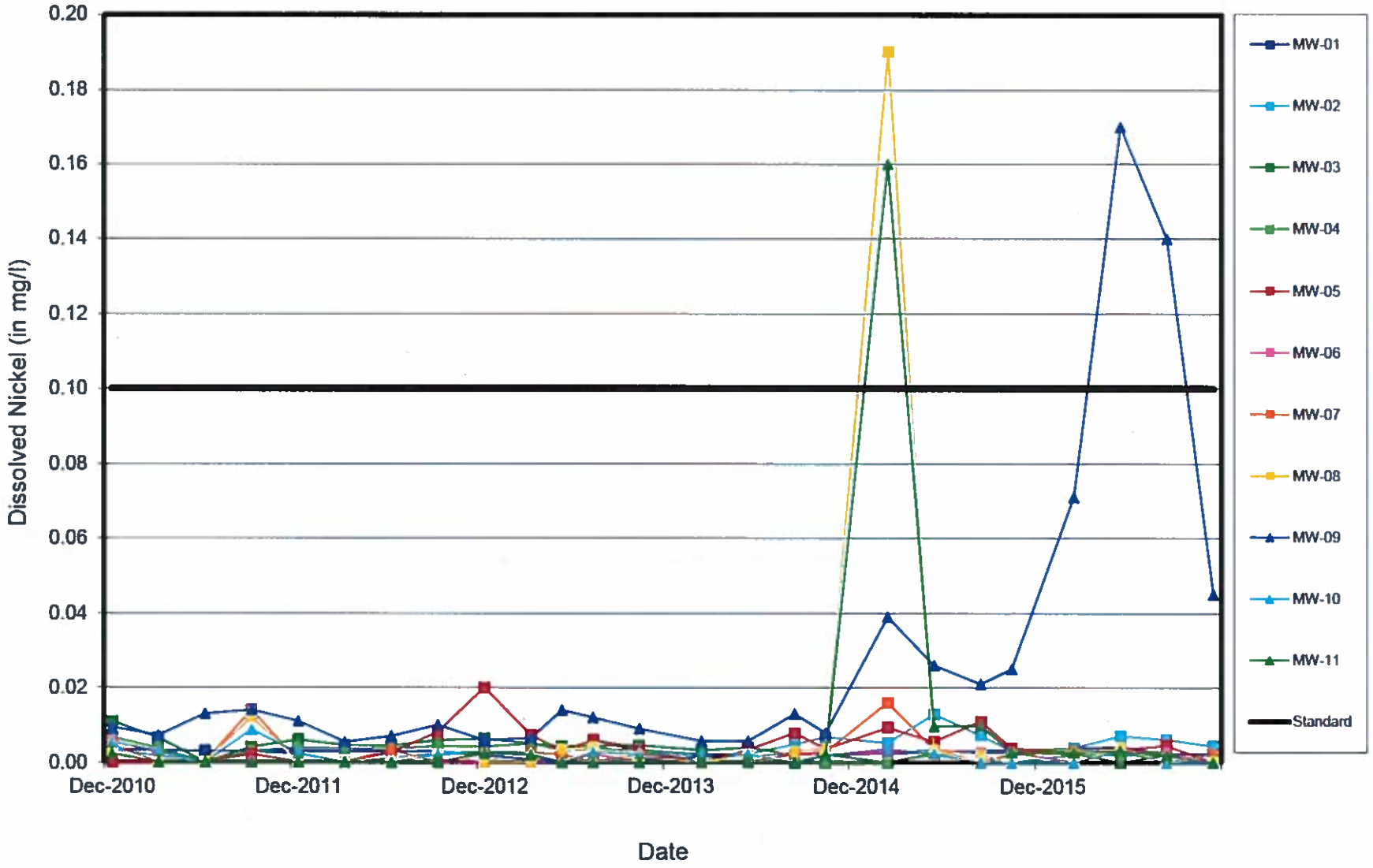
Dissolved Mercury vs. Time



MWG13-15_58376

Midwest Generation Joliet Station #29, Joliet, IL

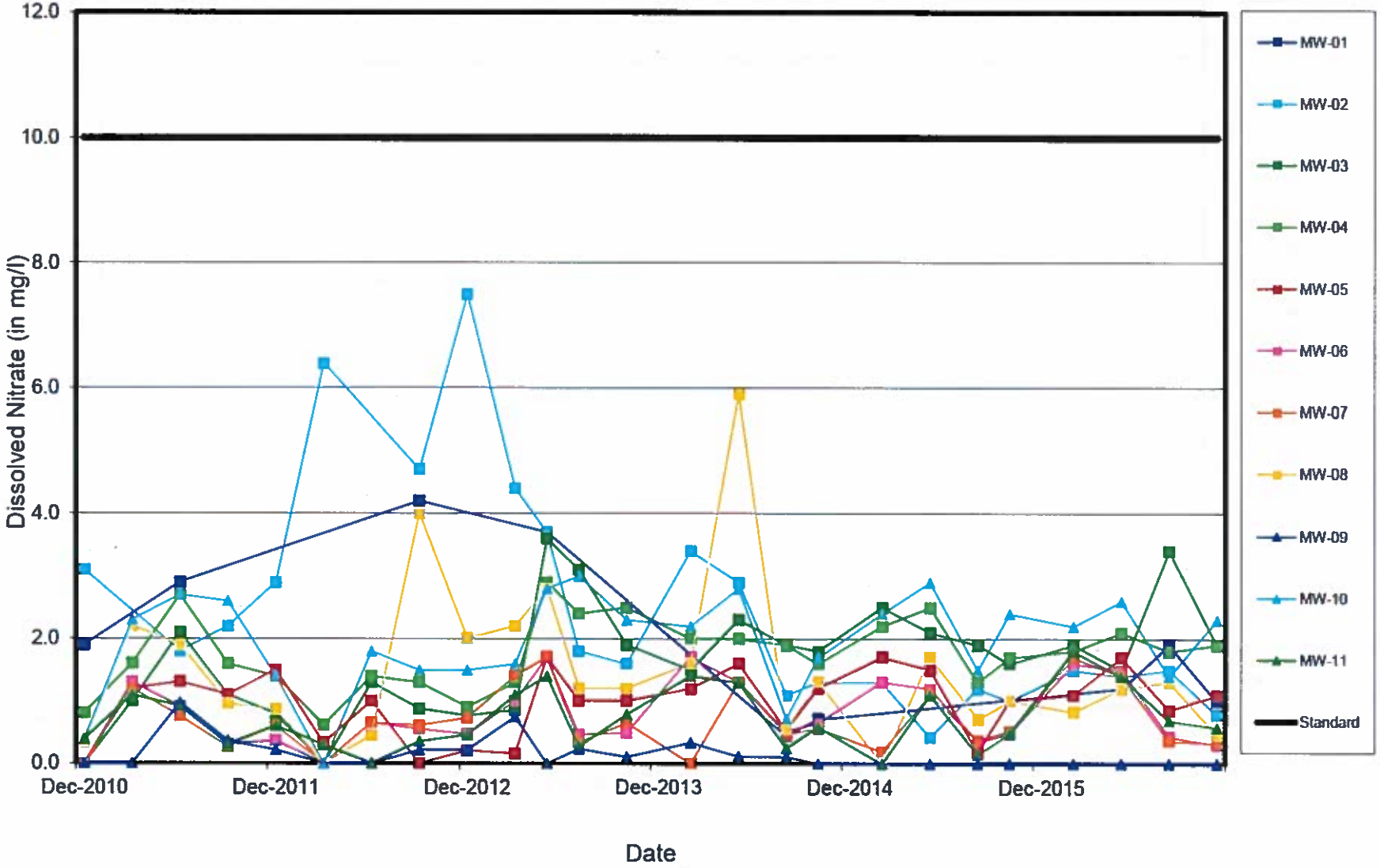
Dissolved Nickel vs. Time



MWG13-15_58377

Midwest Generation Joliet Station #29, Joliet, IL

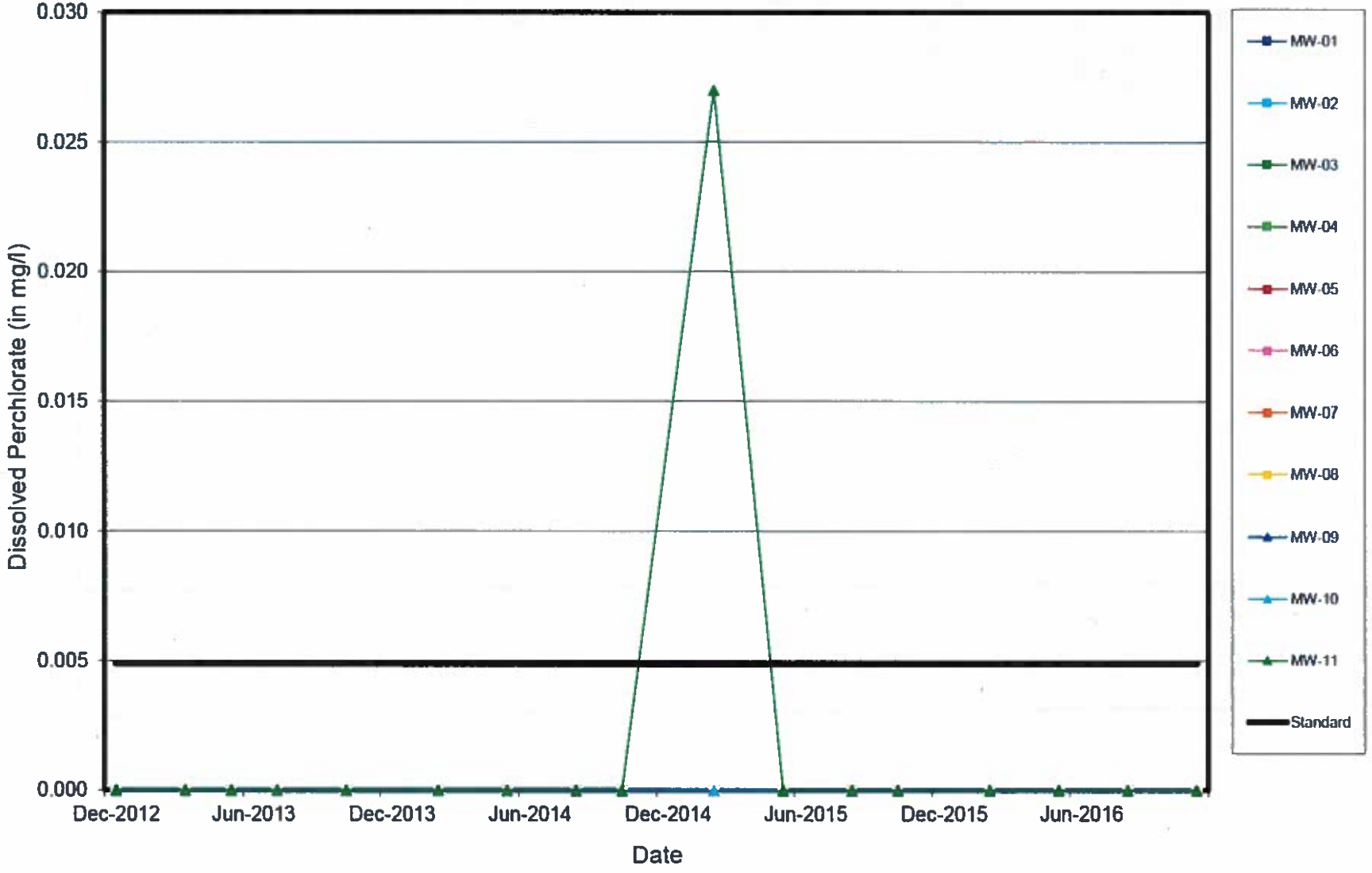
Dissolved Nitrate vs. Time



MWG13-15_58378

Midwest Generation Joliet Station #29, Joliet, IL

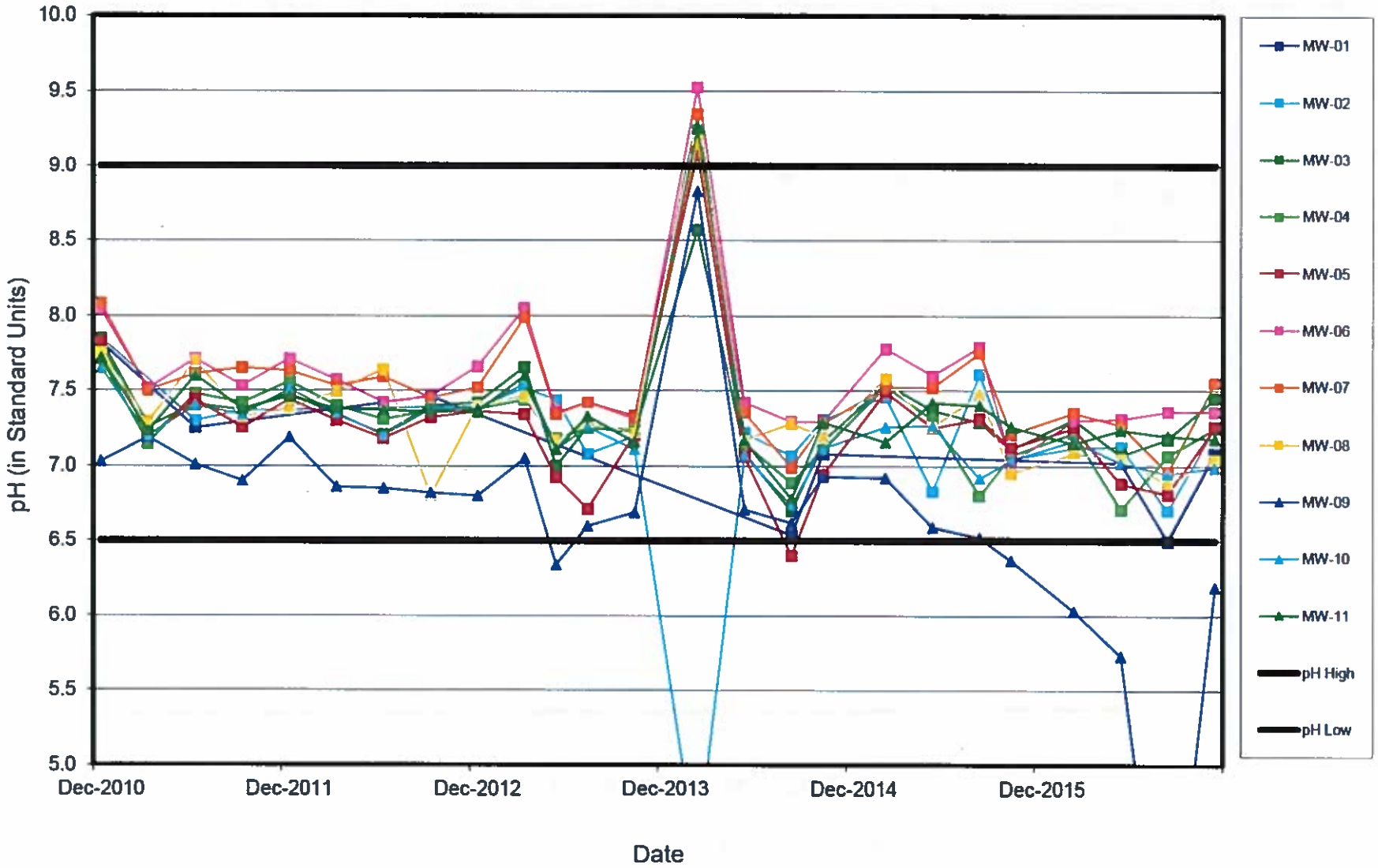
Dissolved Perchlorate vs. Time



MWG13-15_58379

Midwest Generation Joliet Station #29, Joliet, IL

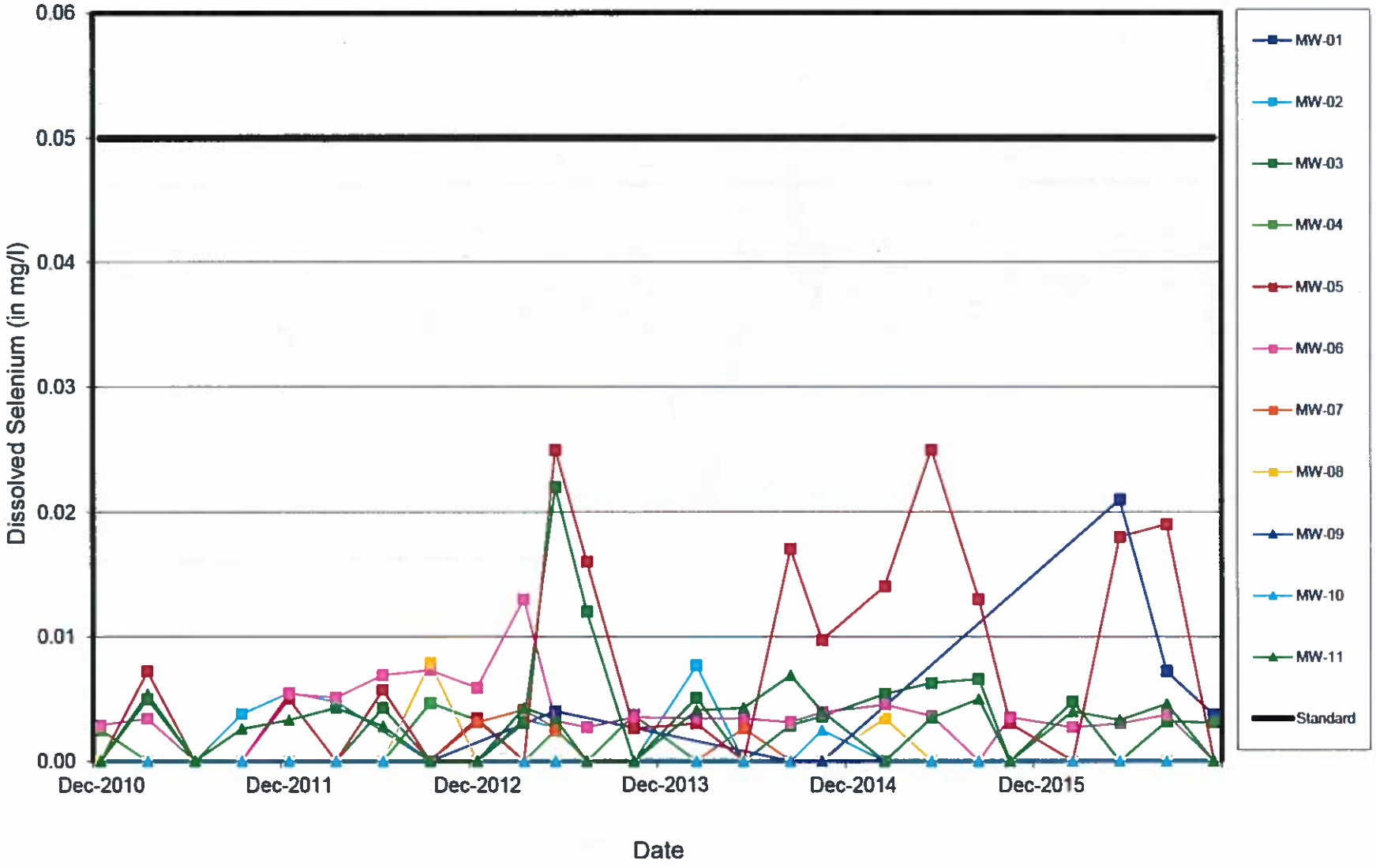
pH vs. Time



MWG13-15_58380

Midwest Generation Joliet Station #29, Joliet, IL

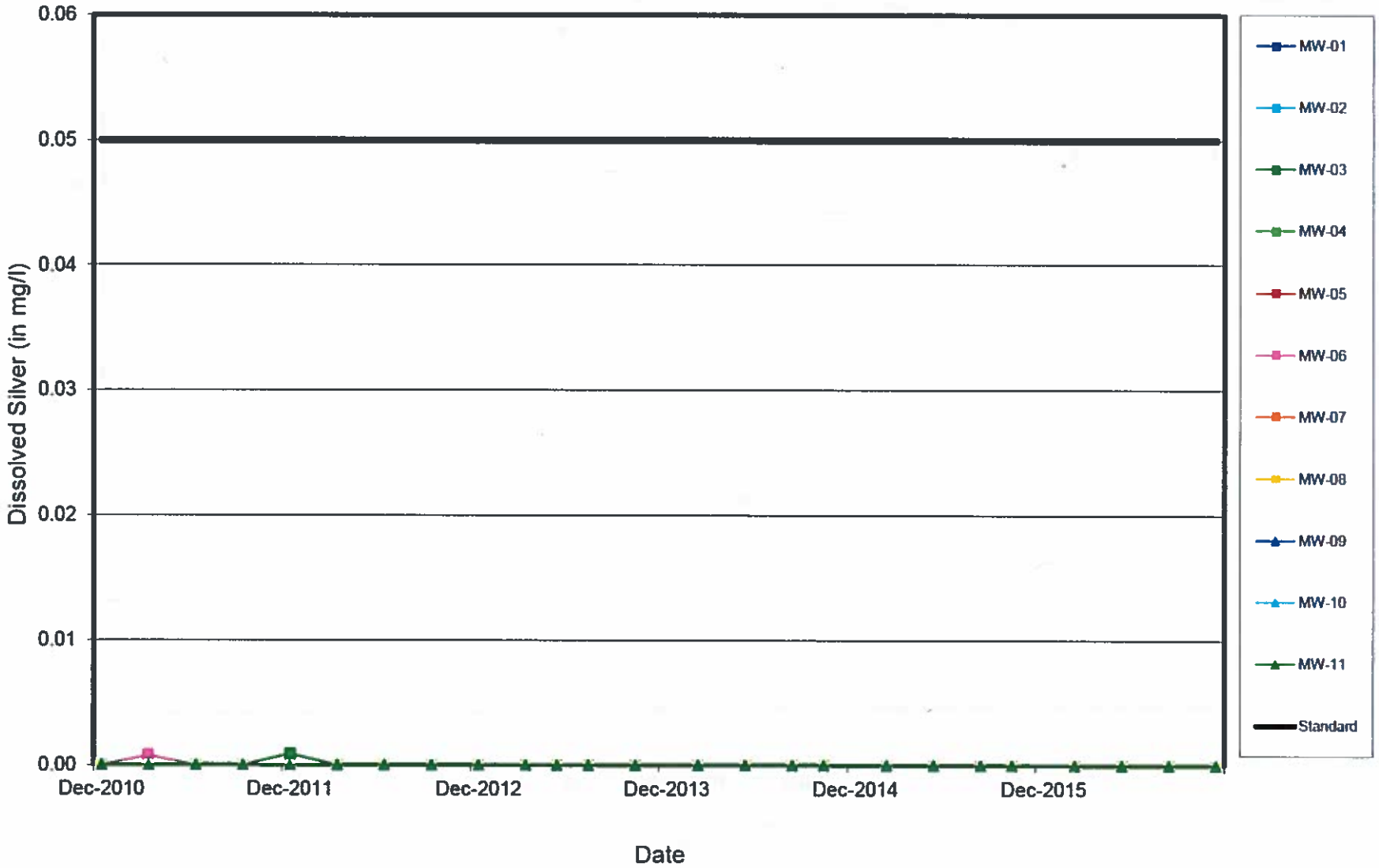
Dissolved Selenium vs. Time



MWG13-15_58381

Midwest Generation Joliet Station #29, Joliet, IL

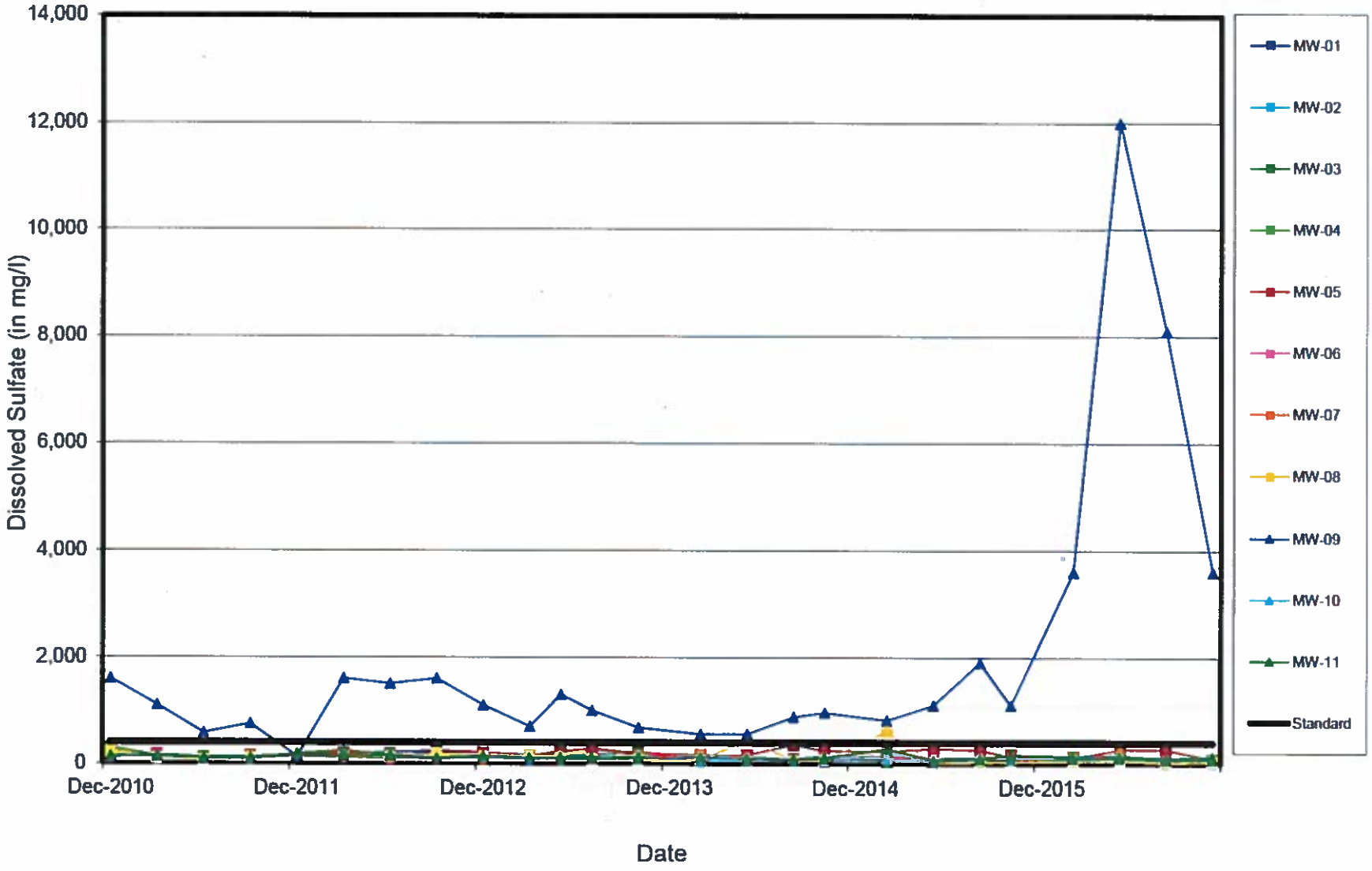
Dissolved Silver vs. Time



MWG13-15_58382

Midwest Generation Joliet Station #29, Joliet, IL

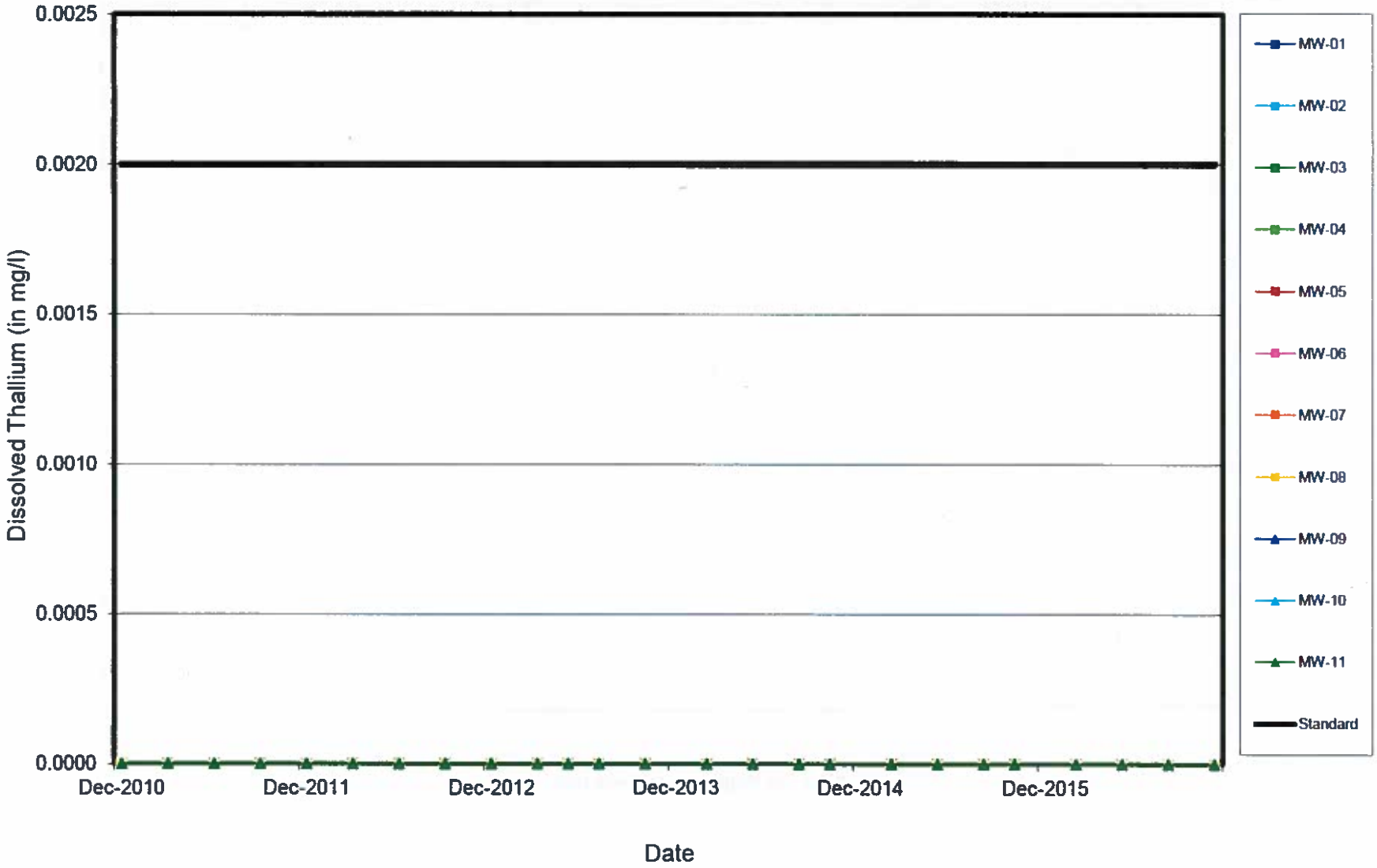
Dissolved Sulfate vs. Time



MWG13-15_58383

Midwest Generation Joliet Station #29, Joliet, IL

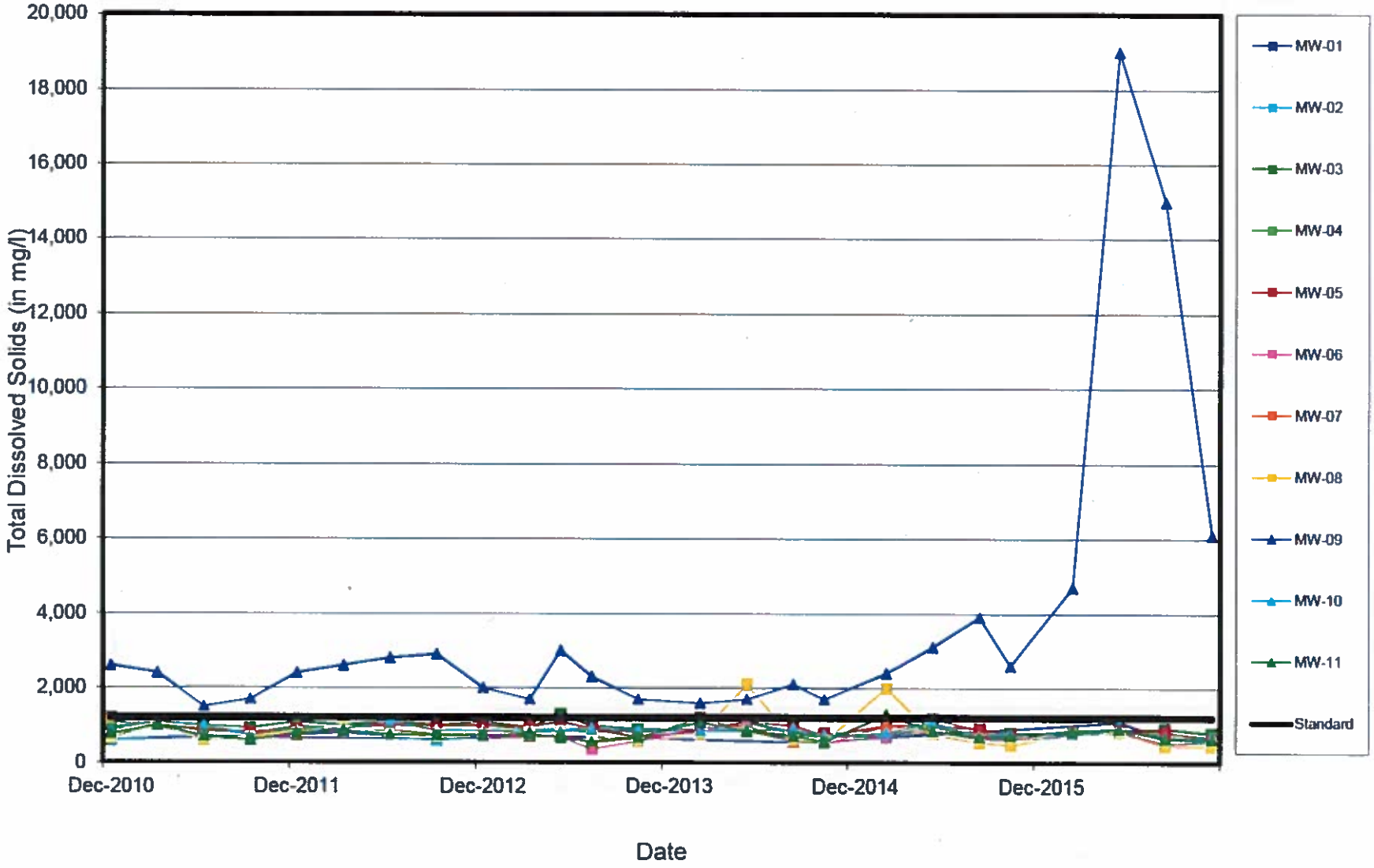
Dissolved Thallium vs. Time



MWG13-15_58384

Midwest Generation Joliet Station #29, Joliet, IL

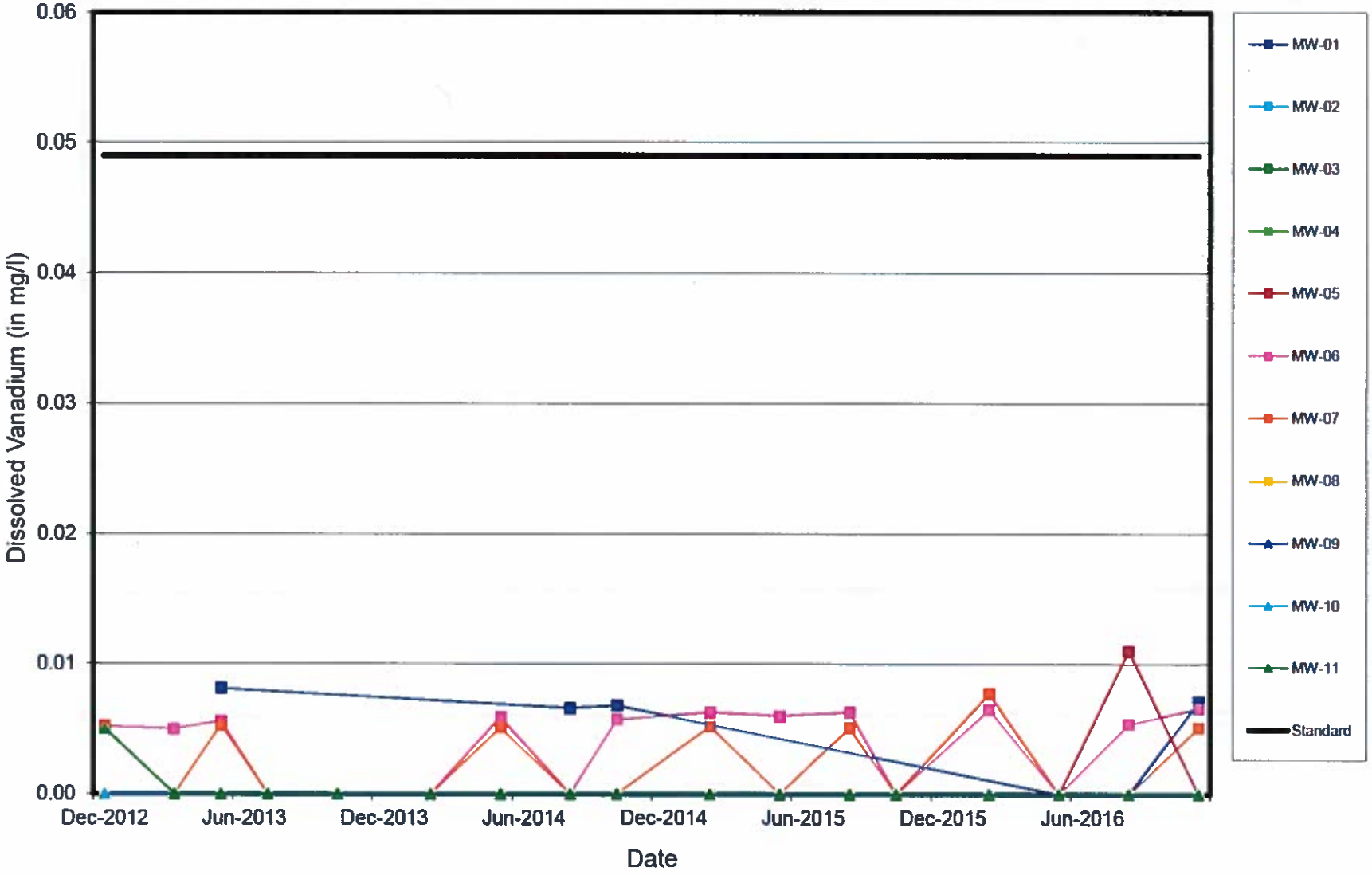
Total Dissolved Solids vs. Time



MWG13-15_58385

Midwest Generation Joliet Station #29, Joliet, IL

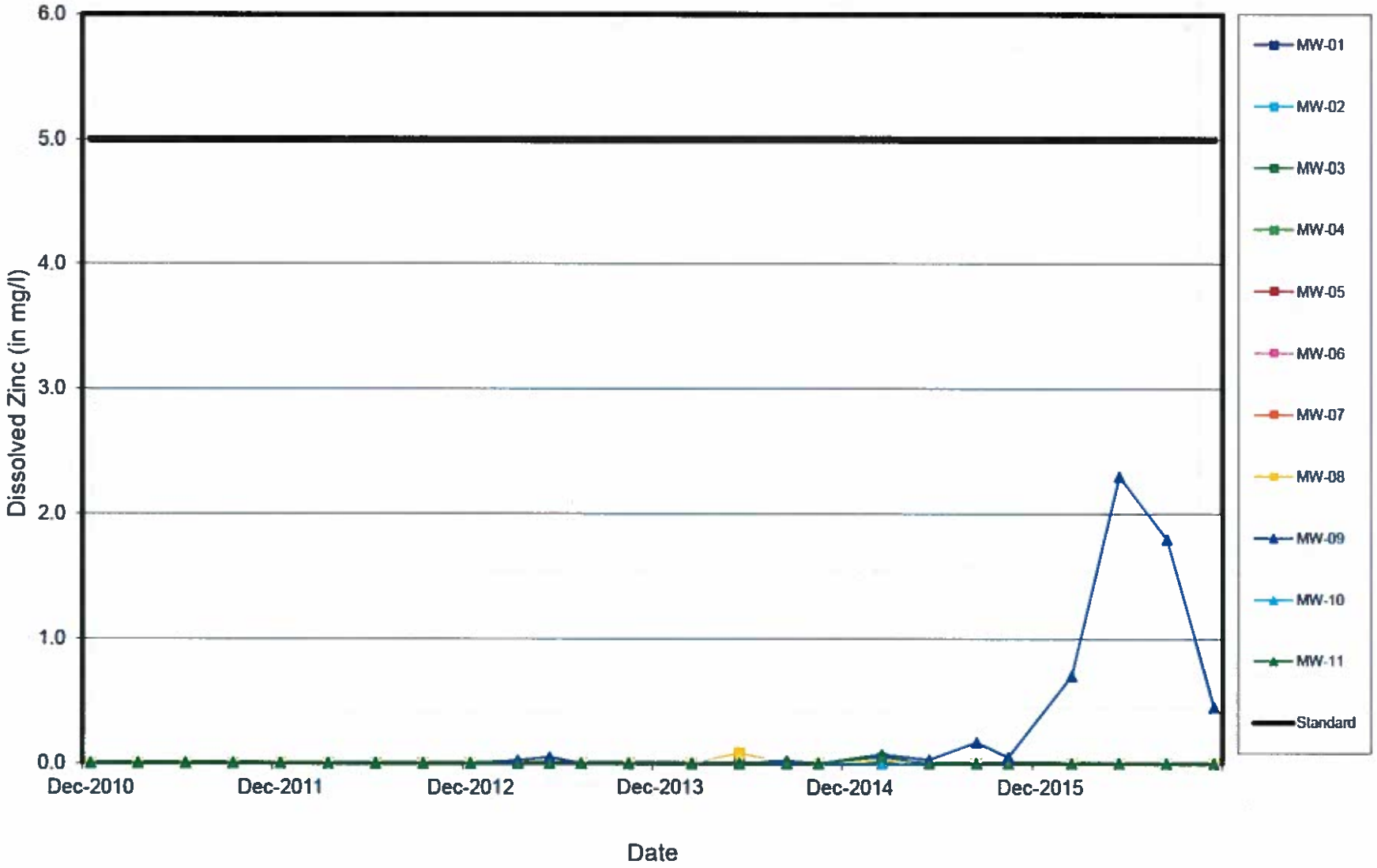
Dissolved Vanadium vs. Time



MWG13-15_58386

Midwest Generation Joliet Station #29, Joliet, IL

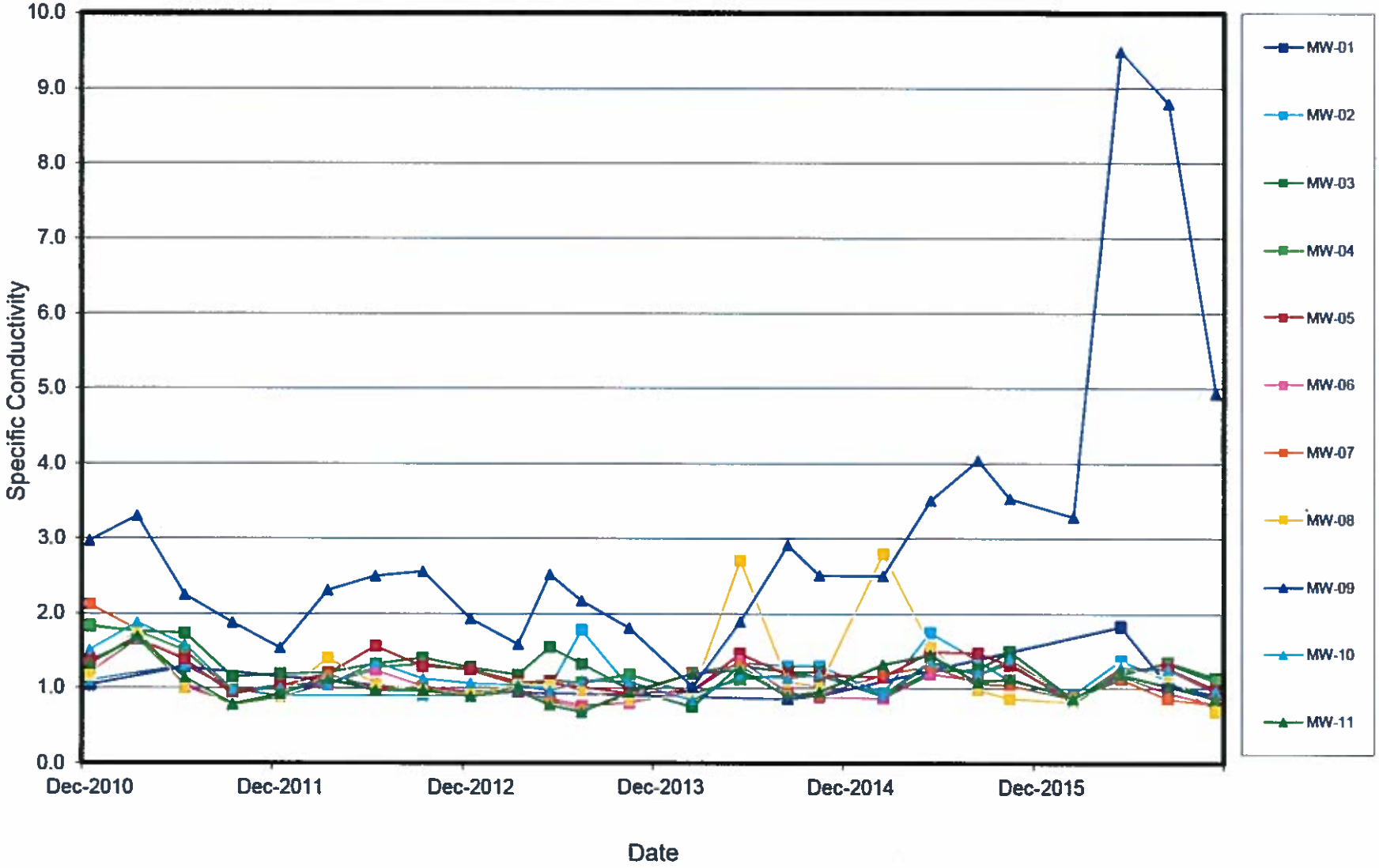
Dissolved Zinc vs. Time



MWG13-15_58387

Midwest Generation Joliet Station #29, Joliet, IL

Specific Conductivity vs. Time



MWG13-15_58388