NRG Energy
401 E. Greenwood Ave,
Waukegan, IL 60087

ANNUAL and QUARTERLY GROUNDWATER MONITORING REPORT
WAUKEGAN GENERATING STATION

January 22, 2015

VIA FEDERAL EXPRESS

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

Re: Annual and Quarterly Groundwater Monitoring Results – Fourth Quarter 2014
Waukegan Generating Station – Ash Impoundments
Compliance Commitment Agreement VN W-2012-00056; ID# 6281

Dear Ms. Rhodes:

The fourth quarterly groundwater sampling for 2014 has been completed for the ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Waukegan Generating Station in accordance with the Compliance Commitment Agreement (CCA) with Illinois Environmental Protection Agency (IEPA) dated October 24, 2012. This quarterly monitoring report summarizes the results of the monitoring event and 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 seven wells (MW-01 through MW-07) as shown on Figure 1. As part of sampling procedures, the integrity of all monitoring wells was inspected and water levels were obtained using an electronic water level meter (see summary of water level discussion below). Wells MW-01 through MW-04 are completed as flush-mounts at ground surface. The concrete anchors, protector boxes and interior casings were in good condition. Wells MW-05 through MW-07 are completed with stick-up protector casings. The wells were found in good condition with locked protector casings and the concrete surface seals were intact. Well MW-05 has a slightly damaged hinge on the protective casing lid, but the hinge is still functional and the integrity of the protective casing is intact.

Groundwater samples at well locations MW-01 through MW-07 were collected using the low-flow sampling technique.

One duplicate sample (well MW-07) was collected for quality assurance purposes. In addition, a deionized water trip blank was placed with the sample bottle shipment by the laboratory and accompanied the groundwater sample bottles from and back to the laboratory. The groundwater monitoring samples and the duplicate sample were analyzed for the inorganic compounds listed in Illinois Administrative Code (IAC) 620.410(a), 620.410(d) and 620.410(e), excluding radium 226/228. The trip blank was analyzed for the volatile organic compounds (VOCs) listed in IAC 620.410(d).

Groundwater Flow Evaluation

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

Relative to an annual evaluation of groundwater levels, a historical hydrograph is presented in Attachment 1. The hydrograph indicates that after a groundwater elevation low noted in 4th quarter 2012 sampling, groundwater levels at all wells have recovered approximately 2 feet overall and that water levels have stabilized. Highest water levels were associated with the spring sampling event (May 2014) and the lowest water levels were associated with the summer sampling event (August 2014) suggesting some seasonal variations on the order of 2 to 2.5 feet.

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. The duplicate sample was collected from well MW-07. The data are generally consistent with previous data generated for the site. Any exceptions are discussed in greater detail below. All wells for which the sampling data reports a value above one or more groundwater standards are located within the area of the approved Environmental Land Use Control (ELUC).

At this time a statistical evaluation of background water quality for comparing against downgradient wells has not been completed. Data from the initial anticipated background well installation (MW-05) indicated impacts that are not associated with the ash ponds at the site and therefore, IEPA does not recognize the water quality data from this well as representative of background. A new potential background monitoring well (MW-06) has been installed and is included within the quarterly sampling. An initial review of the MW-06 data suggests that this well location may provide a representative background water quality with which to perform a statistical evaluation, however there are some detections of boron above the Class I standard which may be originating from off-site. In general, a minimum of eight quarters of data are required to provide a meaningful statistical analysis of background water quality. The exact nature of the statistics that will be required by IEPA is still in the process of being finalized.

Relative to an annual evaluation of the water chemistry data, time versus concentration curves are provided in Attachment 3 for each parameter analyzed. The curves include the Class I drinking water standard for reference, where appropriate. The following noteworthy observations are made for 2014:

- Arsenic detections at well MW-01 are consistently higher than at the other well locations. The arsenic concentration at this well has been overall decreasing since the 2nd quarter 2011 sampling, however a spike in concentration is noted for the 4th quarter 2014. The nature of this spike will be evaluated as additional quarterly data is collected. Arsenic concentrations at the remaining wells have been overall stable.

- Boron concentrations at wells MW-05 and MW-07 are consistently higher than at the other locations. Well MW-05 is immediately upgradient of the ash ponds and MW-07 is slightly sidegradient and to the south. This suggests that the elevated boron concentrations at these locations are not associated with the subject ash ponds.

- Chloride concentration curves are overall stable with the exception of well MW-05 where some temporal scatter is apparent. In 2013, there was spike in chloride concentrations at this well location which have subsequently diminished to below the Class I groundwater standard in the 4th quarter 2013 sampling and throughout 2014.

- There was some variability in iron concentrations at wells MW-05 and MW-06 over 2014 with overall increasing trends at these locations. Both of these wells are upgradient of the ash ponds being monitored. Well MW-07 consistently shows dissolved iron concentrations higher than the remaining wells, however with an overall decreasing trend.

- Wells MW-05, MW-06 and MW-07 were the only wells with detections of dissolved manganese above the groundwater standard since the 3rd quarter 2011 sampling. Manganese concentrations at all other locations appear fairly stable and are generally below the comparison standard.

- Wells MW-05 and MW-07 are the only wells with historic detections of dissolved sulfate above the comparison groundwater standard. The remaining sulfate concentrations appear to be fairly stable over the last year.

- Wells MW-05 and MW-07 are the only wells with historic detections of Total Dissolved Solids (TDS) above the comparison groundwater standard. The concentrations at these wells and the remaining wells appear overall stable with the exception of a non-reproducible spike in TDS at well MW-05 in the 2nd quarter 2013.

- The 4th quarter sampling for vanadium at well MW-01 appears to show a spike in concentration that is not consistent with historical data. Subsequent quarterly sampling will determine the nature of this spike in concentration at this location.

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 ELUC.

If there are any questions, please contact either James DiCola of NRG Energy at 815-207-5968 or Richard Gnat of KPRG at 262-781-0475.

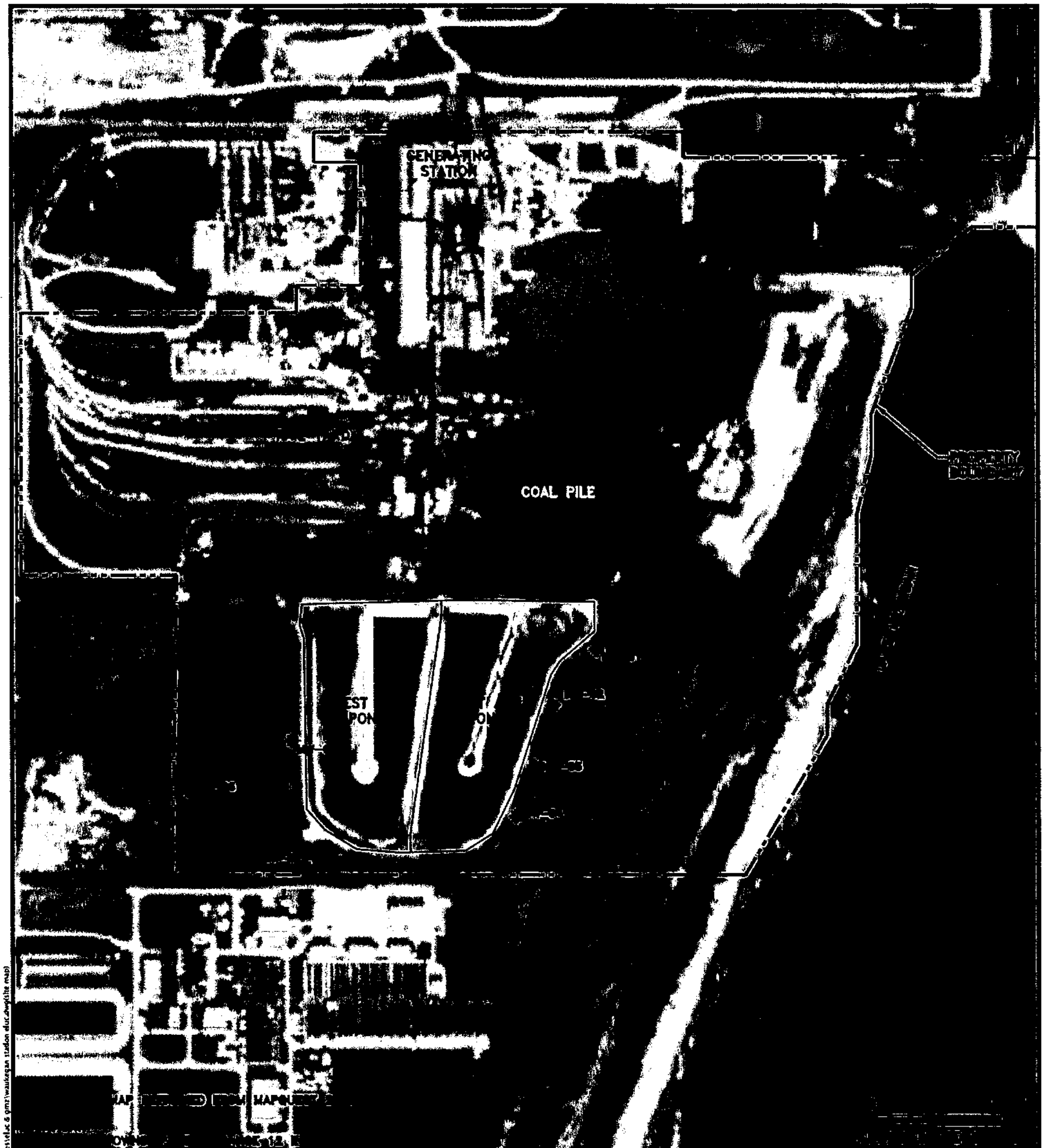
Sincerely,

Mark Nagel
Station Manager

Attachments

cc: William Buscher, IEPA
Fred Veenbaas, NRG Energy
James DiCola, NRG Energy
Elizabeth Quirk-Hendry, NRG Energy
Richard Gnat, KPRG and Associates, Inc.

FIGURES



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG

KPRG and Associates, Inc.

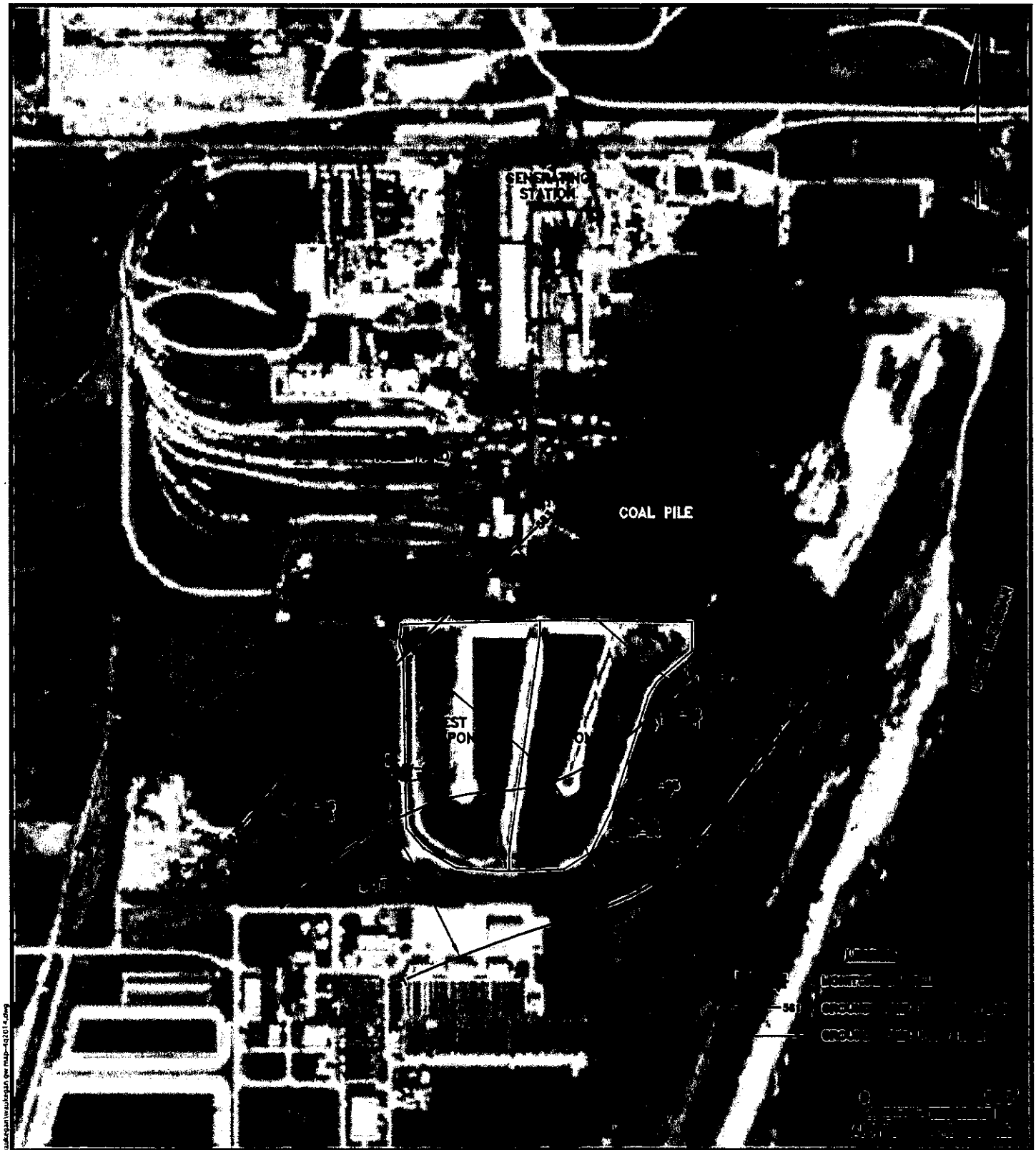
14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

SITE MAP

WAUKEGAN STATION
WAUKEGAN, ILLINOIS

Scale: 1" = 500'	Date: January 23, 2015
KPRG Project No. 12313.2	FIGURE 1



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GROUNDWATER CONTOUR MAP 10/2014

WAUKEGAN STATION
WAUKEGAN, ILLINOIS

Scale: 1" = 500'	Date: January 23, 2015
KPRG Project No. 12313.2	FIGURE 2

MW313-15-45954

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TABLES

Table 1. Groundwater Elevations - Midwest Generation, LLC, Waukegan Station, Waukegan, 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	6/13/2011	603 14	603 46	583 34	583 33	570 96	19 80	19 81	32 18
	9/13/2011	603 14	603 46	581 14	581 14	570 96	22 00	22 00	32 18
	12/6/2011	603 14	603 46	581 15	581 15	570 96	21 99	21 99	32 18
	3/14/2012	603 14	603 46	581 18	581 18	570 96	21 96	21 96	32 18
	6/18/2012	603 14	603 46	580 86	580 86	570 96	22 28	22 28	32 18
	9/28/2012	603 14	603 46	579 65	579 65	570 96	23 49	23 49	32 18
	12/19/2012	603 14	603 46	579 42	579 42	570 96	23 72	23 72	32 18
	3/7/2013	603 14	603 46	580 35	580 35	570 96	22 79	22 79	32 18
	6/6/2013	603 14	603 46	582 38	582 31	571 30	20 76	20 83	31 84
	7/25/2013	603 14	603 46	581 40	581 36	571 30	21 74	21 78	31 84
	11/4/2013	603 14	603 46	581 32	581 31	571 30	21 82	21 83	31 84
	3/10/2014	603 14	603 46	581 94	581 96	571 30	21 20	21 18	31 84
	5/16/2014	603 14	603 46	583 07	583 09	571 30	20 07	20 05	31 84
	8/21/2014	603 14	603 46	581 81	581 82	571 30	21 33	21 32	31 84
	11/6/2014	603 14	603 46	582 01	582 01	571 30	21 13	21 13	31 84
MW-02	6/13/2011	603 04	603 28	583 31	583 31	573 48	19 73	19 73	29 56
	9/13/2011	603 04	603 28	581 19	581 19	573 48	21 85	21 85	29 56
	12/6/2011	603 04	603 28	581 22	581 22	573 48	21 82	21 82	29 56
	3/14/2012	603 04	603 28	581 23	581 21	573 48	21 81	21 83	29 56
	6/18/2012	603 04	603 28	580 89	580 89	573 48	22 15	22 15	29 56
	9/28/2012	603 04	603 28	579 73	579 73	573 48	23 31	23 31	29 56
	12/19/2012	603 04	603 28	579 27	579 27	573 48	23 77	23 77	29 56
	3/7/2013	603 04	603 28	580 50	580 50	573 48	22 54	22 54	29 56
	6/6/2013	603 04	603 28	582 34	582 34	573 48	20 70	20 70	29 56
	7/25/2013	603 04	603 28	581 34	581 33	573 48	21 70	21 71	29 56
	11/4/2013	603 04	603 28	581 23	581 23	573 48	21 81	21 81	29 56
	3/10/2014	603 04	603 28	581 84	581 84	573 48	21 20	21 20	29 56
	5/15/2014	603 04	603 28	582 95	582 95	573 48	20 09	20 09	29 56
	8/21/2014	603 04	603 28	581 76	581 76	573 48	21 28	21 28	29 56
	11/6/2014	603 04	603 28	581 91	581 91	573 48	21 13	21 13	29 56
MW-03	6/13/2011	602 90	603 18	583 34	583 34	573 06	19 56	19 56	29 84
	9/13/2011	602 90	603 18	581 18	581 18	573 06	21 72	21 72	29 84
	12/6/2011	602 90	603 18	581 22	581 22	573 06	21 68	21 68	29 84
	3/14/2012	602 90	603 18	581 22	581 22	573 06	21 68	21 68	29 84
	6/18/2012	602 90	603 18	580 92	580 92	573 06	21 98	21 98	29 84
	9/28/2012	602 90	603 18	579 68	579 68	573 06	23 22	23 22	29 84
	12/19/2012	602 90	603 18	579 45	579 45	573 06	23 45	23 45	29 84
	3/7/2013	602 90	603 18	580 49	580 49	573 06	22 41	22 41	29 84
	6/6/2013	602 90	603 18	582 38	582 36	573 10	20 52	20 54	29 80
	7/25/2013	602 90	603 18	581 41	581 39	573 10	21 49	21 51	29 80
	11/4/2013	602 90	603 18	581 29	581 29	573 10	21 61	21 61	29 80
	3/10/2014	602 90	603 18	581 88	581 89	573 10	21 02	21 01	29 80
	5/16/2014	602 90	603 18	583 02	583 04	573 10	19 88	19 86	29 80
	8/21/2014	602 90	603 18	581 87	581 85	573 10	21 03	21 05	29 80
	11/6/2014	602 90	603 18	581 97	581 98	573 10	20 93	20 92	29 80
MW-04	6/13/2011	603 15	603 53	583 35	583 35	573 30	19 80	19 80	29 85
	9/13/2011	603 15	603 53	581 19	581 19	573 30	21 96	21 96	29 85
	12/6/2011	603 15	603 53	581 23	581 23	573 30	21 92	21 92	29 85
	3/14/2012	603 15	603 53	581 20	581 20	573 30	21 95	21 95	29 85
	6/18/2012	603 15	603 53	580 88	580 88	573 30	22 27	22 27	29 85
	9/28/2012	603 15	603 53	579 55	579 55	573 30	23 60	23 60	29 85
	12/19/2012	603 15	603 53	579 34	579 34	573 30	23 81	23 81	29 85
	3/7/2013	603 15	603 53	580 36	580 36	573 30	22 79	22 79	29 85
	6/6/2013	603 15	603 53	582 38	582 30	573 57	20 77	20 85	29 58
	7/25/2013	603 15	603 53	581 33	581 27	573 57	21 82	21 88	29 58
	11/4/2013	603 15	603 53	581 13	581 13	573 57	22 02	22 02	29 58
	3/11/2014	603 15	603 53	581 87	581 87	573 57	21 28	21 28	29 58
	5/16/2014	603 15	603 53	583 11	583 11	573 57	20 04	20 04	29 58
	8/21/2014	603 15	603 53	581 69	581 68	573 57	21 46	21 47	29 58
	11/6/2014	603 15	603 53	581 86	581 88	573 57	21 29	21 27	29 58
MW-05	6/13/2011	604 84	601 53	584 55	584 56	572 92	20 29	20 28	31 92
	9/13/2011	604 84	601 53	582 66	582 64	572 92	22 18	22 20	31 92
	12/6/2011	604 84	601 53	582 82	582 82	572 92	22 02	22 02	31 92
	3/14/2012	604 84	601 53	582 98	582 98	572 92	21 86	21 86	31 92
	6/18/2012	604 84	601 53	582 22	582 22	572 92	22 62	22 62	31 92
	9/28/2012	604 84	601 53	581 13	581 13	572 92	23 71	23 71	31 92
	12/19/2012	604 84	601 53	580 65	580 65	572 92	24 19	24 19	31 92
	3/7/2013	604 84	601 53	582 18	582 18	572 92	22 66	22 66	31 92
	6/6/2013	604 84	601 53	583 44	583 44	572 92	21 40	21 40	31 92
	7/25/2013	604 84	601 53	582 60	582 59	572 92	22 24	22 25	31 92
	11/5/2013	604 84	601 53	582 03	582 04	572 92	22 81	22 80	31 92
	3/11/2014	604 84	601 53	582 88	582 88	572 92	21 96	21 96	31 92
	5/16/2014	604 84	601 53	583 71	583 72	572 92	21 13	21 12	31 92
	8/21/2014	604 84	601 53	582 36	582 32	572 92	22 48	22 52	31 92
	11/5/2014	604 84	601 53	582 54	582 55	572 92	22 30	22 29	31 92

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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-06	12/19/2012	589 73	586 75	580 89	580 89	572 03	8 84	8 84	17 70
	3/7/2013	589 73	586 75	582 63	582 63	572 03	7 10	7 10	17 70
	6/6/2013	589 73	586 75	583 58	583 54	572 03	6 15	6 19	17 70
	7/25/2013	589 73	586 75	582 71	582 71	572 03	7 02	7 02	17 70
	11/5/2013	589 73	586 75	582 71	582 71	572 03	7 02	7 02	17 70
	3/10/2014	589 73	586 75	583 83	583 84	572 03	5 90	5 89	17 70
	5/15/2014	589 73	586 75	584 56	584 56	572 03	5 17	5 17	17 70
	8/21/2014	589 73	586 75	582 70	582 70	572 03	7 03	7 03	17 70
	11/5/2014	589 73	586 75	582 92	582 91	572 03	6 81	6 82	17 70
MW-07	12/19/2012	598 29	595 87	579 57	579 57	570 33	18 72	18 72	27 96
	3/7/2013	598 29	595 87	580 83	580 83	570 33	17 46	17 46	27 96
	6/6/2013	598 29	595 87	582 61	582 60	570 39	15 68	15 69	27 90
	7/25/2013	598 29	595 87	581 28	581 27	570 39	17 01	17 02	27 90
	11/4/2013	598 29	595 87	580 80	580 80	570 39	17 49	17 49	27 90
	3/10/2014	598 29	595 87	582 04	582 10	570 39	16 25	16 19	27 90
	5/15/2014	598 29	595 87	584 35	584 35	570 39	13 94	13 94	27 90
	8/21/2014	598 29	595 87	581 13	581 14	570 39	17 16	17 15	27 90
	11/5/2014	598 29	595 87	581 39	581 40	570 39	16 90	16 89	27 90

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Waukegan Station, Waukegan, IL

Sample: MW-01	Date	12/19/2012		3/7/2013		6/7/2013		7/25/2013		11/4/2013		3/10/2014		5/16/2014		8/21/2014		11/6/2014	
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	0 091	0 0010	0 098	0 0010	0 036	0 0010	0 055	0 0010	0 046	0 0010	0 031	0 0010	0 036	0 0010	0 019	0 0010	0 21
Barium	2 0	0 0025	0 013	0 0025	0 033	0 0025	0 052	0 0025	0 040	0 0025	0 065	0 0025	0 031	0 0025	0 025	0 0025	0 032	0 0025	0 0094
Beryllium	0 004	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND
Boron	2 0	0 050	1 9	0 50	2 2	0 50	2 2	0 50	2 3	0 25	3 1	0 25	1 9	0 050	2 0	0 25	2 0	0 50	2 2
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	2 0	48	2 0	45	2 0	34	2 0	42	2 0	28	2 0	33	2 0	31	10	79	2 0	70
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	0 0022	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	0 0024
Cyanide	0 2	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	0 013	0 010	0 029	0 010	ND	0 010	ND
Fluoride	4 0	0 10	0 41 ^	0 10	0 50	0 10	0 41	0 10	0 45	0 10	0 28	0 10	0 27	0 10	0 46	0 10	0 76	0 10	0 56
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	0 0047	0 0025	0 011	0 0025	0 011	0 0025	0 021	0 0025	0 0073	0 0025	ND	0 0025	0 026	0 0025	0 0054
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	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND
Nitrogen/Nitrate	10 0	0 10	ND	0 10	ND	0 10	1 0	0 10	0 10	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	J 1	0 10	0 10	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	ND
Nitrogen/Nitrite	NA	0 020	0 055	0 020	ND	0 020	0 058	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	0 024	0 020	0 078
Perchlorate	0 0049	0 004	ND	0 004	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND
pH	6 5 - 9 0	NA	10 47	NA	9 85	NA	8 37	NA	8 81	NA	8 42	NA	8 99	NA	8 88	NA	7 92	NA	10 54
Selenium	0 05	0 0025	ND	0 0025	0 056	0 0025	0 043	0 0025	0 031	0 0025	0 013	0 0025	ND	0 0025	ND	0 0025	ND	0 0025	0 035
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	200	50	250	100	260	100	300	50	260	50	130	50	170	50	130	50	270
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	460	10	510	10	660	10	580	10	580	10	290	10	300	10	460	10	450
Vanadium	0 049	0 0050	0 026	0 0050	0 018	0 0050	0 056	0 0050	0 042	0 0050	0 0067	0 0050	ND	0 0050	ND	0 0050	ND	0 0050	0 49
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 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
BETX	11 705	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
Temperature	NA	NA	14 17	NA	12 8	NA	12 94	NA	14 93	NA	13 41	NA	13 79	NA	9 41	NA	16 04	NA	11 91
Conductivity	NA	NA	0 53	NA	0 60	NA	0 655	NA	0 65	NA	0 51	NA	0 41	NA	0 36	NA	0 638	NA	0 616
Dissolved Oxygen	NA	NA	0 45	NA	0 36	NA	0 39	NA	0 28	NA	0 55	NA	1 21	NA	1 46	NA	0 43	NA	1 75
ORP	NA	NA	-205	NA	-98 2	NA	-109 4	NA	-133 6	NA	-213 3	NA	-98 4	NA	42 7	NA	22 7	NA	-37 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

Temperature	°C	degrees Celcius
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, Waukegan Station, Waukegan, IL

Sample: MW-02	Date	12/19/2012		3/7/2013		6/7/2013		7/25/2013		11/4/2013		3/10/2014		5/15/2014		8/21/2014		11/6/2014	
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 0089	0 0010	0 012	0 0010	0 0090	0 0010	0 0087	0 0010	0 0091	0 0010	0 0085	0 0010	0 0062	0 0010	0 0081	0.0010	0.0095
Barium	2 0	0 0025	0 016	0 0025	0 020	0 0025	0 021	0 0025	0 026	0 0025	0 028	0 0025	0 046	0 0025	0 086	0 0025	0 029	0.0025	0.029
Beryllium	0 004	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0.0010	ND
Boron	2 0	0 050	1 9	0 50	2 2	0 50	1 9	0 50	2 1	0 25	2 2	0 25	2 8	0 25	2 6	0 25	3 0	0.50	3.0
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	2 0	54	2 0	50	2 0	52	2 0	47	2 0	55	2 0	51	2 0	57	2 0	47	2.0	48
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	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	1 3 ^	0 10	1 2	0 10	1 3	0 10	0 93	0 10	0 60	0 10	0 60	0 10	0 70	0 10	0 76	0.10	0.61
Iron	5 0	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	0 16	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	0 023	0 0025	0 039	0 0025	0 051	0 0025	0 069	0 0025	0 034	0 0025	0 085	0 0025	0 16	0 0025	0 050	0.0025	0.041
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	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0.0020	ND
Nitrogen/Nitrate	10 0	0 10	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	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0.020	ND
Perchlorate	0 0049	0 004	ND	0 004	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0.0040	ND
pH	6 5 - 9 0	NA	7 94	NA	8 95	NA	7 63	NA	7 61	NA	7 97	NA	8 38	NA	7 65	NA	8 13	NA	8 61
Selenium	0 05	0 0025	ND	0 0025	0 0084	0 0025	ND	0 0025	0 015	0 0025	ND	0 0025	ND	0 0025	ND	0 0025	0 0060	0.0025	0.0045
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	210	50	230	50	220	50	260	100	290	50	370	100	280	50	210	50	350
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	500	10	520	10	550	10	530	10	770	10	670	10	710	10	550	10	510
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 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
BETX	11 705	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	0 00077
Temperature	NA	NA	13 01	NA	12 2	NA	12 99	NA	14 79	NA	13 16	NA	12 72	NA	11 00	NA	15 15	NA	11 87
Conductivity	NA	NA	0 54	NA	0 62	NA	0 55	NA	0 59	NA	0 62	NA	0 72	NA	0 79	NA	0 684	NA	0 647
Dissolved Oxygen	NA	NA	0 33	NA	0 18	NA	0 32	NA	0 42	NA	0 60	NA	0 81	NA	0 79	NA	0 32	NA	0 47
ORP	NA	NA	-43	NA	-66 4	NA	-124 3	NA	-90 4	NA	-129 8	NA	-121 9	NA	-18 2	NA	-58 2	NA	-145 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

Temperature	°C	degrees Celcius
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, Waukegan Station, Waukegan, IL

Sample: MW-03	Date	12/19/2012		3/7/2013		6/7/2013		7/25/2013		11/4/2013		3/10/2014		5/15/2014		8/21/2014		11/6/2014	
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 0031	0 0010	0 0018	0 0010	0 0014	0 0010	0 0025	0 0010	0 0050	0 0010	0 0013	0 0010	0 0020	0 0010	0 0041	0 0010	0 0029
Barium	2 0	0 0025	0 011	0 0025	0 015	0 0025	0 039	0 0025	0 017	0 0025	0 015	0 0025	0 012	0 0025	0 0061	0 0025	0 012	0 0025	0 013
Beryllium	0 004	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND
Boron	2 0	0 050	1 9	0 50	2 0	0 50	2 5	0 50	1 8	0 25	1 9	0 25	1 1	0 050	1 2	0 25	2 3	0 50	2 3
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	2 0	49	2 0	45	2 0	39	2 0	43	2 0	25	2 0	37	2 0	37	10	89	2 0	64
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	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	1 1 ^	0 10	0 99	0 10	0 48	0 10	0 83	0 10	0 63	0 10	0 74	0 10	0 57	0 10	0 55	0 10	0 65
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	0 0015
Manganese	0 15	0 0025	0 0034	0 0025	0 015	0 0025	0 0062	0 0025	0 0031	0 0025	0 0082	0 0025	0 0069	0 0025	0 0028	0 0025	0 0083	0 0025	0 0035
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	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND
Nitrogen/Nitrate	10 0	0 10	ND	0 10	ND	0 10	13	0 10	ND	0 10	ND	0 10	0 11	0 10	ND	0 10	ND	0 10	ND
Nitrogen/Nitrate, Nitrite	NA	0 10	ND	0 10	ND	0 50	13	0 10	ND	0 10	ND	0 10	0 11	0 10	0 15	0 10	ND	0 10	ND
Nitrogen/Nitrite	NA	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	0 072	0 020	ND	0 020	ND
Perchlorate	0 0049	0 004	ND	0 004	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND
pH	6 5 - 9 0	NA	8 22	NA	8 55	NA	7 13	NA	7 46	NA	7 26	NA	7 38	NA	8 47	NA	7 82	NA	6 95
Selenium	0 05	0 0025	ND	0 0025	0 011	0 0025	0 067	0 0025	0 0085	0 0025	0 0045	0 0025	0 0028	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	240	50	240	100	290	100	240	50	140	50	170	25	100	50	110	50	240
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	470	10	860	10	530	10	380	10	340	10	210	10	470	10	400
Vanadium	0 049	0 0050	ND	0 0050	ND	0 0050	0 0055	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 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
BETX	11 705	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
Temperature	NA	NA	13 02	NA	12 6	NA	12 87	NA	13 95	NA	15 35	NA	11 89	NA	8 47	NA	18 83	NA	13 28
Conductivity	NA	NA	0 55	NA	0 61	NA	0 86	NA	0 580	NA	0 40	NA	0 37	NA	0 27	NA	0 600	NA	0 513
Dissolved Oxygen	NA	NA	0 27	NA	0 4	NA	0 59	NA	0 31	NA	0 54	NA	0 78	NA	0 40	NA	1 05	NA	1 43
ORP	NA	NA	17	NA	40 8	NA	-84 1	NA	0 80	NA	-128 2	NA	-78 5	NA	90 5	NA	4 2	NA	13 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

Temperature	°C	degrees Celcius
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, Waukegan Station, Waukegan, IL

Sample: MW-04	Date	12/19/2012		3/7/2013		6/6/2013		7/25/2013		11/4/2013		3/11/2014		5/16/2014		8/21/2014		11/6/2014	
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 0080	0 0010	0 0081	0 0010	0 0032	0 0010	0 0044	0 0010	0 0055	0 0010	0 0062	0 0010	0 0061	0 0010	0 0064	0 0010	0 0080
Barium	2 0	0 0025	0 031	0 0025	0 031	0 0025	0 049	0 0025	0 049	0 0025	0 047	0 0025	0 071	0 0025	0 053	0 0025	0 029	0 0025	0 024
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 50	2 5	0 50	2 4	0 50	2 3	0 50	2 5	0 25	2 8	0 25	3 0	0 25	2 7	0 25	1 5	0 50	1 6
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	2 0	55	2 0	50	2 0	51	2 0	42	2 0	46	2 0	41	2 0	34	2 0	33	2 0	36
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	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 72 ^	0 10	0 73	0 10	0 67	0 10	0 60	0 10	0 48	0 10	0 28	0 10	0 27	0 10	0 26	0 10	0 23
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	0 031	0 0025	0 034	0 0025	0 016	0 0025	0 024	0 0025	0 036	0 0025	0 074	0 0025	0 052	0 0025	0 046	0 0025	0 035
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	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND
Nitrogen/Nitrate	10 0	0 10	0 31	0 10	ND	0 10	0 21	0 10	0 12	0 10	ND	0 10	ND	0 10	ND	0 10	ND	0 10	ND
Nitrogen/Nitrate, Nitrite	NA	0 10	0 31	0 10	ND	0 10	0 21	0 10	0 12	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	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND
Perchlorate	0 0049	0 004	ND	0 004	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND
pH	6 5 - 9 0	NA	8 41	NA	8 93	NA	7 25	NA	7 18	NA	7 35	NA	7 99	NA	7 76	NA	7 74	NA	7 53
Selenium	0 05	0 0025	ND	0 0025	0 0043	0 0025	0 028	0 0025	0 050	0 0025	0 011	0 0025	0 0034	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	220	50	230	50	260	100	300	50	270	100	360	50	140	25	130	50	200
Thallium	0 002	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND
Total Dissolved Solids	1,200	10	510	10	460	10	660	10	610	10	630	10	680	10	470	10	370	10	280
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 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
BETX	11 705	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
Temperature	NA	NA	13 11	NA	11 9	NA	12 91	NA	14 1	NA	13 17	NA	10 93	NA	10 27	NA	16 85	NA	10 41
Conductivity	NA	NA	0 57	NA	0 56	NA	0 666	NA	0 70	NA	0 59	NA	0 65	NA	0 59	NA	0 43	NA	0 374
Dissolved Oxygen	NA	NA	0 07	NA	0 14	NA	0 37	NA	0 35	NA	0 37	NA	1 28	NA	0 52	NA	0 43	NA	4 55
ORP	NA	NA	-151	NA	-54 3	NA	-55 9	NA	13 7	NA	-166 2	NA	-99 2	NA	13 8	NA	-48 2	NA	-56 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 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

Temperature	°C	degrees Celcius
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, Waukegan Station, Waukegan, IL

Sample: MW-05	Date	12/19/2012		3/7/2013		6/6/2013		7/25/2013		11/5/2013		3/11/2014		5/16/2014		8/21/2014		11/5/2014	
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	0 011	0 0010	0 012	0 0010	ND	0 0010	0 0013	0 0010	0 0086	0 0010	0 0097	0 0010	0 0090	0 0010	0 0019	0 0010	0 0097
Barium	2 0	0 0025	0 070	0 0025	0 060	0 0025	0 045	0 0025	0 037	0 0025	0 054	0 0025	0 051	0 0025	0 036	0 0025	0 031	0 0025	0 046
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	5 0	27	5 0	33	5 0	12	5 0	29	1 0	32	2 5	31	5 0	36	5 0	35	5 0	36
Cadmium	0 005	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
Chloride	200 0	10	220	2 0	68	50	600	10	210	2 0	49	2 0	45	2 0	47	2 0	47	2 0	42
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	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 36	0 10	0 21	0 10	0 32	0 10	0 32	0 10	0 29	0 10	0 31	0 10	0 31	0 10	0 29
Iron	5 0	0 10	3 9	0 10	4 0	0 10	0 41	0 10	1 1	0 10	4 6	0 10	5 5	0 10	5 5	0 10	4 0	0 10	8 6
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	0 48	0 0025	0 51	0 0025	0 17	0 0025	0 44	0 0025	0 54	0 0025	0 62	0 0025	0 49	0 0025	0 65	0 0025	0 62
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 0026	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	0 0020
Nitrogen/Nitrate	10 0	0 10	ND	0 10	ND	0 10	0 45	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	0 45	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	0 033	0 020	ND	0 020	ND	0 020	ND	0 020	0 047	0 020	ND
Perchlorate	0 0049	0 004	ND	0 004	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND
pH	6 5 - 9 0	NA	7 36	NA	7 33	NA	6 61	NA	6 74	NA	7 20	NA	7 64	NA	7 07	NA	7 06	NA	7 30
Selenium	0 05	0 0025	ND	0 0025	ND	0 0025	0 0037	0 0025	ND	0 0025	ND	0 0025	ND	0 0025	ND	0 0025	ND	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	550	250	650	250	1200	250	890	250	870	250	640	100	630	130	640	200	840
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	1800	10	1600	17	3500	10	2000	10	1600	10	1400	10	1500	10	1600	10	1500
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 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
BETX	11 705	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
Temperature	NA	NA	12 46	NA	12 5	NA	13 12	NA	15 7	NA	13 34	NA	10 19	NA	10 13	NA	19 08	NA	11 27
Conductivity	NA	NA	1 74	NA	1 48	NA	3 118	NA	2 18	NA	1 24	NA	0 86	NA	1 33	NA	1 509	NA	1 316
Dissolved Oxygen	NA	NA	0 10	NA	0 22	NA	0 63	NA	0 50	NA	0 47	NA	1 45	NA	0 59	NA	4 09	NA	1 61
ORP	NA	NA	-101	NA	-129 7	NA	18 4	NA	22 3	NA	-107 0	NA	-94 3	NA	-28 2	NA	-80	NA	-53

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

Temperature	°C	degrees Celcius
Conductivity	ms/cm²	millisiemens/centimeters
Dissolved Oxygen	mg/L	milligrams/liter
Oxygen Reduction Potential (ORP)	mV	millivolts

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Waukegan Station, Waukegan, IL

Sample: MW-06	Date	12/19/2012		3/7/2013		6/6/2013		7/25/2013		11/5/2013		3/10/2014		5/15/2014		8/21/2014		11/5/2014	
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 0029	0 0010	0 0019	0 0010	0 0065	0 0010	0 0096	0 0010	0 0034	0 0010	0 0017	0 0010	0 0043	0 0010	0 0083	0 0010	0 0045
Barium	2 0	0 0025	0 11	0 0025	0 088	0 0025	0 077	0 0025	0 092	0 0025	0 13	0 0025	0 012	0 0025	0 061	0 0025	0 089	0 0025	0 10
Beryllium	0 004	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND
Boron	2 0	0 25	1 1	0 50	2 8	0 50	6 7	2 5	4 3	0 25	2 4	0 25	2 0	0 25	2 2	0 25	2 9	0 50	3 7
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	110	2 0	61	2 0	48	2 0	69	10	85	2 0	8 0	10	84	10	98	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	ND	0 0010	0 0015	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND
Copper	0 65	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	0 0025	0 0020	ND	0 0020	ND	0 0020	ND
Cyanide	0 2	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND	0 010	ND
Fluoride	4 0	0 10	0 43 ^	0 10	0 27	0 10	0 30	0 10	0 34	0 10	0 30	0 10	0 17	0 10	0 22	0 10	0 35	0 10	0 29
Iron	5 0	0 10	2 6	0 10	2 0	0 10	6 2	0 10	16	0 10	4 1	0 10	0 19	0 10	3 0	0 10	9 2	0 10	6 7
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	0 21	0 0025	0 36	0 0025	0 75	0 0025	0 72	0 0025	0 44	0 0025	0 0073	0 0025	0 17	0 0025	0 38	0 0025	0 44
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 0039	0 0020	0 0029	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND
Nitrogen/Nitrate	10 0	0 10	ND	0 10	ND	0 10	1 1	0 10	ND	0 10	ND	0 10	0 54	0 10	ND	0 10	ND	0 10	ND
Nitrogen/Nitrate, Nitrite	NA	0 10	ND	0 10	ND	0 10	1 1	0 10	ND	0 10	ND	0 10	0 54	0 10	ND	0 10	ND	0 10	ND
Nitrogen/Nitrite	NA	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND
Perchlorate	0 0049	0 004	ND	0 004	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND
pH	6 5 - 9 0	NA	7 52	NA	7 42	NA	6 83	NA	6 88	NA	7 24	NA	7 94	NA	7 18	NA	7 11	NA	7 33
Selenium	0 05	0 0025	ND	0 0025	ND	0 0025	ND	0 0025	ND	0 0025	ND	0 0025	0 014	0 0025	ND	0 0025	0 0033	0 0025	0 0034
Silver	0 05	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
Sulfate	400 0	50	160	100	380	100	390	100	360	100	350	25	93	50	170	50	120	50	240
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	940	10	1100	10	1100	10	1100	10	1200	10	190	10	870	10	950	10	890
Vanadium	0 049	0 0050	ND	0 0050	ND	0 0050	ND	0 0050	ND	0 0050	ND	0 0050	0 0050	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 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
BETX	11 705	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
Temperature	NA	NA	11 32	NA	7 1	NA	9 68	NA	12 92	NA	13 14	NA	5 14	NA	8 91	NA	17 83	NA	12 69
Conductivity	NA	NA	1 05	NA	1 01	NA	0 911	NA	1 18	NA	1 10	NA	0 21	NA	0 9	NA	1 179	NA	1 092
Dissolved Oxygen	NA	NA	0 07	NA	0 33	NA	0 40	NA	0 28	NA	0 22	NA	7 07	NA	0 51	NA	0 97	NA	1 37
ORP	NA	NA	-128	NA	-99 4	NA	-72 7	NA	-109 7	NA	-126 3	NA	-9 90	NA	-36 7	NA	-116 9	NA	-94 1

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

Temperature	°C	degrees Celcius
Conductivity	ms/cm^2	millisiemens/centimeters
Dissolved Oxygen	mg/L	milligrams/liter
Oxygen Reduction Potential (ORP)	mV	millivolts

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Waukegan Station, Waukegan, IL

Sample: MW-07	Date	12/19/2012		3/7/2013		6/6/2013		7/25/2013		11/4/2013		3/10/2014		5/15/2014		8/21/2014		11/5/2014	
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 0099	0 0010	0 012	0 0010	0 010	0 0010	0 011	0 0010	0 012	0 0010	0 0096	0 0010	0 0098	0 0010	0 011	0 0010	0 0095
Barium	2 0	0 0025	0 080	0 0025	0 082	0 0025	0 082	0 0025	0 083	0 0025	0 082	0 0025	0 073	0 0025	0 089	0 0025	0 072	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	5 0	43	5 0	49	5 0	42	5 0	44	1 0	45	2 5	39	5 0	27	5 0	40	5 0	41
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	2 0	60	2 0	54	2 0	44	2 0	33	2 0	53	2 0	34	2 0	35	2 0	36	2 0	48
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	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 48	0 10	0 50	0 10	0 46	0 10	0 46	0 10	0 44	0 10	0 39	0 10	0 30	0 10	0 47	0 10	0 45
Iron	5 0	0 10	12	0 10	12	0 10	13	0 10	13	0 10	13	0 10	11	0 10	12	0 10	11	0 10	9 4
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	0 46	0 0025	0 49	0 0025	0 48	0 0025	0 46	0 0025	0 46	0 0025	0 46	0 0025	0 60	0 0025	0 40	0 0025	0 34
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	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND
Nitrogen/Nitrate	10 0	0 10	ND	0 10	ND	0 10	0 11	0 10	ND	0 10	ND	0 10	ND	0 10	0 11	0 10	ND	0 10	ND
Nitrogen/Nitrate, Nitrite	NA	0 10	ND	0 10	ND	0 10	0 11	0 10	ND	0 10	ND	0 10	ND	0 10	0 11	0 10	ND	0 10	ND
Nitrogen/Nitrite	NA	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND	0 020	ND
Perchlorate	0 0049	0 004	ND	0 004	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND	0 0040	ND
pH	6 5 - 9 0	NA	7 27	NA	8 24	NA	7 09	NA	7 10	NA	7 18	NA	7 67	NA	6 89	NA	7 25	NA	7 46
Selenium	0 05	0 0025	ND	0 0025	ND	0 0025	ND	0 0025	ND	0 0025	0 0025	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	630	250	710	250	650	250	860	250	770	250	540	100	330	130	690	200	880
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	1800	10	1800	10	1800	10	1800	10	1800	10	1600	10	1300	10	1600	10	1500
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 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND	0 00050	ND
BETX	11 705	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
Temperature	NA	NA	12 99	NA	1 5	NA	12 46	NA	13 99	NA	12 92	NA	12 33	NA	9 89	NA	18 25	NA	13 37
Conductivity	NA	NA	1 54	NA	1 17	NA	1 385	NA	1 52	NA	1 01	NA	0 98	NA	1 26	NA	1 607	NA	1 394
Dissolved Oxygen	NA	NA	0 05	NA	0 33	NA	0 80	NA	0 28	NA	0 54	NA	1 19	NA	0 62	NA	1 18	NA	2 35
ORP	NA	NA	-129	NA	-111 6	NA	-151 7	NA	-125 8	NA	-127 7	NA	-116 8	NA	-16 9	NA	-143 6	NA	-112 5

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

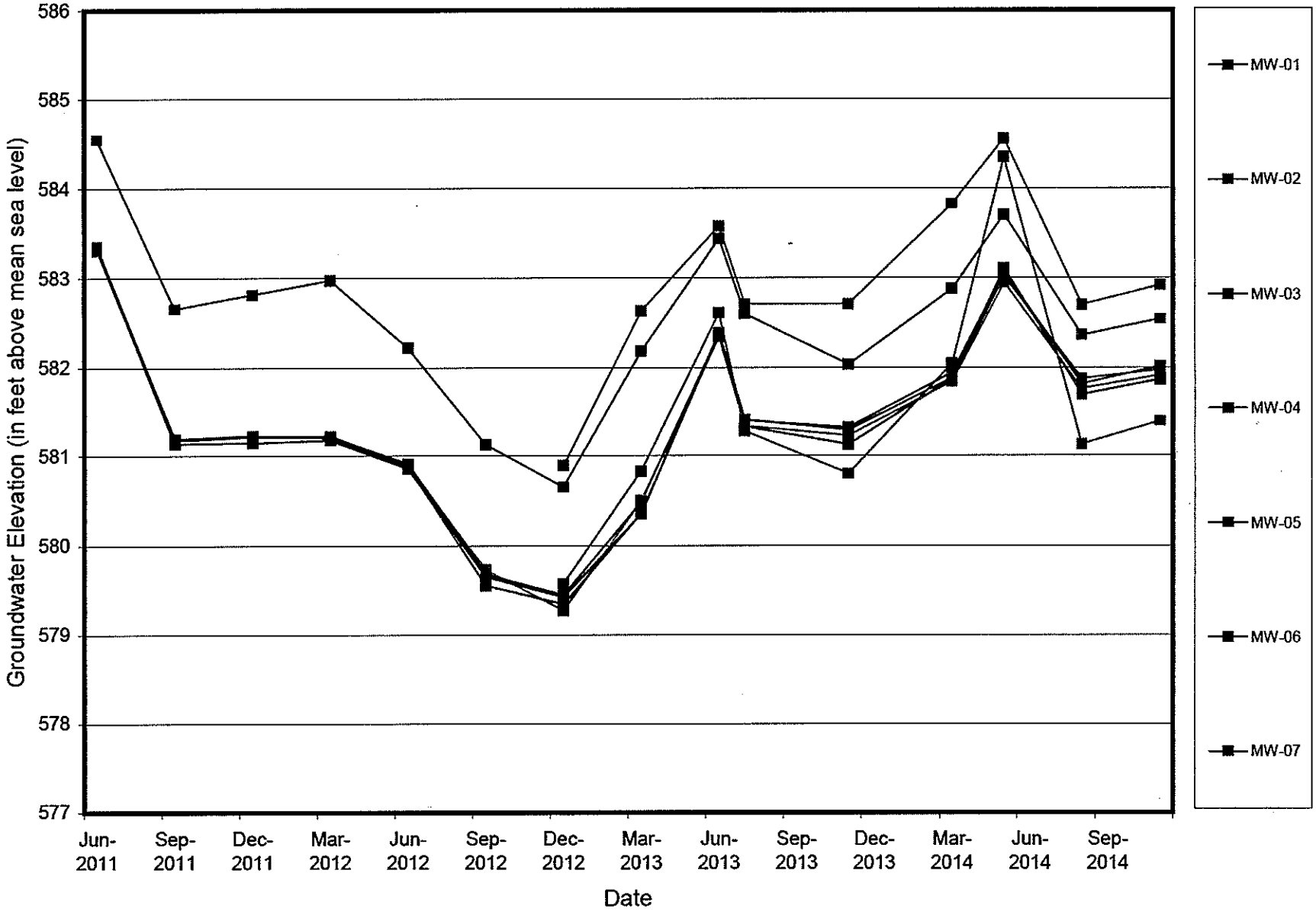
NR - Not Required
NS - Not Sampled
^ - Denotes instrument related QC exceeds the control limits

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

ATTACHMENT 1
Hydrograph of Water Level Elevations

Midwest Generation Waukegan Station, Waukegan, IL

Groundwater Elevation vs Time



MWG13-15_45346

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: 500-87368-1
Client Project/Site: Waukegan Station Ash Ponds

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

Attn: Richard Gnat

Authorized for release by:
11/20/2014 4:25:49 PM

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

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

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

Table of Contents

3

Job ID: 500-87368-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-87368-1

Comments
No additional comments.

Receipt
The samples were received on 11/6/2014 10:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.4° C, 2.8° C, 3.1° C and 4.1° C.

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

Metals
Method(s) 6020A: The low level cal bration check standard (CCVL) at lines 44 and 56 in AD batch 264940 were outside the acceptance criteria for Sb. The associated sample concentrations were non-detect and therefore not affected by a high bias in the CCVL: (500-87368-1 DU), (500-87368-1 MS), (500-87368-1 MSD), (500-87368-1 SD), Duplicate (500-87368-4), MW-01 (500-87368-8), MW-02 (500-87368-9), MW-03 (500-87368-10), MW-05 (500-87368-1), MW-06 (500-87368-2), MW-07 (500-87368-3)

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

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

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

Detection Summary

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

TestAmerica Job ID: 500-87368-1

4

Client Sample ID: MW-05 — Lab Sample ID: 500-87368-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0097		0.0010		mg/L	1		6020A	Dissolved
Barium	0.046		0.0025		mg/L	1		6020A	Dissolved
Boron	36		5.0		mg/L	100		6020A	Dissolved
Iron	8.6		0.10		mg/L	1		6020A	Dissolved
Manganese	0.62		0.0025		mg/L	1		6020A	Dissolved
Nickel	0.0020		0.0020		mg/L	1		6020A	Dissolved
Sulfate	840		200		mg/L	40		9038	Dissolved
Chloride	42		2.0		mg/L	1		9251	Dissolved
Total Dissolved Solids	1500		10		mg/L	1		SM 2540C	Dissolved
Fluoride	0.29		0.10		mg/L	1		SM 4500 F C	Dissolved

Client Sample ID: MW-06 — Lab Sample ID: 500-87368-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0045		0.0010		mg/L	1		6020A	Dissolved
Barium	0.10		0.0025		mg/L	1		6020A	Dissolved
Boron	3.7		0.50		mg/L	10		6020A	Dissolved
Iron	6.7		0.10		mg/L	1		6020A	Dissolved
Manganese	0.44		0.0025		mg/L	1		6020A	Dissolved
Selenium	0.0034		0.0025		mg/L	1		6020A	Dissolved
Sulfate	240		50		mg/L	10		9038	Dissolved
Chloride	97		10		mg/L	5		9251	Dissolved
Total Dissolved Solids	890		10		mg/L	1		SM 2540C	Dissolved
Fluoride	0.29		0.10		mg/L	1		SM 4500 F C	Dissolved

Client Sample ID: MW-07 — Lab Sample ID: 500-87368-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0095		0.0010		mg/L	1		6020A	Dissolved
Barium	0.062		0.0025		mg/L	1		6020A	Dissolved
Boron	41		5.0		mg/L	100		6020A	Dissolved
Iron	9.4		0.10		mg/L	1		6020A	Dissolved
Manganese	0.34		0.0025		mg/L	1		6020A	Dissolved
Sulfate	880		200		mg/L	40		9038	Dissolved
Chloride	48		2.0		mg/L	1		9251	Dissolved
Total Dissolved Solids	1500		10		mg/L	1		SM 2540C	Dissolved
Fluoride	0.45		0.10		mg/L	1		SM 4500 F C	Dissolved

Client Sample ID: Duplicate — Lab Sample ID: 500-87368-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0097		0.0010		mg/L	1		6020A	Dissolved
Barium	0.061		0.0025		mg/L	1		6020A	Dissolved
Boron	40		5.0		mg/L	100		6020A	Dissolved
Iron	9.5		0.10		mg/L	1		6020A	Dissolved
Manganese	0.33		0.0025		mg/L	1		6020A	Dissolved
Sulfate	800		200		mg/L	40		9038	Dissolved
Chloride	48		2.0		mg/L	1		9251	Dissolved
Total Dissolved Solids	1500		10		mg/L	1		SM 2540C	Dissolved
Fluoride	0.45		0.10		mg/L	1		SM 4500 F C	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 500-87368-1

4

Client Sample ID: MW-01 — Lab Sample ID: 500-87368-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.21		0.0010		mg/L	1		6020A	Dissolved
Barium	0.0094		0.0025		mg/L	1		6020A	Dissolved
Boron	2.2		0.50		mg/L	10		6020A	Dissolved
Copper	0.0024		0.0020		mg/L	1		6020A	Dissolved
Manganese	0.0054		0.0025		mg/L	1		6020A	Dissolved
Selenium	0.035		0.0025		mg/L	1		6020A	Dissolved
Vanadium	0.49		0.0050		mg/L	1		6020A	Dissolved
Sulfate	270		50		mg/L	10		9038	Dissolved
Chloride	70		2.0		mg/L	1		9251	Dissolved
Total Dissolved Solids	450		10		mg/L	1		SM 2540C	Dissolved
Fluoride	0.56		0.10		mg/L	1		SM 4500 F C	Dissolved
Nitrogen, Nitrite	0.078		0.020		mg/L	1		SM 4500 NO2 B	Dissolved

Client Sample ID: MW-02 — Lab Sample ID: 500-87368-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.00077		0.00050		mg/L	1		8260B	Total/NA
Arsenic	0.0095		0.0010		mg/L	1		6020A	Dissolved
Barium	0.029		0.0025		mg/L	1		6020A	Dissolved
Boron	3.0		0.50		mg/L	10		6020A	Dissolved
Manganese	0.041		0.0025		mg/L	1		6020A	Dissolved
Selenium	0.0045		0.0025		mg/L	1		6020A	Dissolved
Sulfate	350		50		mg/L	10		9038	Dissolved
Chloride	48		2.0		mg/L	1		9251	Dissolved
Total Dissolved Solids	510		10		mg/L	1		SM 2540C	Dissolved
Fluoride	0.61		0.10		mg/L	1		SM 4500 F C	Dissolved

Client Sample ID: MW-03 — Lab Sample ID: 500-87368-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0029		0.0010		mg/L	1		6020A	Dissolved
Barium	0.013		0.0025		mg/L	1		6020A	Dissolved
Boron	2.3		0.50		mg/L	10		6020A	Dissolved
Lead	0.0015		0.00050		mg/L	1		6020A	Dissolved
Manganese	0.0035		0.0025		mg/L	1		6020A	Dissolved
Sulfate	240		50		mg/L	10		9038	Dissolved
Chloride	64		2.0		mg/L	1		9251	Dissolved
Total Dissolved Solids	400		10		mg/L	1		SM 2540C	Dissolved
Fluoride	0.65		0.10		mg/L	1		SM 4500 F C	Dissolved

Client Sample ID: MW-04 — Lab Sample ID: 500-87368-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0080		0.0010		mg/L	1		6020A	Dissolved
Barium	0.024		0.0025		mg/L	1		6020A	Dissolved
Boron	1.6		0.50		mg/L	10		6020A	Dissolved
Manganese	0.035		0.0025		mg/L	1		6020A	Dissolved
Sulfate	200		50		mg/L	10		9038	Dissolved
Chloride	36		2.0		mg/L	1		9251	Dissolved
Total Dissolved Solids	280		10		mg/L	1		SM 2540C	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-04 (Continued) — **Lab Sample ID: 500-87368-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.23		0.10		mg/L	1		SM 4500 F C	Dissolved

Client Sample ID: TRIP BLANK — **Lab Sample ID: 500-87368-12**

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 500-87368-1

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

5

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

Sample Summary

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

TestAmerica Job ID: 500-87368-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-87368-1	MW-05	Water	11/05/14 09:20	11/06/14 10:25
500-87368-2	MW-06	Water	11/05/14 12:15	11/06/14 10:25
500-87368-3	MW-07	Water	11/05/14 11:00	11/06/14 10:25
500-87368-4	Duplicate	Water	11/05/14 00:00	11/06/14 10:25
500-87368-8	MW-01	Water	11/06/14 09:10	11/07/14 12:28
500-87368-9	MW-02	Water	11/06/14 13:50	11/07/14 12:28
500-87368-10	MW-03	Water	11/06/14 12:10	11/07/14 12:28
500-87368-11	MW-04	Water	11/06/14 10:45	11/07/14 12:28
500-87368-12	TRIP BLANK	Water	11/06/14 00:00	11/07/14 12:28

6

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

TestAmerica Job ID: 500-87368-1

Client Sample ID: MW-05
Date Collected: 11/05/14 09:20
Date Received: 11/06/14 10:25

Lab Sample ID: 500-87368-1
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			11/13/14 19:27	1
Toluene	<0.00050		0.00050		mg/L			11/13/14 19:27	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/13/14 19:27	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/13/14 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 125*		*11/13/14 19:27*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*11/13/14 19:27*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 120*		*11/13/14 19:27*	*1*
Dibromofluoromethane	*89*		*75 - 120*		*11/13/14 19:27*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/20/14 01:43	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		11/18/14 10:44	11/18/14 17:00	1
Arsenic	**0.0097**		0.0010		mg/L		11/18/14 10:44	11/19/14 11:48	1
Barium	**0.046**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:00	1
Beryllium	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 17:00	1
Boron	**36**		5.0		mg/L		11/18/14 10:44	11/20/14 12:51	100
Cadmium	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:00	1
Chromium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/19/14 11:48	1
Cobalt	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 17:00	1
Copper	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:00	1
Iron	**8.6**		0.10		mg/L		11/18/14 10:44	11/18/14 17:00	1
Lead	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:00	1
Manganese	**0.62**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:00	1
Nickel	**0.0020**		0.0020		mg/L		11/18/14 10:44	11/18/14 17:00	1
Selenium	<0.0025		0.0025		mg/L		11/18/14 10:44	11/18/14 17:00	1
Silver	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:00	1
Thallium	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:00	1
Vanadium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/18/14 17:00	1
Zinc	<0.020		0.020		mg/L		11/18/14 10:44	11/18/14 17:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/10/14 11:45	11/11/14 08:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/14 11:50	11/12/14 14:58	1
Sulfate	**840**		200		mg/L			11/18/14 09:21	40
Chloride	**42**		2.0		mg/L			11/12/14 23:10	1
Nitrogen, Nitrate	<0.10		0.10		mg/L			11/14/14 08:59	1
Total Dissolved Solids	**1500**		10		mg/L			11/10/14 21:12	1
Fluoride	**0.29**		0.10		mg/L			11/14/14 14:47	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/06/14 12:57	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			11/11/14 14:33	1

Client Sample ID: MW-06
Date Collected: 11/05/14 12:15
Date Received: 11/06/14 10:25

Lab Sample ID: 500-87368-2
Matrix: Water

7

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			11/13/14 19:53	1
Toluene	<0.00050		0.00050		mg/L			11/13/14 19:53	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/13/14 19:53	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/13/14 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 125*		*11/13/14 19:53*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*11/13/14 19:53*	*1*
4-Bromofluorobenzene (Surr)	*110*		*75 - 120*		*11/13/14 19:53*	*1*
Dibromofluoromethane	*87*		*75 - 120*		*11/13/14 19:53*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/20/14 02:29	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		11/18/14 10:44	11/18/14 17:33	1
Arsenic	**0.0045**		0.0010		mg/L		11/18/14 10:44	11/19/14 12:06	1
Barium	**0.10**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:33	1
Beryllium	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 17:33	1
Boron	**3.7**		0.50		mg/L		11/18/14 10:44	11/20/14 12:56	10
Cadmium	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:33	1
Chromium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/19/14 12:06	1
Cobalt	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 17:33	1
Copper	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:33	1
Iron	**6.7**		0.10		mg/L		11/18/14 10:44	11/18/14 17:33	1
Lead	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:33	1
Manganese	**0.44**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:33	1
Nickel	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:33	1
Selenium	**0.0034**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:33	1
Silver	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:33	1
Thallium	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:33	1
Vanadium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/18/14 17:33	1
Zinc	<0.020		0.020		mg/L		11/18/14 10:44	11/18/14 17:33	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/10/14 11:45	11/11/14 08:59	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/14 11:50	11/12/14 14:58	1
Sulfate	**240**		50		mg/L			11/18/14 09:21	10
Chloride	**97**		10		mg/L			11/12/14 23:49	5
Nitrogen, Nitrate	<0.10		0.10		mg/L			11/14/14 08:59	1
Total Dissolved Solids	**890**		10		mg/L			11/10/14 21:19	1
Fluoride	**0.29**		0.10		mg/L			11/14/14 14:50	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/06/14 12:58	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			11/11/14 14:40	1

Client Sample ID: MW-07
Date Collected: 11/05/14 11:00
Date Received: 11/06/14 10:25

Lab Sample ID: 500-87368-3
Matrix: Water

7

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			11/13/14 20:19	1
Toluene	<0.00050		0.00050		mg/L			11/13/14 20:19	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/13/14 20:19	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/13/14 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 125*		*11/13/14 20:19*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*11/13/14 20:19*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 120*		*11/13/14 20:19*	*1*
Dibromofluoromethane	*86*		*75 - 120*		*11/13/14 20:19*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/20/14 02:45	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		11/18/14 10:44	11/18/14 17:37	1
Arsenic	**0.0095**		0.0010		mg/L		11/18/14 10:44	11/19/14 12:09	1
Barium	**0.062**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:37	1
Beryllium	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 17:37	1
Boron	**41**		5.0		mg/L		11/18/14 10:44	11/20/14 12:57	100
Cadmium	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:37	1
Chromium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/19/14 12:09	1
Cobalt	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 17:37	1
Copper	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:37	1
Iron	**9.4**		0.10		mg/L		11/18/14 10:44	11/18/14 17:37	1
Lead	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:37	1
Manganese	**0.34**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:37	1
Nickel	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:37	1
Selenium	<0.0025		0.0025		mg/L		11/18/14 10:44	11/18/14 17:37	1
Silver	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:37	1
Thallium	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:37	1
Vanadium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/18/14 17:37	1
Zinc	<0.020		0.020		mg/L		11/18/14 10:44	11/18/14 17:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/10/14 11:45	11/11/14 09:01	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/14 11:50	11/12/14 14:59	1
Sulfate	**880**		200		mg/L			11/18/14 09:21	40
Chloride	**48**		2.0		mg/L			11/12/14 23:12	1
Nitrogen, Nitrate	<0.10		0.10		mg/L			11/14/14 08:59	1
Total Dissolved Solids	**1500**		10		mg/L			11/10/14 21:22	1
Fluoride	**0.45**		0.10		mg/L			11/14/14 14:53	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/06/14 12:58	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			11/11/14 14:42	1

Client Sample ID: Duplicate
Date Collected: 11/05/14 00:00
Date Received: 11/06/14 10:25

Lab Sample ID: 500-87368-4
Matrix: Water

7

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			11/13/14 20:46	1
Toluene	<0.00050		0.00050		mg/L			11/13/14 20:46	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/13/14 20:46	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/13/14 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 125*		*11/13/14 20:46*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*11/13/14 20:46*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 120*		*11/13/14 20:46*	*1*
Dibromofluoromethane	*85*		*75 - 120*		*11/13/14 20:46*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/20/14 03:00	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		11/18/14 10:44	11/18/14 17:41	1
Arsenic	**0.0097**		0.0010		mg/L		11/18/14 10:44	11/19/14 12:12	1
Barium	**0.061**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:41	1
Beryllium	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 17:41	1
Boron	**40**		5.0		mg/L		11/18/14 10:44	11/20/14 12:58	100
Cadmium	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:41	1
Chromium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/19/14 12:12	1
Cobalt	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 17:41	1
Copper	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:41	1
Iron	**9.5**		0.10		mg/L		11/18/14 10:44	11/18/14 17:41	1
Lead	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:41	1
Manganese	**0.33**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:41	1
Nickel	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:41	1
Selenium	<0.0025		0.0025		mg/L		11/18/14 10:44	11/18/14 17:41	1
Silver	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:41	1
Thallium	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:41	1
Vanadium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/18/14 17:41	1
Zinc	<0.020		0.020		mg/L		11/18/14 10:44	11/18/14 17:41	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/10/14 11:45	11/11/14 09:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/14 11:50	11/12/14 14:59	1
Sulfate	**800**		200		mg/L			11/18/14 09:21	40
Chloride	**48**		2.0		mg/L			11/12/14 23:13	1
Nitrogen, Nitrate	<0.10		0.10		mg/L			11/14/14 08:59	1
Total Dissolved Solids	**1500**		10		mg/L			11/10/14 21:24	1
Fluoride	**0.45**		0.10		mg/L			11/14/14 14:56	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/06/14 12:59	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			11/11/14 14:44	1

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

TestAmerica Job ID: 500-87368-1

Client Sample ID: MW-01
Date Collected: 11/06/14 09:10
Date Received: 11/07/14 12:28

Lab Sample ID: 500-87368-8
Matrix: Water

7

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			11/13/14 23:50	1
Toluene	<0.00050		0.00050		mg/L			11/13/14 23:50	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/13/14 23:50	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/13/14 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 125*		*11/13/14 23:50*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*11/13/14 23:50*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 120*		*11/13/14 23:50*	*1*
Dibromofluoromethane	*92*		*75 - 120*		*11/13/14 23:50*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/20/14 04:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^	0.0030		mg/L		11/18/14 10:44	11/18/14 17:58	1
Arsenic	**0.21**		0.0010		mg/L		11/18/14 10:44	11/19/14 12:23	1
Barium	**0.0094**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:58	1
Beryllium	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 17:58	1
Boron	**2.2**		0.50		mg/L		11/18/14 10:44	11/20/14 13:05	10
Cadmium	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:58	1
Chromium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/19/14 12:23	1
Cobalt	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 17:58	1
Copper	**0.0024**		0.0020		mg/L		11/18/14 10:44	11/18/14 17:58	1
Iron	<0.10		0.10		mg/L		11/18/14 10:44	11/18/14 17:58	1
Lead	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:58	1
Manganese	**0.0054**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:58	1
Nickel	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:58	1
Selenium	**0.035**		0.0025		mg/L		11/18/14 10:44	11/18/14 17:58	1
Silver	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 17:58	1
Thallium	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 17:58	1
Vanadium	**0.49**		0.0050		mg/L		11/18/14 10:44	11/18/14 17:58	1
Zinc	<0.020		0.020		mg/L		11/18/14 10:44	11/18/14 17:58	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/10/14 11:45	11/11/14 09:10	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/14 11:50	11/12/14 15:01	1
Sulfate	**270**		50		mg/L			11/18/14 09:21	10
Chloride	**70**		2.0		mg/L			11/12/14 23:20	1
Nitrogen, Nitrate	<0.10		0.10		mg/L			11/14/14 08:59	1
Total Dissolved Solids	**450**		10		mg/L			11/10/14 21:34	1
Fluoride	**0.56**		0.10		mg/L			11/14/14 15:18	1
Nitrogen, Nitrite	**0.078**		0.020		mg/L			11/07/14 14:21	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			11/11/14 14:52	1

Client Sample ID: MW-02
Date Collected: 11/06/14 13:50
Date Received: 11/07/14 12:28

Lab Sample ID: 500-87368-9
Matrix: Water

7

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			11/14/14 12:48	1
Toluene	**0.00077**		0.00050		mg/L			11/14/14 12:48	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/14/14 12:48	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/14/14 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/14/14 12:48*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*11/14/14 12:48*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 120*		*11/14/14 12:48*	*1*
Dibromofluoromethane	*88*		*75 - 120*		*11/14/14 12:48*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/20/14 04:48	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		11/18/14 10:44	11/18/14 18:02	1
Arsenic	**0.0095**		0.0010		mg/L		11/18/14 10:44	11/19/14 12:25	1
Barium	**0.029**		0.0025		mg/L		11/18/14 10:44	11/18/14 18:02	1
Beryllium	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 18:02	1
Boron	**3.0**		0.50		mg/L		11/18/14 10:44	11/20/14 13:06	10
Cadmium	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 18:02	1
Chromium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/19/14 12:25	1
Cobalt	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 18:02	1
Copper	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 18:02	1
Iron	<0.10		0.10		mg/L		11/18/14 10:44	11/18/14 18:02	1
Lead	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 18:02	1
Manganese	**0.041**		0.0025		mg/L		11/18/14 10:44	11/18/14 18:02	1
Nickel	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 18:02	1
Selenium	**0.0045**		0.0025		mg/L		11/18/14 10:44	11/18/14 18:02	1
Silver	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 18:02	1
Thallium	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 18:02	1
Vanadium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/18/14 18:02	1
Zinc	<0.020		0.020		mg/L		11/18/14 10:44	11/18/14 18:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/10/14 11:45	11/11/14 09:12	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/14 11:50	11/12/14 15:02	1
Sulfate	**350**		50		mg/L			11/18/14 09:21	10
Chloride	**48**		2.0		mg/L			11/12/14 23:21	1
Nitrogen, Nitrate	<0.10		0.10		mg/L			11/14/14 08:59	1
Total Dissolved Solids	**510**		10		mg/L			11/10/14 21:37	1
Fluoride	**0.61**		0.10		mg/L			11/14/14 15:21	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/07/14 14:21	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			11/11/14 14:55	1

Client Sample ID: MW-03
Date Collected: 11/06/14 12:10
Date Received: 11/07/14 12:28

Lab Sample ID: 500-87368-10
Matrix: Water

7

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			11/14/14 13:14	1
Toluene	<0.00050		0.00050		mg/L			11/14/14 13:14	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/14/14 13:14	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/14/14 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 125*		*11/14/14 13:14*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*11/14/14 13:14*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 120*		*11/14/14 13:14*	*1*
Dibromofluoromethane	*89*		*75 - 120*		*11/14/14 13:14*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/20/14 05:04	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		11/18/14 10:44	11/18/14 18:06	1
Arsenic	**0.0029**		0.0010		mg/L		11/18/14 10:44	11/19/14 12:28	1
Barium	**0.013**		0.0025		mg/L		11/18/14 10:44	11/18/14 18:06	1
Beryllium	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 18:06	1
Boron	**2.3**		0.50		mg/L		11/18/14 10:44	11/20/14 13:07	10
Cadmium	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 18:06	1
Chromium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/19/14 12:28	1
Cobalt	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 18:06	1
Copper	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 18:06	1
Iron	<0.10		0.10		mg/L		11/18/14 10:44	11/18/14 18:06	1
Lead	**0.0015**		0.00050		mg/L		11/18/14 10:44	11/18/14 18:06	1
Manganese	**0.0035**		0.0025		mg/L		11/18/14 10:44	11/18/14 18:06	1
Nickel	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 18:06	1
Selenium	<0.0025		0.0025		mg/L		11/18/14 10:44	11/18/14 18:06	1
Silver	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 18:06	1
Thallium	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 18:06	1
Vanadium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/18/14 18:06	1
Zinc	<0.020		0.020		mg/L		11/18/14 10:44	11/18/14 18:06	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/10/14 11:45	11/11/14 09:14	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/14 11:50	11/12/14 15:02	1
Sulfate	**240**		50		mg/L			11/18/14 09:21	10
Chloride	**64**		2.0		mg/L			11/12/14 23:21	1
Nitrogen, Nitrate	<0.10		0.10		mg/L			11/14/14 08:59	1
Total Dissolved Solids	**400**		10		mg/L			11/10/14 21:39	1
Fluoride	**0.65**		0.10		mg/L			11/14/14 15:24	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/07/14 14:21	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			11/11/14 14:55	1

Client Sample ID: MW-04
Date Collected: 11/06/14 10:45
Date Received: 11/07/14 12:28

Lab Sample ID: 500-87368-11
Matrix: Water

7

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			11/14/14 13:40	1
Toluene	<0.00050		0.00050		mg/L			11/14/14 13:40	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/14/14 13:40	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/14/14 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 125*		*11/14/14 13:40*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*11/14/14 13:40*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*		*11/14/14 13:40*	*1*
Dibromofluoromethane	*86*		*75 - 120*		*11/14/14 13:40*	*1*

Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	<0.0040		0.0040		mg/L			11/20/14 05:19	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		11/18/14 10:44	11/18/14 18:22	1
Arsenic	**0.0080**		0.0010		mg/L		11/18/14 10:44	11/19/14 12:39	1
Barium	**0.024**		0.0025		mg/L		11/18/14 10:44	11/18/14 18:22	1
Beryllium	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 18:22	1
Boron	**1.6**		0.50		mg/L		11/18/14 10:44	11/20/14 13:08	10
Cadmium	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 18:22	1
Chromium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/19/14 12:39	1
Cobalt	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 18:22	1
Copper	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 18:22	1
Iron	<0.10		0.10		mg/L		11/18/14 10:44	11/18/14 18:22	1
Lead	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 18:22	1
Manganese	**0.035**		0.0025		mg/L		11/18/14 10:44	11/18/14 18:22	1
Nickel	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 18:22	1
Selenium	<0.0025		0.0025		mg/L		11/18/14 10:44	11/18/14 18:22	1
Silver	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 18:22	1
Thallium	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 18:22	1
Vanadium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/18/14 18:22	1
Zinc	<0.020		0.020		mg/L		11/18/14 10:44	11/18/14 18:22	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/10/14 11:45	11/11/14 09:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/14 11:50	11/12/14 15:03	1
Sulfate	**200**		50		mg/L			11/18/14 09:21	10
Chloride	**36**		2.0		mg/L			11/12/14 23:22	1
Nitrogen, Nitrate	<0.10		0.10		mg/L			11/14/14 08:59	1
Total Dissolved Solids	**280**		10		mg/L			11/10/14 21:42	1
Fluoride	**0.23**		0.10		mg/L			11/14/14 15:26	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			11/07/14 14:22	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			11/11/14 14:56	1

Client Sample ID: TRIP BLANK
Date Collected: 11/06/14 00:00
Date Received: 11/07/14 12:28

Lab Sample ID: 500-87368-12
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			11/14/14 14:07	1
Toluene	<0.00050		0.00050		mg/L			11/14/14 14:07	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/14/14 14:07	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/14/14 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/14/14 14:07*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*11/14/14 14:07*	*1*
4-Bromofluorobenzene (Surr)	*105*		*75 - 120*		*11/14/14 14:07*	*1*
Dibromofluoromethane	*86*		*75 - 120*		*11/14/14 14:07*	*1*

Qualifiers

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery exceeds the control limits

General Chemistry

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

8

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 ra io
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: 264055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Total/NA	Water	8260B	
500-87368-2	MW-06	Total/NA	Water	8260B	
500-87368-3	MW-07	Total/NA	Water	8260B	
500-87368-4	Duplicate	Total/NA	Water	8260B	
500-87368-8	MW-01	Total/NA	Water	8260B	
LCS 500-264055/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-264055/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 264177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-9	MW-02	Total/NA	Water	8260B	
500-87368-10	MW-03	Total/NA	Water	8260B	
500-87368-10 MS	MW-03	Total/NA	Water	8260B	
500-87368-10 MSD	MW-03	Total/NA	Water	8260B	
500-87368-11	MW-04	Total/NA	Water	8260B	
500-87368-12	TRIP BLANK	Total/NA	Water	8260B	
LCS 500-264177/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-264177/6	Method Blank	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 58510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Total/NA	Water	314.0	
500-87368-1 MS	MW-05	Total/NA	Water	314.0	
500-87368-1 MSD	MW-05	Total/NA	Water	314.0	
500-87368-2	MW-06	Total/NA	Water	314.0	
500-87368-3	MW-07	Total/NA	Water	314.0	
500-87368-4	Duplicate	Total/NA	Water	314.0	
500-87368-8	MW-01	Total/NA	Water	314.0	
500-87368-9	MW-02	Total/NA	Water	314.0	
500-87368-10	MW-03	Total/NA	Water	314.0	
500-87368-11	MW-04	Total/NA	Water	314.0	
LCS 320-58510/7	Lab Control Sample	Total/NA	Water	314.0	
MB 320-58510/6	Method Blank	Total/NA	Water	314.0	
MRL 320-58510/5	Lab Control Sample	Total/NA	Water	314.0	

Metals

Prep Batch: 263414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	7470A	
500-87368-2	MW-06	Dissolved	Water	7470A	
500-87368-3	MW-07	Dissolved	Water	7470A	
500-87368-4	Duplicate	Dissolved	Water	7470A	
500-87368-8	MW-01	Dissolved	Water	7470A	
500-87368-9	MW-02	Dissolved	Water	7470A	
500-87368-10	MW-03	Dissolved	Water	7470A	
500-87368-11	MW-04	Dissolved	Water	7470A	
LCS 500-263414/13-A	Lab Control Sample	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 263414 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-263414/12-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 263657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	7470A	263414
500-87368-2	MW-06	Dissolved	Water	7470A	263414
500-87368-3	MW-07	Dissolved	Water	7470A	263414
500-87368-4	Duplicate	Dissolved	Water	7470A	263414
500-87368-8	MW-01	Dissolved	Water	7470A	263414
500-87368-9	MW-02	Dissolved	Water	7470A	263414
500-87368-10	MW-03	Dissolved	Water	7470A	263414
500-87368-11	MW-04	Dissolved	Water	7470A	263414
LCS 500-263414/13-A	Lab Control Sample	Total/NA	Water	7470A	263414
MB 500-263414/12-A	Method Blank	Total/NA	Water	7470A	263414

Prep Batch: 264760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	Soluble Metals	
500-87368-1 DU	MW-05	Dissolved	Water	Soluble Metals	
500-87368-1 MS	MW-05	Dissolved	Water	Soluble Metals	
500-87368-1 MSD	MW-05	Dissolved	Water	Soluble Metals	
500-87368-2	MW-06	Dissolved	Water	Soluble Metals	
500-87368-3	MW-07	Dissolved	Water	Soluble Metals	
500-87368-4	Duplicate	Dissolved	Water	Soluble Metals	
500-87368-8	MW-01	Dissolved	Water	Soluble Metals	
500-87368-9	MW-02	Dissolved	Water	Soluble Metals	
500-87368-10	MW-03	Dissolved	Water	Soluble Metals	
500-87368-11	MW-04	Dissolved	Water	Soluble Metals	
LCS 500-264760/2-A	Lab Control Sample	Soluble	Water	Soluble Metals	
MB 500-264760/1-A	Method Blank	Soluble	Water	Soluble Metals	

Analysis Batch: 264940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	6020A	264760
500-87368-1 DU	MW-05	Dissolved	Water	6020A	264760
500-87368-1 MS	MW-05	Dissolved	Water	6020A	264760
500-87368-1 MSD	MW-05	Dissolved	Water	6020A	264760
500-87368-2	MW-06	Dissolved	Water	6020A	264760
500-87368-3	MW-07	Dissolved	Water	6020A	264760
500-87368-4	Duplicate	Dissolved	Water	6020A	264760
500-87368-8	MW-01	Dissolved	Water	6020A	264760
500-87368-9	MW-02	Dissolved	Water	6020A	264760
500-87368-10	MW-03	Dissolved	Water	6020A	264760
500-87368-11	MW-04	Dissolved	Water	6020A	264760
LCS 500-264760/2-A	Lab Control Sample	Soluble	Water	6020A	264760
MB 500-264760/1-A	Method Blank	Soluble	Water	6020A	264760

Analysis Batch: 265037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	6020A	264760
500-87368-1 DU	MW-05	Dissolved	Water	6020A	264760

Metals (Continued)

Analysis Batch: 265037 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1 MS	MW-05	Dissolved	Water	6020A	264760
500-87368-1 MSD	MW-05	Dissolved	Water	6020A	264760
500-87368-2	MW-06	Dissolved	Water	6020A	264760
500-87368-3	MW-07	Dissolved	Water	6020A	264760
500-87368-4	Duplicate	Dissolved	Water	6020A	264760
500-87368-8	MW-01	Dissolved	Water	6020A	264760
500-87368-9	MW-02	Dissolved	Water	6020A	264760
500-87368-10	MW-03	Dissolved	Water	6020A	264760
500-87368-11	MW-04	Dissolved	Water	6020A	264760
LCS 500-264760/2-A	Lab Control Sample	Soluble	Water	6020A	264760
MB 500-264760/1-A	Method Blank	Soluble	Water	6020A	264760

Analysis Batch: 265239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	6020A	264760
500-87368-1 DU	MW-05	Dissolved	Water	6020A	264760
500-87368-1 MS	MW-05	Dissolved	Water	6020A	264760
500-87368-1 MSD	MW-05	Dissolved	Water	6020A	264760
500-87368-2	MW-06	Dissolved	Water	6020A	264760
500-87368-3	MW-07	Dissolved	Water	6020A	264760
500-87368-4	Duplicate	Dissolved	Water	6020A	264760
500-87368-8	MW-01	Dissolved	Water	6020A	264760
500-87368-9	MW-02	Dissolved	Water	6020A	264760
500-87368-10	MW-03	Dissolved	Water	6020A	264760
500-87368-11	MW-04	Dissolved	Water	6020A	264760
LCS 500-264760/2-A	Lab Control Sample	Soluble	Water	6020A	264760
MB 500-264760/1-A	Method Blank	Soluble	Water	6020A	264760

General Chemistry

Analysis Batch: 263001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	SM 4500 NO2 B	
500-87368-2	MW-06	Dissolved	Water	SM 4500 NO2 B	
500-87368-3	MW-07	Dissolved	Water	SM 4500 NO2 B	
500-87368-4	Duplicate	Dissolved	Water	SM 4500 NO2 B	
LCS 500-263001/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	
MB 500-263001/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	

Analysis Batch: 263248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-8	MW-01	Dissolved	Water	SM 4500 NO2 B	
500-87368-9	MW-02	Dissolved	Water	SM 4500 NO2 B	
500-87368-10	MW-03	Dissolved	Water	SM 4500 NO2 B	
500-87368-11	MW-04	Dissolved	Water	SM 4500 NO2 B	
LCS 500-263248/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	
MB 500-263248/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	

General Chemistry (Continued)

Analysis Batch: 263521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	SM 2540C	
500-87368-1 DU	MW-05	Dissolved	Water	SM 2540C	
500-87368-1 MS	MW-05	Dissolved	Water	SM 2540C	
500-87368-2	MW-06	Dissolved	Water	SM 2540C	
500-87368-3	MW-07	Dissolved	Water	SM 2540C	
500-87368-4	Duplicate	Dissolved	Water	SM 2540C	
500-87368-8	MW-01	Dissolved	Water	SM 2540C	
500-87368-9	MW-02	Dissolved	Water	SM 2540C	
500-87368-10	MW-03	Dissolved	Water	SM 2540C	
500-87368-11	MW-04	Dissolved	Water	SM 2540C	
LCS 500-263521/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 500-263521/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 263687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	SM 4500 NO3 F	
500-87368-2	MW-06	Dissolved	Water	SM 4500 NO3 F	
500-87368-3	MW-07	Dissolved	Water	SM 4500 NO3 F	
500-87368-4	Duplicate	Dissolved	Water	SM 4500 NO3 F	
500-87368-8	MW-01	Dissolved	Water	SM 4500 NO3 F	
500-87368-9	MW-02	Dissolved	Water	SM 4500 NO3 F	
500-87368-10	MW-03	Dissolved	Water	SM 4500 NO3 F	
500-87368-11	MW-04	Dissolved	Water	SM 4500 NO3 F	
LCS 500-263687/4	Lab Control Sample	Total/NA	Water	SM 4500 NO3 F	
MB 500-263687/3	Method Blank	Total/NA	Water	SM 4500 NO3 F	

Prep Batch: 263824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	9010B	
500-87368-2	MW-06	Dissolved	Water	9010B	
500-87368-3	MW-07	Dissolved	Water	9010B	
500-87368-4	Duplicate	Dissolved	Water	9010B	
500-87368-8	MW-01	Dissolved	Water	9010B	
500-87368-9	MW-02	Dissolved	Water	9010B	
500-87368-10	MW-03	Dissolved	Water	9010B	
500-87368-11	MW-04	Dissolved	Water	9010B	
LCS 500-263824/2-A	Lab Control Sample	Total/NA	Water	9010B	
MB 500-263824/1-A	Method Blank	Total/NA	Water	9010B	

Analysis Batch: 263880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	9014	263824
500-87368-2	MW-06	Dissolved	Water	9014	263824
500-87368-3	MW-07	Dissolved	Water	9014	263824
500-87368-4	Duplicate	Dissolved	Water	9014	263824
500-87368-8	MW-01	Dissolved	Water	9014	263824
500-87368-9	MW-02	Dissolved	Water	9014	263824
500-87368-10	MW-03	Dissolved	Water	9014	263824
500-87368-11	MW-04	Dissolved	Water	9014	263824
LCS 500-263824/2-A	Lab Control Sample	Total/NA	Water	9014	263824
MB 500-263824/1-A	Method Blank	Total/NA	Water	9014	263824

General Chemistry (Continued)

Analysis Batch: 263938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	9251	
500-87368-2	MW-06	Dissolved	Water	9251	
500-87368-3	MW-07	Dissolved	Water	9251	
500-87368-4	Duplicate	Dissolved	Water	9251	
500-87368-8	MW-01	Dissolved	Water	9251	
500-87368-9	MW-02	Dissolved	Water	9251	
500-87368-10	MW-03	Dissolved	Water	9251	
500-87368-11	MW-04	Dissolved	Water	9251	
LCS 500-263938/5	Lab Control Sample	Total/NA	Water	9251	
MB 500-263938/4	Method Blank	Total/NA	Water	9251	

Analysis Batch: 264200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	Nitrate by calc	
500-87368-2	MW-06	Dissolved	Water	Nitrate by calc	
500-87368-3	MW-07	Dissolved	Water	Nitrate by calc	
500-87368-4	Duplicate	Dissolved	Water	Nitrate by calc	
500-87368-8	MW-01	Dissolved	Water	Nitrate by calc	
500-87368-9	MW-02	Dissolved	Water	Nitrate by calc	
500-87368-10	MW-03	Dissolved	Water	Nitrate by calc	
500-87368-11	MW-04	Dissolved	Water	Nitrate by calc	

Analysis Batch: 264378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	SM 4500 F C	
500-87368-2	MW-06	Dissolved	Water	SM 4500 F C	
500-87368-3	MW-07	Dissolved	Water	SM 4500 F C	
500-87368-4	Duplicate	Dissolved	Water	SM 4500 F C	
500-87368-8	MW-01	Dissolved	Water	SM 4500 F C	
500-87368-9	MW-02	Dissolved	Water	SM 4500 F C	
500-87368-10	MW-03	Dissolved	Water	SM 4500 F C	
500-87368-11	MW-04	Dissolved	Water	SM 4500 F C	
LCS 500-264378/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MB 500-264378/31	Method Blank	Total/NA	Water	SM 4500 F C	

Analysis Batch: 264746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87368-1	MW-05	Dissolved	Water	9038	
500-87368-2	MW-06	Dissolved	Water	9038	
500-87368-3	MW-07	Dissolved	Water	9038	
500-87368-4	Duplicate	Dissolved	Water	9038	
500-87368-8	MW-01	Dissolved	Water	9038	
500-87368-9	MW-02	Dissolved	Water	9038	
500-87368-10	MW-03	Dissolved	Water	9038	
500-87368-11	MW-04	Dissolved	Water	9038	
LCS 500-264746/4	Lab Control Sample	Total/NA	Water	9038	
MB 500-264746/3	Method Blank	Total/NA	Water	9038	

Surrogate Summary

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

TestAmerica Job ID: 500-87368-1

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 (75-125)	TOL (75-120)	BFB (75-120)	DBFM (75-120)
500-87368-1	MW-05	104	99	108	89
500-87368-2	MW-06	95	100	110	87
500-87368-3	MW-07	95	100	109	86
500-87368-4	Duplicate	93	100	108	85
500-87368-8	MW-01	107	96	107	92
500-87368-9	MW-02	94	99	108	88
500-87368-10	MW-03	96	98	107	89
500-87368-10 MS	MW-03	98	99	110	95
500-87368-10 MSD	MW-03	104	97	111	98
500-87368-11	MW-04	95	102	105	86
500-87368-12	TRIP BLANK	94	101	105	86
LCS 500-264055/4	Lab Control Sample	94	100	107	90
LCS 500-264177/4	Lab Control Sample	94	99	108	91
MB 500-264055/6	Method Blank	95	101	108	87
MB 500-264177/6	Method Blank	96	98	107	89

Surrogate Legend

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

10

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

Lab Sample ID: MB 500-264055/6
Matrix: Water
Analysis Batch: 264055

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			11/13/14 15:03	1
Toluene	<0.00050		0.00050		mg/L			11/13/14 15:03	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/13/14 15:03	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/13/14 15:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 125*		*11/13/14 15:03*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*11/13/14 15:03*	*1*
4-Bromofluorobenzene (Surr)	*108*		*75 - 120*		*11/13/14 15:03*	*1*
Dibromofluoromethane	*87*		*75 - 120*		*11/13/14 15:03*	*1*

Lab Sample ID: LCS 500-264055/4
Matrix: Water
Analysis Batch: 264055

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	0.0467		mg/L		93	75 - 120
Toluene	0.0500	0.0508		mg/L		102	75 - 120
Ethylbenzene	0.0500	0.0470		mg/L		94	75 - 120
Xylenes, Total	0.100	0.0992		mg/L		99	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*
Toluene-d8 (Surr)	*100*		*75 - 120*
4-Bromofluorobenzene (Surr)	*107*		*75 - 120*
Dibromofluoromethane	*90*		*75 - 120*

Lab Sample ID: MB 500-264177/6
Matrix: Water
Analysis Batch: 264177

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			11/14/14 12:21	1
Toluene	<0.00050		0.00050		mg/L			11/14/14 12:21	1
Ethylbenzene	<0.00050		0.00050		mg/L			11/14/14 12:21	1
Xylenes, Total	<0.0010		0.0010		mg/L			11/14/14 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 125*		*11/14/14 12:21*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*11/14/14 12:21*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 120*		*11/14/14 12:21*	*1*
Dibromofluoromethane	*89*		*75 - 120*		*11/14/14 12:21*	*1*

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

Lab Sample ID: LCS 500-264177/4
Matrix: Water
Analysis Batch: 264177

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	0.0473		mg/L		95	75 - 120
Toluene	0.0500	0.0512		mg/L		102	75 - 120
Ethylbenzene	0.0500	0.0490		mg/L		98	75 - 120
Xylenes, Total	0.100	0.102		mg/L		102	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*
Toluene-d8 (Surr)	*99*		*75 - 120*
4-Bromofluorobenzene (Surr)	*108*		*75 - 120*
Dibromofluoromethane	*91*		*75 - 120*

Lab Sample ID: 500-87368-10 MS
Matrix: Water
Analysis Batch: 264177

Client Sample ID: MW-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00050		0.0500	0.0436		mg/L		87	75 - 120
Toluene	<0.00050		0.0500	0.0456		mg/L		91	75 - 120
Ethylbenzene	<0.00050		0.0500	0.0427		mg/L		85	75 - 120
Xylenes, Total	<0.0010		0.100	0.0902		mg/L		90	75 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 125*
Toluene-d8 (Surr)	*99*		*75 - 120*
4-Bromofluorobenzene (Surr)	*110*		*75 - 120*
Dibromofluoromethane	*95*		*75 - 120*

Lab Sample ID: 500-87368-10 MSD
Matrix: Water
Analysis Batch: 264177

Client Sample ID: MW-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00050		0.0500	0.0468		mg/L		94	75 - 120	7	20
Toluene	<0.00050		0.0500	0.0487		mg/L		97	75 - 120	7	20
Ethylbenzene	<0.00050		0.0500	0.0456		mg/L		91	75 - 120	7	20
Xylenes, Total	<0.0010		0.100	0.0959		mg/L		96	75 - 120	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 125*
Toluene-d8 (Surr)	*97*		*75 - 120*
4-Bromofluorobenzene (Surr)	*111*		*75 - 120*
Dibromofluoromethane	*98*		*75 - 120*

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 320-58510/6
Matrix: Water
Analysis Batch: 58510

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			11/19/14 23:09	1

Lab Sample ID: LCS 320-58510/7
Matrix: Water
Analysis Batch: 58510

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	0.0487		mg/L		97	85 - 115

Lab Sample ID: MRL 320-58510/5
Matrix: Water
Analysis Batch: 58510

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	4.24		ug/L		106	75 - 125

Lab Sample ID: 500-87368-1 MS
Matrix: Water
Analysis Batch: 58510

Client Sample ID: MW-05
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	0.0421		mg/L		84	80 - 120

Lab Sample ID: 500-87368-1 MSD
Matrix: Water
Analysis Batch: 58510

Client Sample ID: MW-05
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	0.0431		mg/L		86	80 - 120	2	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: 500-87368-1 MS
Matrix: Water
Analysis Batch: 264940

Client Sample ID: MW-05
Prep Type: Dissolved
Prep Batch: 264760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0030	^	0.500	0.385	^	mg/L		77	75 - 125
Barium	0.046		0.500	0.509		mg/L		93	75 - 125
Beryllium	<0.0010		0.0500	0.0419		mg/L		84	75 - 125
Cadmium	<0.00050		0.0500	0.0517		mg/L		103	75 - 125
Cobalt	<0.0010		0.500	0.433		mg/L		87	75 - 125
Copper	<0.0020		0.250	0.220		mg/L		88	75 - 125
Iron	8.6		1.00	9.13	4	mg/L		49	75 - 125
Lead	<0.00050		0.100	0.0999		mg/L		100	75 - 125
Manganese	0.62		0.500	1.02		mg/L		81	75 - 125
Nickel	0.0020		0.500	0.434		mg/L		86	75 - 125
Selenium	<0.0025		0.100	0.115		mg/L		115	75 - 125
Silver	<0.00050		0.0500	0.0441		mg/L		88	75 - 125

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

Lab Sample ID: 500-87368-1 MS
Matrix: Water
Analysis Batch: 264940

Client Sample ID: MW-05
Prep Type: Dissolved
Prep Batch: 264760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	<0.0020		0.100	0.102		mg/L		102	75 - 125
Vanadium	<0.0050		0.500	0.438		mg/L		88	75 - 125
Zinc	<0.020		0.500	0.467		mg/L		93	75 - 125

Lab Sample ID: 500-87368-1 MS
Matrix: Water
Analysis Batch: 265037

Client Sample ID: MW-05
Prep Type: Dissolved
Prep Batch: 264760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0097		0.100	0.139	F1	mg/L		129	75 - 125
Chromium	<0.0050		0.200	0.217		mg/L		108	75 - 125

Lab Sample ID: 500-87368-1 MS
Matrix: Water
Analysis Batch: 265239

Client Sample ID: MW-05
Prep Type: Dissolved
Prep Batch: 264760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	36		1.00	139	4	mg/L		10238	75 - 125

Lab Sample ID: 500-87368-1 MSD
Matrix: Water
Analysis Batch: 264940

Client Sample ID: MW-05
Prep Type: Dissolved
Prep Batch: 264760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.0030	^	0.500	0.384	^	mg/L		77	75 - 125	0	20
Barium	0.046		0.500	0.500		mg/L		91	75 - 125	2	20
Beryllium	<0.0010		0.0500	0.0407		mg/L		81	75 - 125	3	20
Cadmium	<0.00050		0.0500	0.0515		mg/L		103	75 - 125	0	20
Cobalt	<0.0010		0.500	0.431		mg/L		86	75 - 125	1	20
Copper	<0.0020		0.250	0.221		mg/L		88	75 - 125	1	20
Iron	8.6		1.00	9.21	4	mg/L		57	75 - 125	1	20
Lead	<0.00050		0.100	0.0991		mg/L		99	75 - 125	1	20
Manganese	0.62		0.500	1.04		mg/L		84	75 - 125	1	20
Nickel	0.0020		0.500	0.434		mg/L		86	75 - 125	0	20
Selenium	<0.0025		0.100	0.116		mg/L		116	75 - 125	1	20
Silver	<0.00050		0.0500	0.0434		mg/L		87	75 - 125	2	20
Thallium	<0.0020		0.100	0.102		mg/L		102	75 - 125	1	20
Vanadium	<0.0050		0.500	0.429		mg/L		86	75 - 125	2	20
Zinc	<0.020		0.500	0.461		mg/L		92	75 - 125	1	20

Lab Sample ID: 500-87368-1 MSD
Matrix: Water
Analysis Batch: 265037

Client Sample ID: MW-05
Prep Type: Dissolved
Prep Batch: 264760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0097		0.100	0.141	F1	mg/L		131	75 - 125	1	20
Chromium	<0.0050		0.200	0.217		mg/L		108	75 - 125	0	20

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

Lab Sample ID: 500-87368-1 MSD — **Client Sample ID: MW-05**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 265239 — **Prep Batch: 264760**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	36		1.00	141	4	mg/L		10418	75 - 125	1	20

Lab Sample ID: 500-87368-1 DU — **Client Sample ID: MW-05**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 264940 — **Prep Batch: 264760**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0030	^	<0.0030		mg/L		NC	20
Barium	0.046		0.0462		mg/L		0.5	20
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Cadmium	<0.00050		<0.00050		mg/L		NC	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Copper	<0.0020		<0.0020		mg/L		NC	20
Iron	8.6		8.58		mg/L		0.7	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Manganese	0.62		0.612		mg/L		1	20
Nickel	0.0020		<0.0020		mg/L		NC	20
Selenium	<0.0025		<0.0025		mg/L		NC	20
Silver	<0.00050		<0.00050		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20
Vanadium	<0.0050		<0.0050		mg/L		NC	20
Zinc	<0.020		<0.020		mg/L		NC	20

Lab Sample ID: 500-87368-1 DU — **Client Sample ID: MW-05**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 265037 — **Prep Batch: 264760**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.0097		0.00929		mg/L		4	20
Chromium	<0.0050		<0.0050		mg/L		NC	20

Lab Sample ID: 500-87368-1 DU — **Client Sample ID: MW-05**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 265239 — **Prep Batch: 264760**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	36		35.2		mg/L		4	20

Lab Sample ID: MB 500-264760/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 264940 — **Prep Batch: 264760**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^	0.0030		mg/L		11/18/14 10:44	11/18/14 16:52	1
Barium	<0.0025		0.0025		mg/L		11/18/14 10:44	11/18/14 16:52	1
Beryllium	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 16:52	1
Cadmium	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 16:52	1
Cobalt	<0.0010		0.0010		mg/L		11/18/14 10:44	11/18/14 16:52	1
Copper	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 16:52	1

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

Lab Sample ID: MB 500-264760/1-A
Matrix: Water
Analysis Batch: 264940

Client Sample ID: Method Blank
Prep Type: Soluble
Prep Batch: 264760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.10		0.10		mg/L		11/18/14 10:44	11/18/14 16:52	1
Lead	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 16:52	1
Manganese	<0.0025		0.0025		mg/L		11/18/14 10:44	11/18/14 16:52	1
Nickel	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 16:52	1
Selenium	<0.0025		0.0025		mg/L		11/18/14 10:44	11/18/14 16:52	1
Silver	<0.00050		0.00050		mg/L		11/18/14 10:44	11/18/14 16:52	1
Thallium	<0.0020		0.0020		mg/L		11/18/14 10:44	11/18/14 16:52	1
Vanadium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/18/14 16:52	1
Zinc	<0.020		0.020		mg/L		11/18/14 10:44	11/18/14 16:52	1

Lab Sample ID: MB 500-264760/1-A
Matrix: Water
Analysis Batch: 265037

Client Sample ID: Method Blank
Prep Type: Soluble
Prep Batch: 264760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		11/18/14 10:44	11/19/14 11:42	1
Chromium	<0.0050		0.0050		mg/L		11/18/14 10:44	11/19/14 11:42	1

Lab Sample ID: MB 500-264760/1-A
Matrix: Water
Analysis Batch: 265239

Client Sample ID: Method Blank
Prep Type: Soluble
Prep Batch: 264760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		11/18/14 10:44	11/20/14 12:48	1

Lab Sample ID: LCS 500-264760/2-A
Matrix: Water
Analysis Batch: 264940

Client Sample ID: Lab Control Sample
Prep Type: Soluble
Prep Batch: 264760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.441	^	mg/L		88	80 - 120
Barium	0.500	0.477		mg/L		95	80 - 120
Beryllium	0.0500	0.0445		mg/L		89	80 - 120
Cadmium	0.0500	0.0511		mg/L		102	80 - 120
Cobalt	0.500	0.448		mg/L		90	80 - 120
Copper	0.250	0.233		mg/L		93	80 - 120
Iron	1.00	1.06		mg/L		106	80 - 120
Lead	0.100	0.102		mg/L		102	80 - 120
Manganese	0.500	0.459		mg/L		92	80 - 120
Nickel	0.500	0.453		mg/L		91	80 - 120
Selenium	0.100	0.0966		mg/L		97	80 - 120
Silver	0.0500	0.0491		mg/L		98	80 - 120
Thallium	0.100	0.104		mg/L		104	80 - 120
Vanadium	0.500	0.452		mg/L		90	80 - 120
Zinc	0.500	0.477		mg/L		95	80 - 120

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

Lab Sample ID: LCS 500-264760/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 265037 — **Prep Batch: 264760**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.119		mg/L		119	80 - 120
Chromium	0.200	0.237		mg/L		119	80 - 120

Lab Sample ID: LCS 500-264760/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 265239 — **Prep Batch: 264760**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.19		mg/L		119	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-263414/12-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263657 — **Prep Batch: 263414**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/10/14 11:45	11/11/14 08:35	1

Lab Sample ID: LCS 500-263414/13-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263657 — **Prep Batch: 263414**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00211		mg/L		106	80 - 120

Method: 9014 - Cyanide

Lab Sample ID: MB 500-263824/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263880 — **Prep Batch: 263824**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		11/12/14 11:50	11/12/14 14:55	1

Lab Sample ID: LCS 500-263824/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263880 — **Prep Batch: 263824**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.106		mg/L		106	80 - 120

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 500-264746/3
Matrix: Water
Analysis Batch: 264746

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			11/18/14 09:21	1

Lab Sample ID: LCS 500-264746/4
Matrix: Water
Analysis Batch: 264746

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	18.9		mg/L		94	80 - 120

Method: 9251 - Chloride

Lab Sample ID: MB 500-263938/4
Matrix: Water
Analysis Batch: 263938

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			11/12/14 23:08	1

Lab Sample ID: LCS 500-263938/5
Matrix: Water
Analysis Batch: 263938

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	53.3		mg/L		107	80 - 120

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

Lab Sample ID: MB 500-263521/1
Matrix: Water
Analysis Batch: 263521

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			11/10/14 21:07	1

Lab Sample ID: LCS 500-263521/2
Matrix: Water
Analysis Batch: 263521

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	258		mg/L		103	80 - 120

Lab Sample ID: 500-87368-1 MS
Matrix: Water
Analysis Batch: 263521

Client Sample ID: MW-05
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1500		250	1810	4	mg/L		140	75 - 125

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

Lab Sample ID: 500-87368-1 DU
Matrix: Water
Analysis Batch: 263521

Client Sample ID: MW-05
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1500		1450		mg/L		0.3	5

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-264378/31
Matrix: Water
Analysis Batch: 264378

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			11/14/14 14:10	1

Lab Sample ID: LCS 500-264378/32
Matrix: Water
Analysis Batch: 264378

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	11.4		mg/L		114	80 - 120

Method: SM 4500 NO2 B - Nitrogen, Nitrite

Lab Sample ID: MB 500-263001/3
Matrix: Water
Analysis Batch: 263001

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			11/06/14 12:55	1

Lab Sample ID: LCS 500-263001/4
Matrix: Water
Analysis Batch: 263001

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 500-263248/3
Matrix: Water
Analysis Batch: 263248

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			11/07/14 14:20	1

Lab Sample ID: LCS 500-263248/4
Matrix: Water
Analysis Batch: 263248

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	0.0960		mg/L		96	80 - 120

Method: SM 4500 NO3 F - Nitrogen, Nitrate

Lab Sample ID: MB 500-263687/3
Matrix: Water
Analysis Batch: 263687

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			11/11/14 14:14	1

Lab Sample ID: LCS 500-263687/4
Matrix: Water
Analysis Batch: 263687

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	1.00	1.03		mg/L		103	80 - 120

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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

500-87368 COC

Report To:		Bill To:
Contact:	Rich Gnat	Contact:
Company:	KPRG & Associates Inc.	Company:
Address:	14665 W. Llisbon Rd. Suite 2B	Address:
	Brookfield, WI	
Phone:	262-781-0475	Phone:
Fax:		Fax:
Email:		PO #:

Lab Lot # 500- 87368

Package Sealed	Samples Sealed
Yes No	Yes No
Received on Ice	**Samples Intact**
Yes No	Yes No N/A
Temperature °C of Cooler	4.1

Sampler Name:	Client Project #	Refrg #
Ian John Howieson	12313.2	# / Cont.
Project Name:	**TestAmerica Project Number:**	Volume
Waukegan Station Ash Ponds	50004763	Preserv.
Project Location:	**Date Required**	
Waukegan, IL	Hard Copy: ____/____/____	
Lab PM: Bonnie Stadelmann	Fax: ____/____/____	

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

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	18 Metals + Hg, dissolved	Cl, TDS, SO4, Fl, dissolved	NO2, dissolved	NO3+NO2, dissolved	Cyanide, dissolved	BTEX	Perchlorate	Additional Analyses / Remarks
1		MW-05	11/5/2014	9:20	W				X					
2		MW-06	11/5/2014	12:15	W				X					
3		MW-07	11/5/2014	11:00	W				X					
4		Duplicate	11/5/2014	...	W				X					

RELINQUISHED BY:	COMPANY:	DATE:	TIME:	RECEIVED BY:	COMPANY:	DATE:	TIME:
	KPRG	11-05-14	18:15	FEDEX			
RELINQUISHED BY:	COMPANY:	DATE:	TIME:	RECEIVED BY:	COMPANY:	DATE:	TIME:
					TAL	11/6/14	1025

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, 6, 14
Courier: FX
Hand Delivered
Bill of Lading:

PAGE 3 of 3

STL-8208 (0600)

12

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:		PO #:	

500-87368 COC

Lab Lot # 500-87368

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

Temperature °C of Cooler: 2.4, 3.1, 2.8

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	12313.2	# / Cont.
Project Name:	**TestAmerica Project Number:**	**Volume**
Waukegan Station Ash Ponds	50004763	**Preserv.**
Project Location:	**Date Required**	
Waukegan, IL	Hard Copy: ___/___/___	
Lab PM: Bonnie Stadelmann	Fax: ___/___/___	

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	18 Metals + Hg, dissolved	Cl, TDS, SO4, Fl, dissolved	NO2, dissolved	NO3+NO2, dissolved	Cyanide, dissolved	BTEX	Perchlorate	Additional Analyses / Remarks
8		MW-01	11/6/2014	9:10	W	9	X	X	X	X	X	X	X	
9		MW-02	11/6/2014	13:50	W	9	X	X	X	X	X	X	X	
10		MW-03	11/6/2014	12:10	W	9	X	X	X	X	X	X	X	
11		MW-04	11/6/2014	10:45	W	9	X	X	X	X	X	X	X	
1		MW-05	11/5/2014	8:33	W	8	X	X		X	X	X	X	
2		MW-06	11/5/2014	12:15	W	8	X	X		X	X	X	X	
3		MW-07	11/5/2014	11:00	W	8	X	X		X	X	X	X	
4		DUPLICATE	11/5/2014	...	W	8	X	X		X	X	X	X	
12		TRIP BLANK	...		W	2								

RELINQUISHED BY:	COMPANY:	DATE:	TIME:	RECEIVED BY:	COMPANY:	DATE:	TIME:
	KPRG	11-07-14	12:28		TA	11-7-14	1228
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 ___/___/___
Courier:
Hand Delivered ☐
Bill of Lading:

PAGE 3 of 3

STL-8208 (0600)

12

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stadelmann, Bonnie M	Carrier Tracking No(s):	COC No: 500-56041.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: bonnie.stadelmann@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 500-87368-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/18/2014			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Waukegan Station Ash Ponds	Project #: 50004763			
Site: Ian John Howieson	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4.5
L - EDA	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-05 (500-87368-1)	11/5/14	09:20 Central		Water			X	1	
MW-06 (500-87368-2)	11/5/14	12:15 Central		Water			X	1	
MW-07 (500-87368-3)	11/5/14	11:00 Central		Water			X	1	
Duplicate (500-87368-4)	11/5/14	Central		Water			X	1	
MW-01 (500-87368-8)	11/6/14	09:10 Central		Water			X	1	
MW-02 (500-87368-9)	11/6/14	13:50 Central		Water			X	1	
MW-03 (500-87368-10)	11/6/14	12:10 Central		Water			X	1	
MW-04 (500-87368-11)	11/6/14	10:45 Central		Water			X	1	

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 11/7/14 1600	Company: TAL	Received by:	Date/Time: 11-8-14 930	Company: TAL	
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: 1.7 (COC/11.10.14 - temp on airbill form)

MWG13-15_45384
11/20/2014

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-87368-1

Login Number: 87368
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	4.1,2.4,3.1,2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have leg ble 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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

13

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-87368-1

Login Number: 87368
List Number: 2
Creator: Hytrek, Cheryl

List Source: TestAmerica Sacramento
List Creation: 11/08/14 11:29 AM

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.	True	
Sample containers have leg ble 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: Waukegan Station Ash Ponds

TestAmerica Job ID: 500-87368-1

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

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

Laboratory: TestAmerica Sacramento

All certifica ions held by this laboratory are listed. Not all cer ifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-16
Alaska (UST)	State Program	10	UST-055	12-18-14
Arizona	State Program	9	AZ0708	08-11-15
Arkansas DEQ	State Program	6	88-0691	06-17-15
California	State Program	9	2897	01-31-15
Colorado	State Program	8	N/A	08-31-15
Connecticut	State Program	1	PH-0691	06-30-15
Florida	NELAP	4	E87570	06-30-15
Hawaii	State Program	9	N/A	01-29-15
Illinois	NELAP	5	200060	03-17-15
Kansas	NELAP	7	E-10375	10-31-14 *
Louisiana	NELAP	6	30612	06-30-15
Michigan	State Program	5	9947	01-31-15
Nebraska	State Program	7	NE-OS-22-13	01-29-15
Nevada	State Program	9	CA44	07-31-15
New Jersey	NELAP	2	CA005	06-30-15
New York	NELAP	2	11666	04-01-15
Oregon	NELAP	10	CA200005	01-29-15
Oregon	NELAP Secondary AB	10	E87570	06-30-15
Pennsylvania	NELAP	3	9947	03-31-15
Texas	NELAP	6	T104704399-08-TX	05-31-15
US Fish & Wildlife	Federal		LE148388-0	12-31-14
USDA	Federal		P330-11-00436	12-30-14
USEPA UCMR	Federal	1	CA00044	11-06-16
Utah	NELAP	8	QUAN1	02-28-15
Washington	State Program	10	C581	05-05-15
West Virginia (DW)	State Program	3	9930C	12-31-14
Wyoming	State Program	8	8TMS-Q	01-29-15

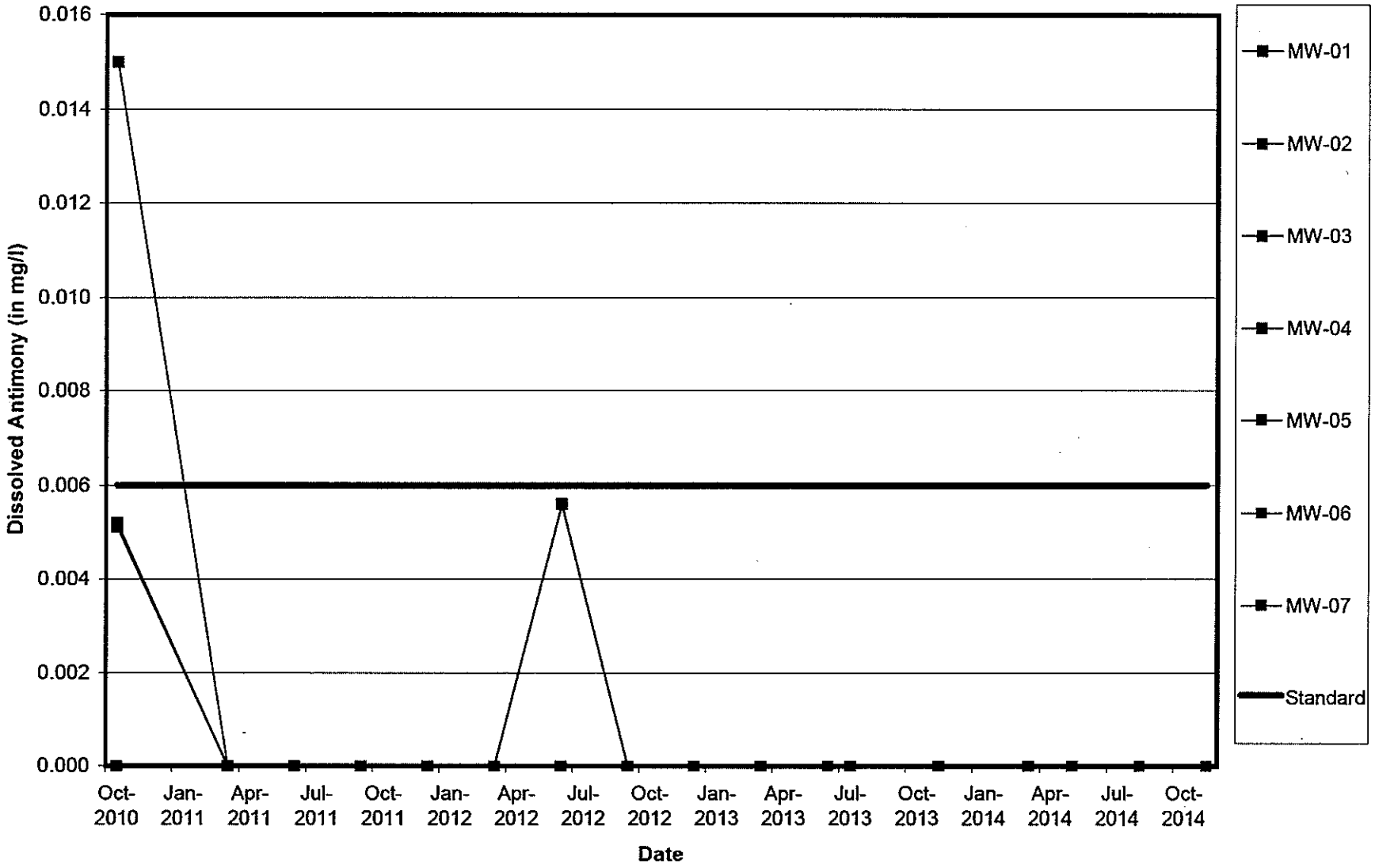
14

* Certification renewal pending - certification considered valid.

ATTACHMENT 3
Time Versus Concentration Curves

Midwest Generation Waukegan Station, Waukegan, IL

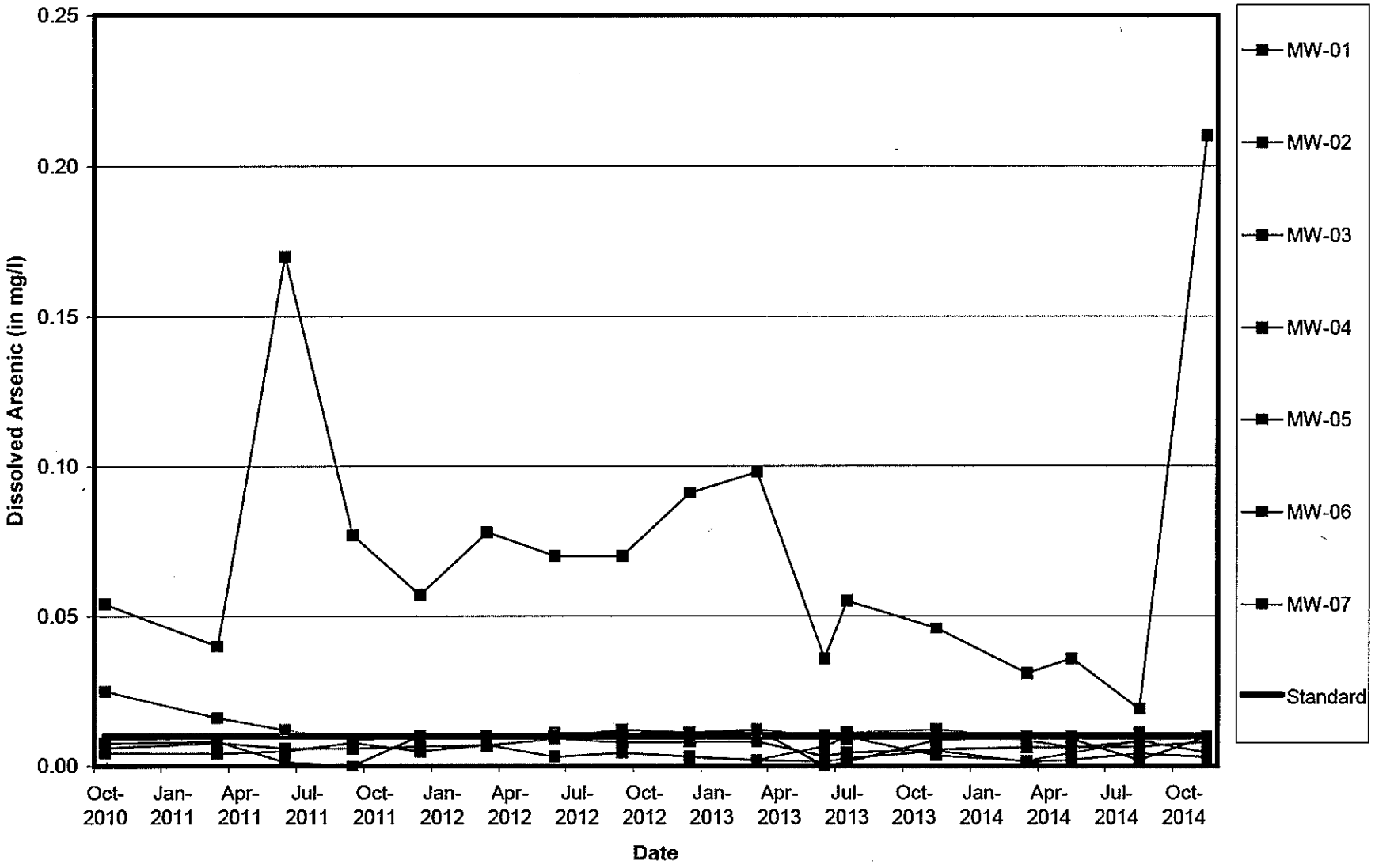
Dissolved Antimony vs. Time



MWG13-15_45389

Midwest Generation Waukegan Station, Waukegan, IL

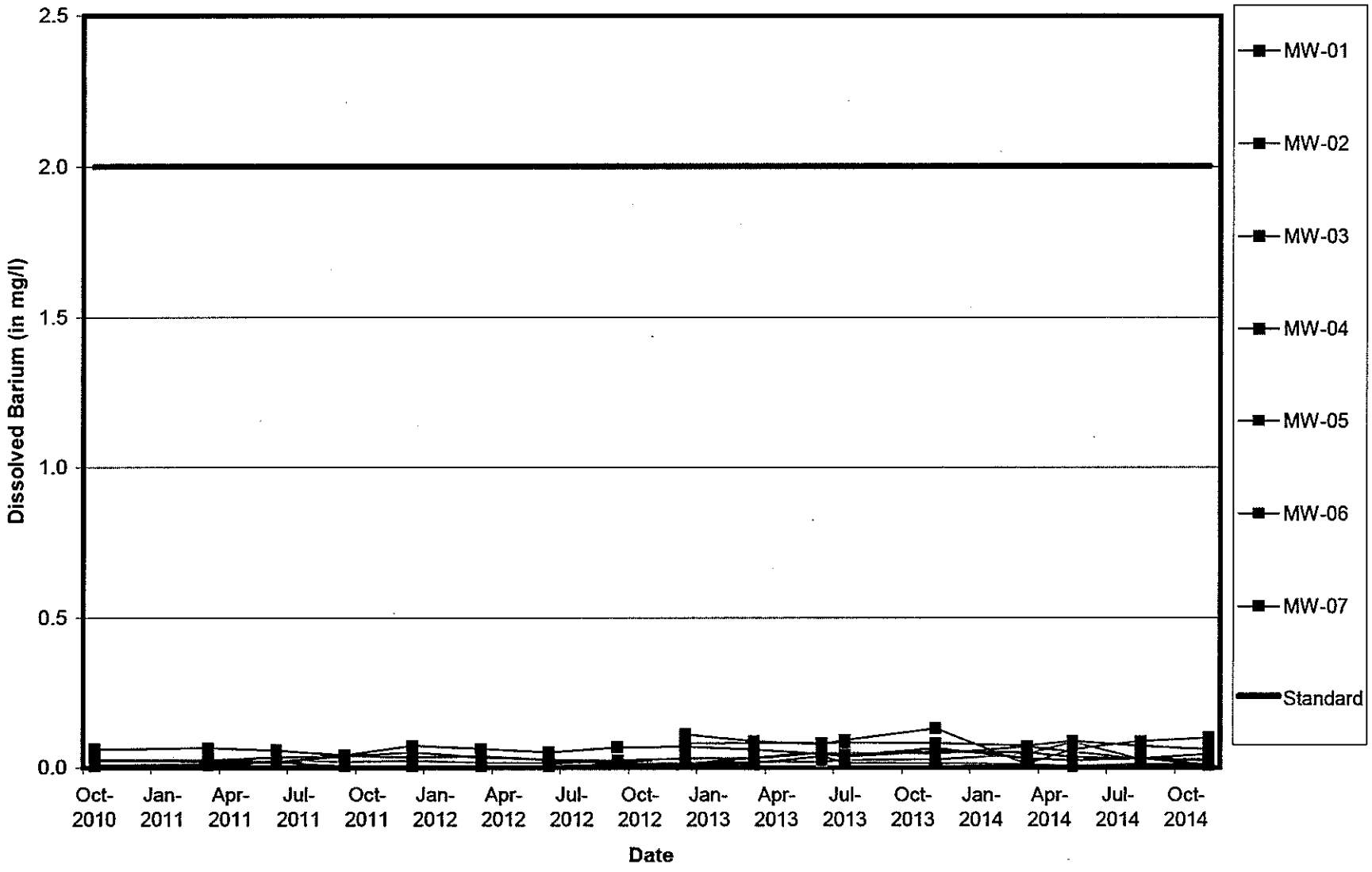
Dissolved Arsenic vs. Time



MWG13-15_45390

Midwest Generation Waukegan Station, Waukegan, IL

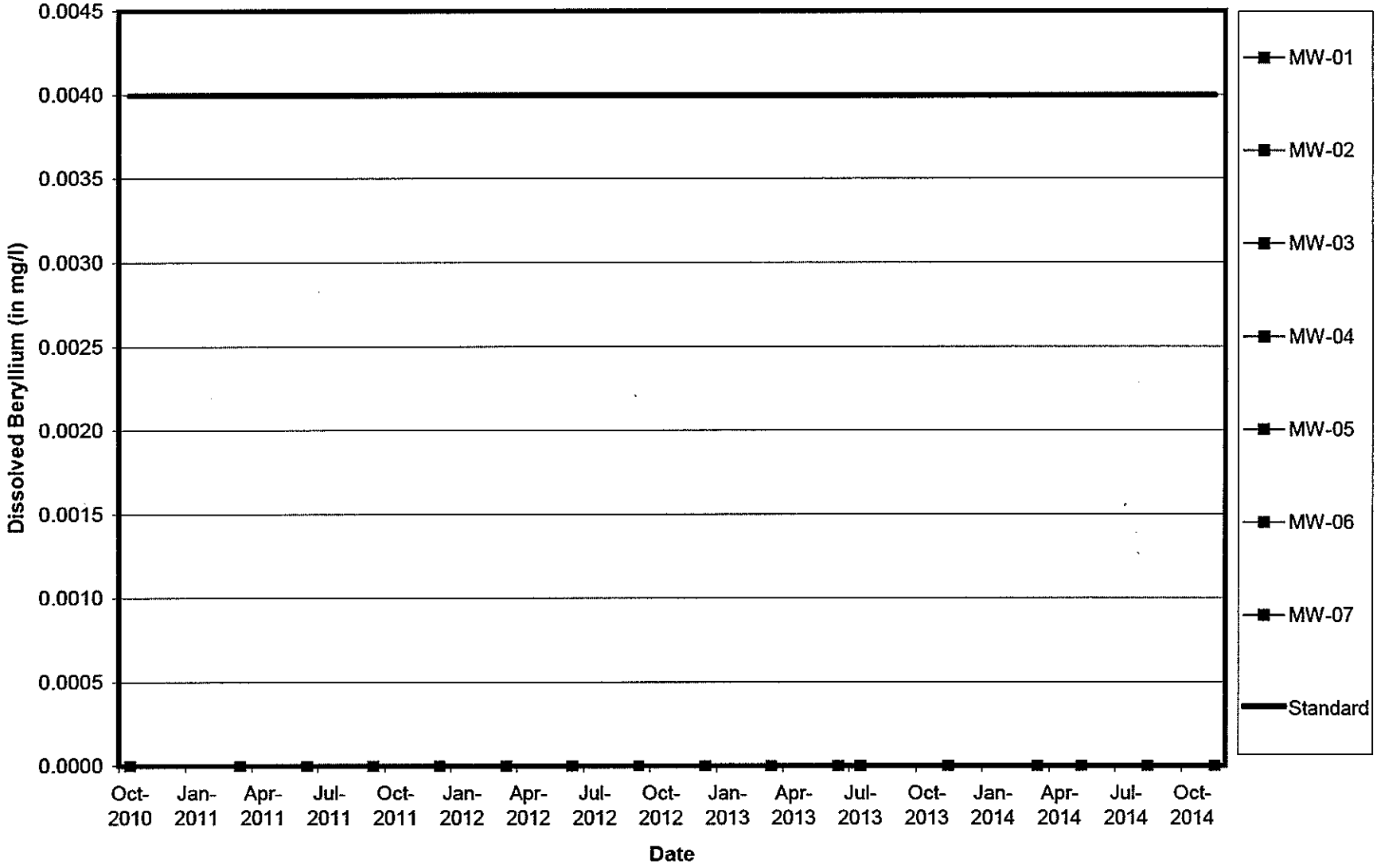
Dissolved Barium vs. Time



MWG13-15_45391

Midwest Generation Waukegan Station, Waukegan, IL

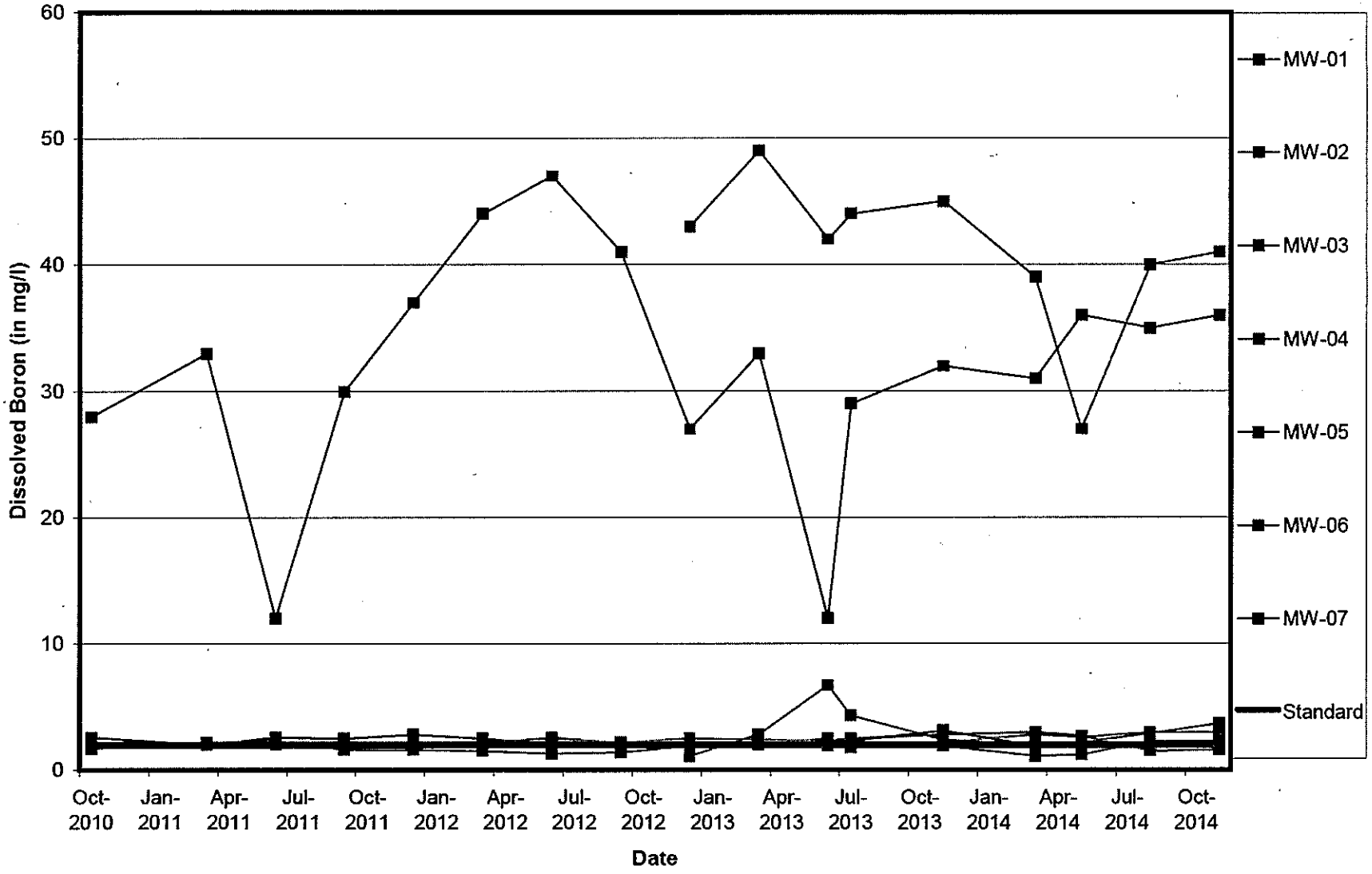
Dissolved Beryllium vs. Time



MWG13-15_45392

Midwest Generation Waukegan Station, Waukegan, IL

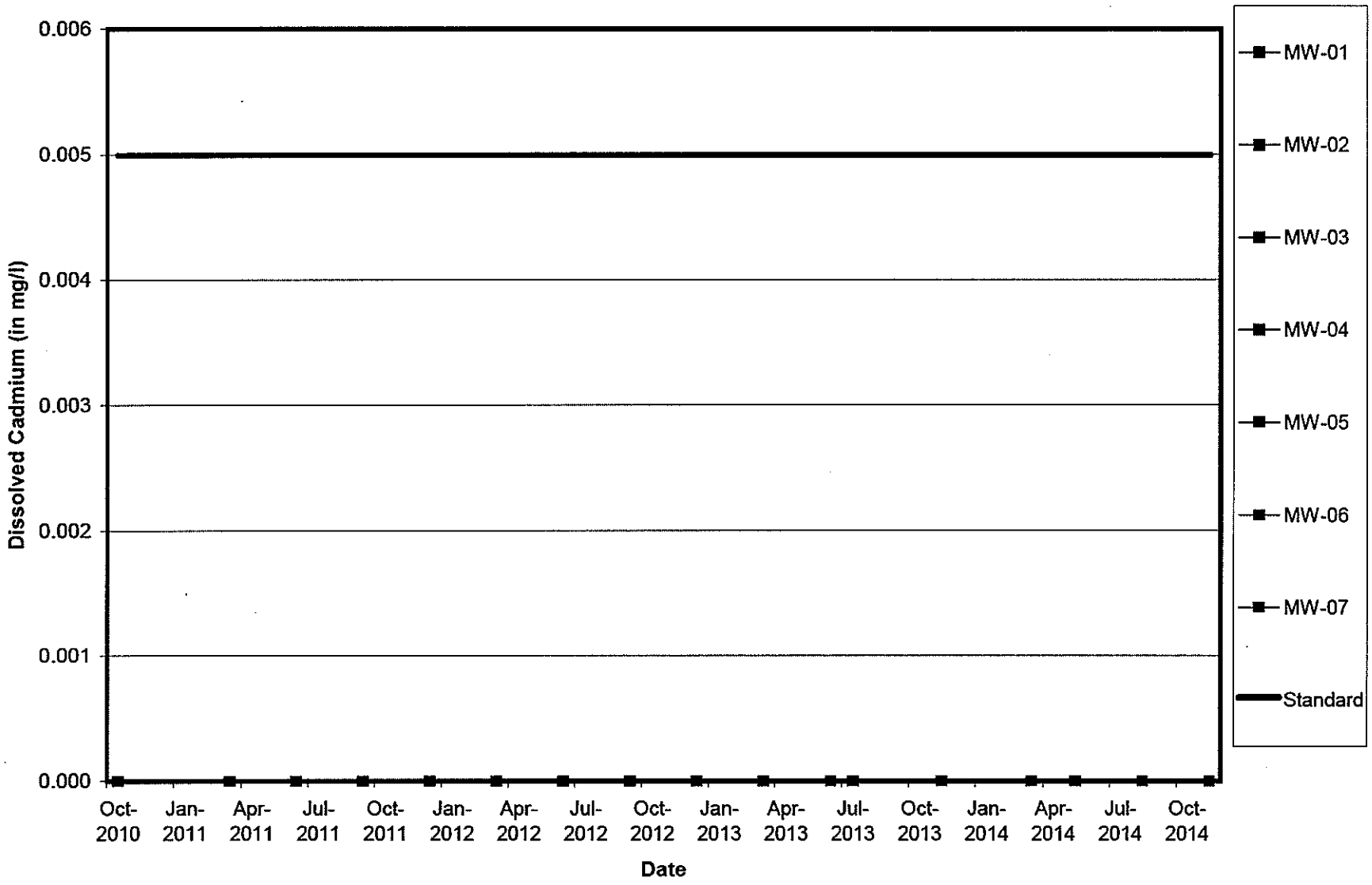
Dissolved Boron vs. Time



MWG13-15_45393

Midwest Generation Waukegan Station, Waukegan, IL

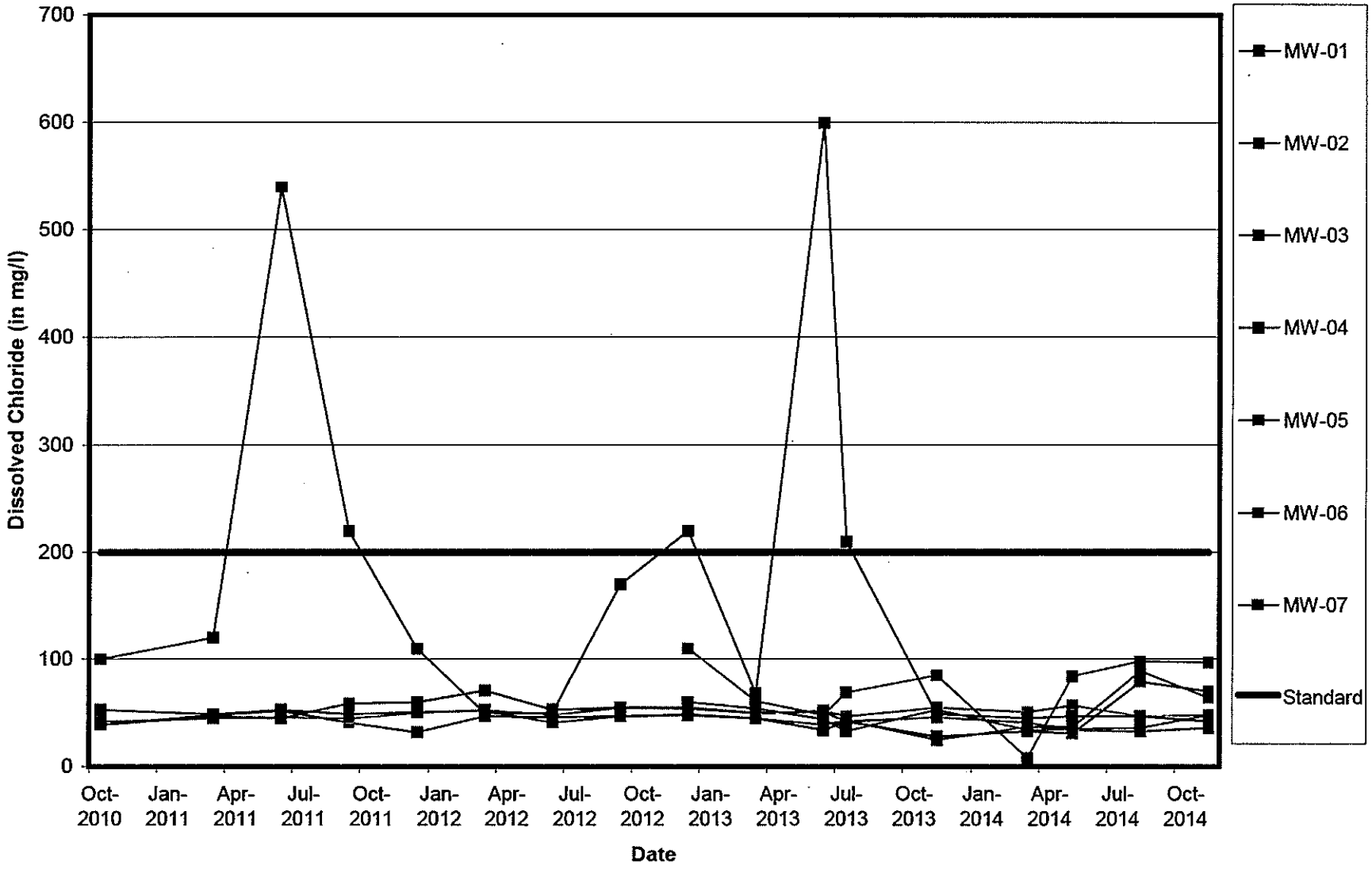
Dissolved Cadmium vs. Time



MWG13-15_45394

Midwest Generation Waukegan Station, Waukegan, IL

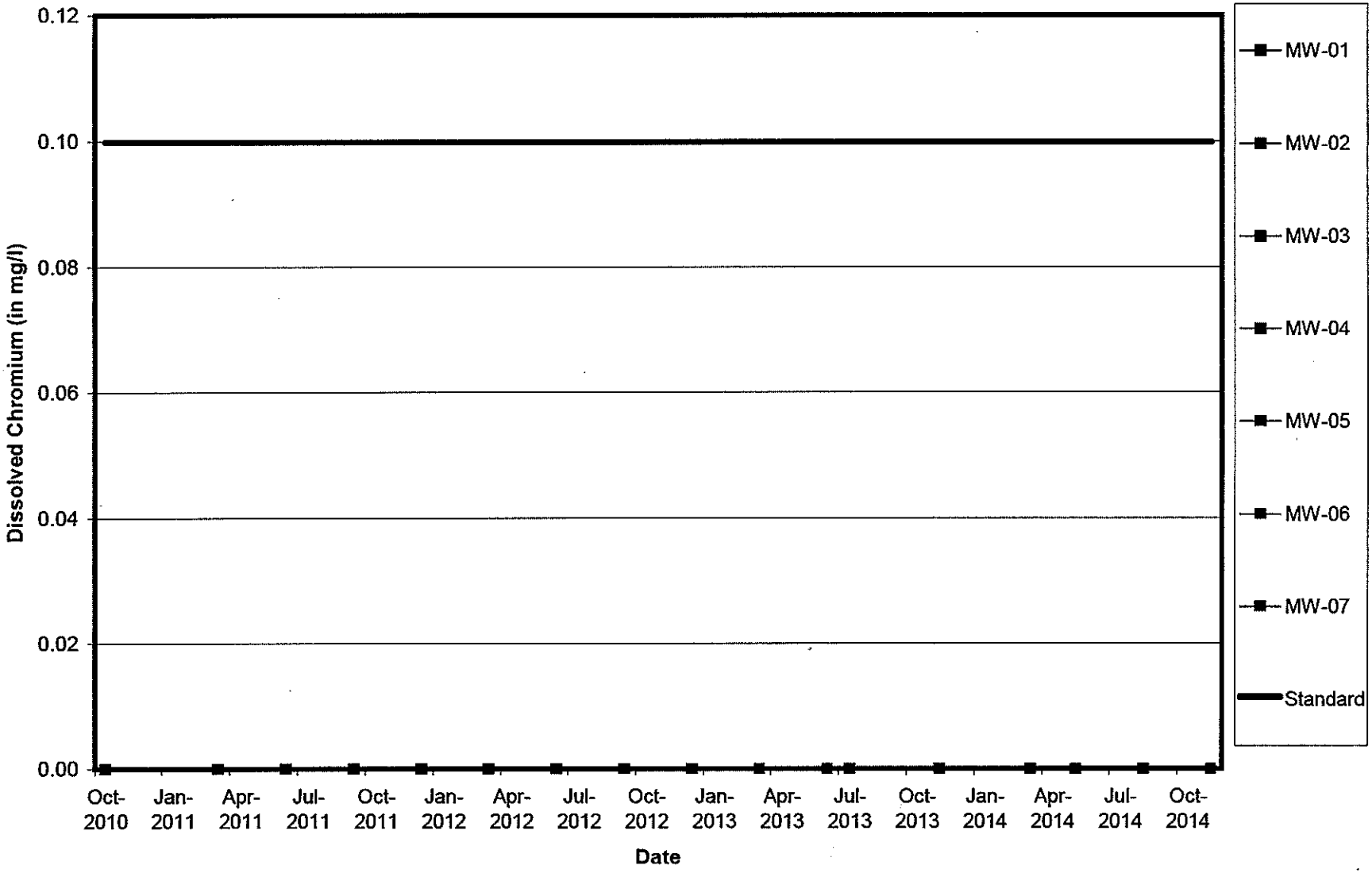
Dissolved Chloride vs. Time



MWG13-15_45395

Midwest Generation Waukegan Station, Waukegan, IL

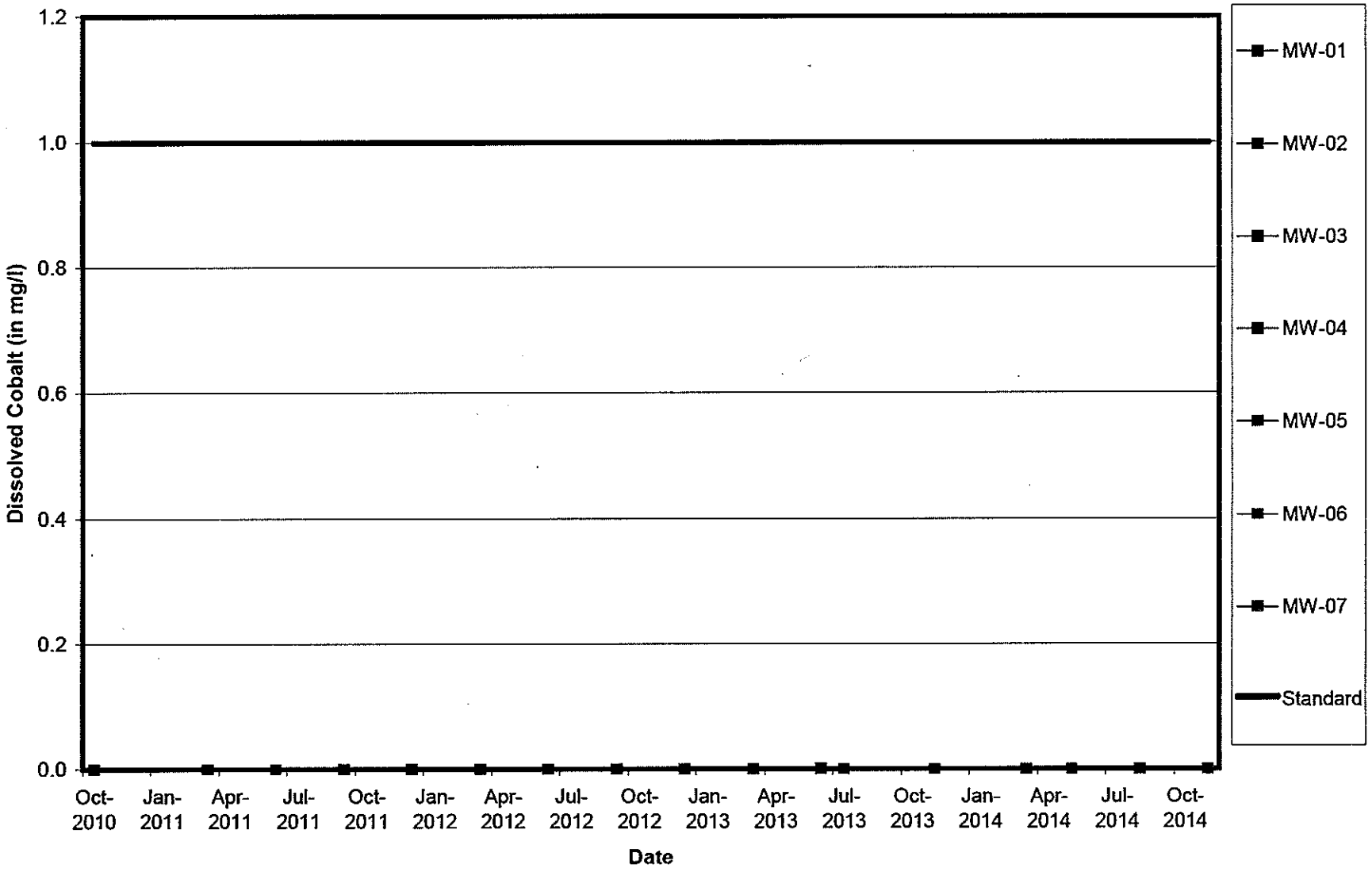
Dissolved Chromium vs. Time



MWG13-15_45396

Midwest Generation Waukegan Station, Waukegan, IL

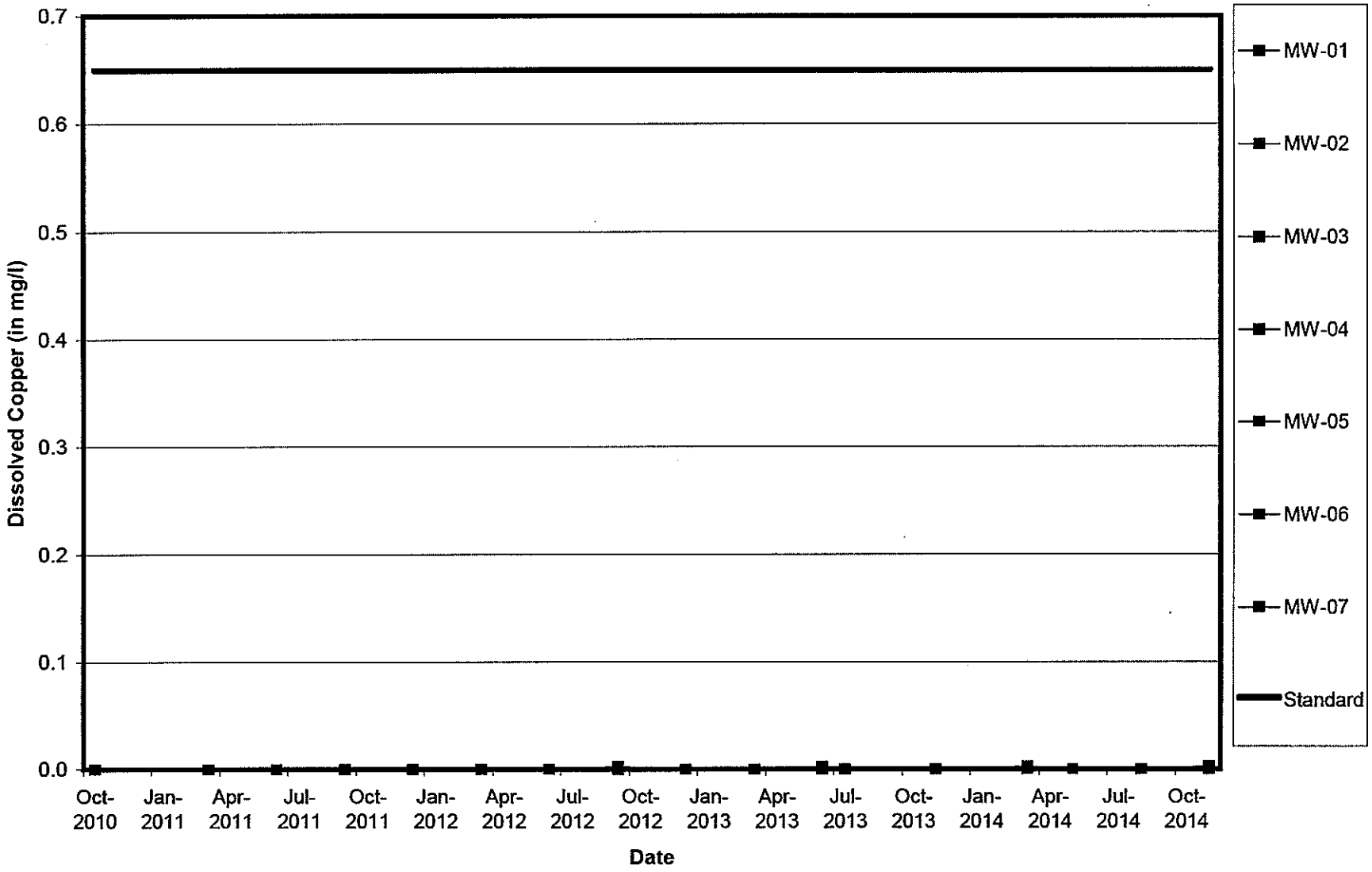
Dissolved Cobalt vs. Time



MWG13-15_45397

Midwest Generation Waukegan Station, Waukegan, IL

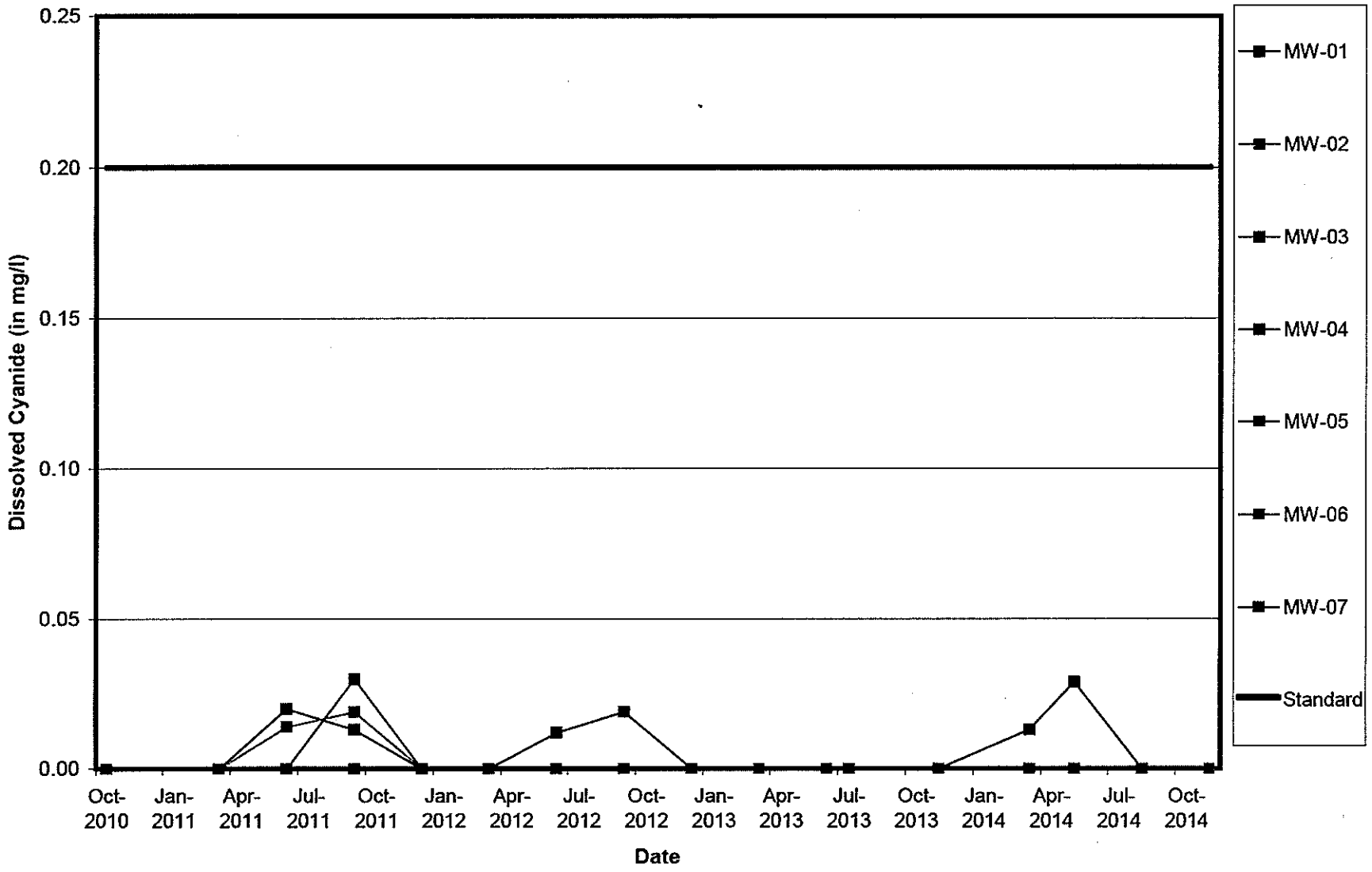
Dissolved Copper vs. Time



MWG13-15_45398

Midwest Generation Waukegan Station, Waukegan, IL

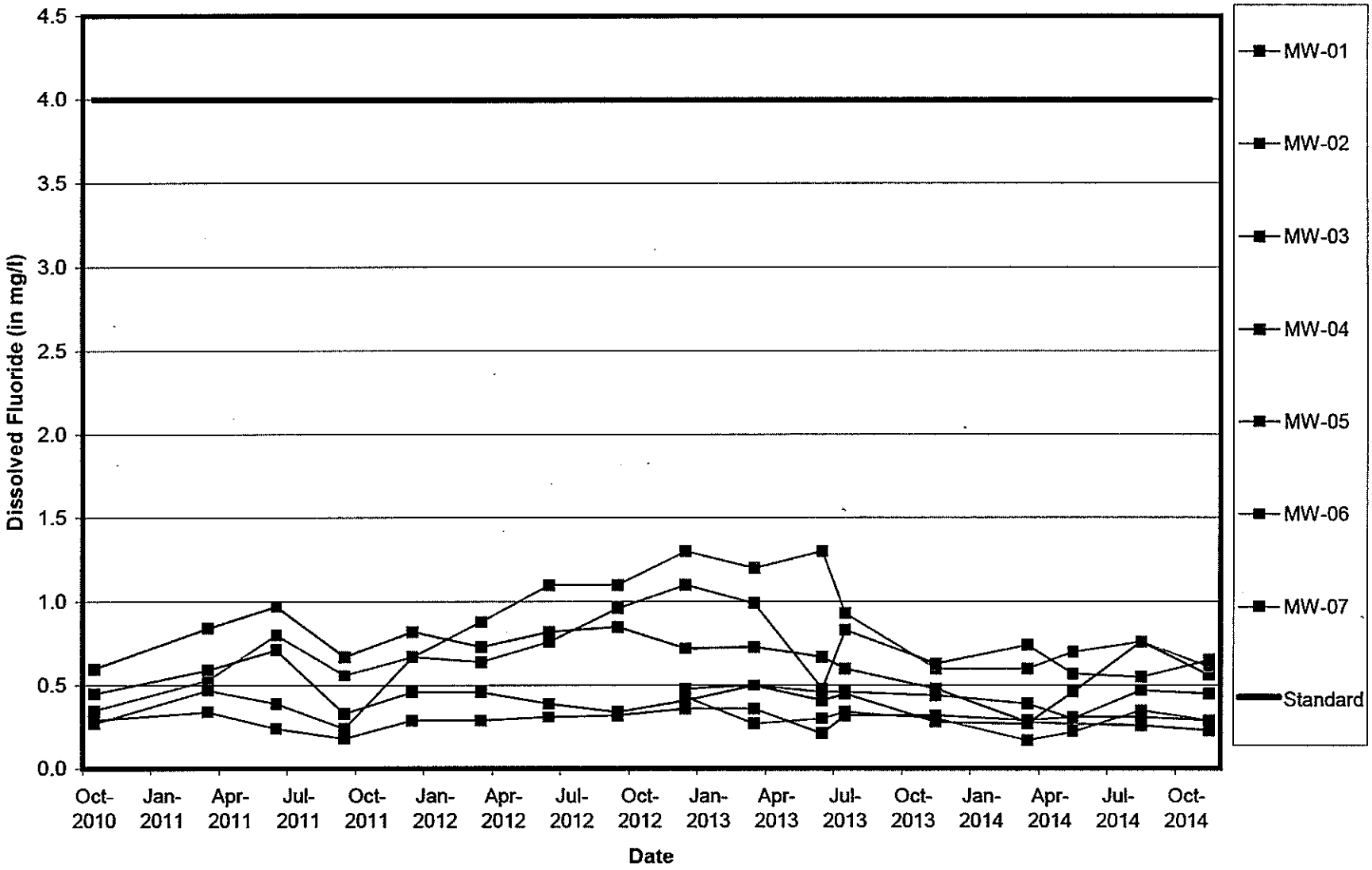
Dissolved Cyanide vs. Time



MWG13-15_45399

Midwest Generation Waukegan Station, Waukegan, IL

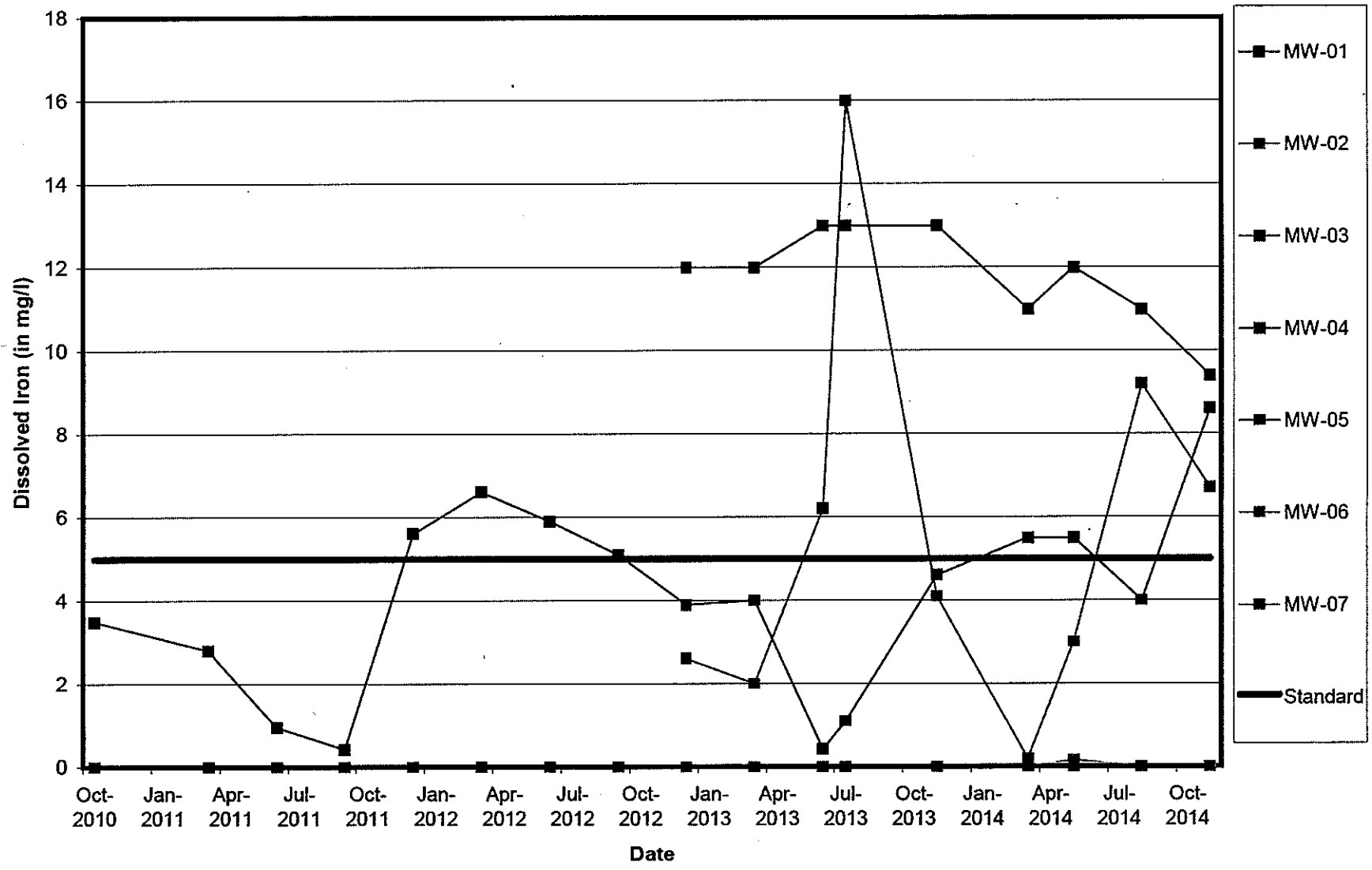
Dissolved Fluoride vs. Time



MWG13-15_45400

Midwest Generation Waukegan Station, Waukegan, IL

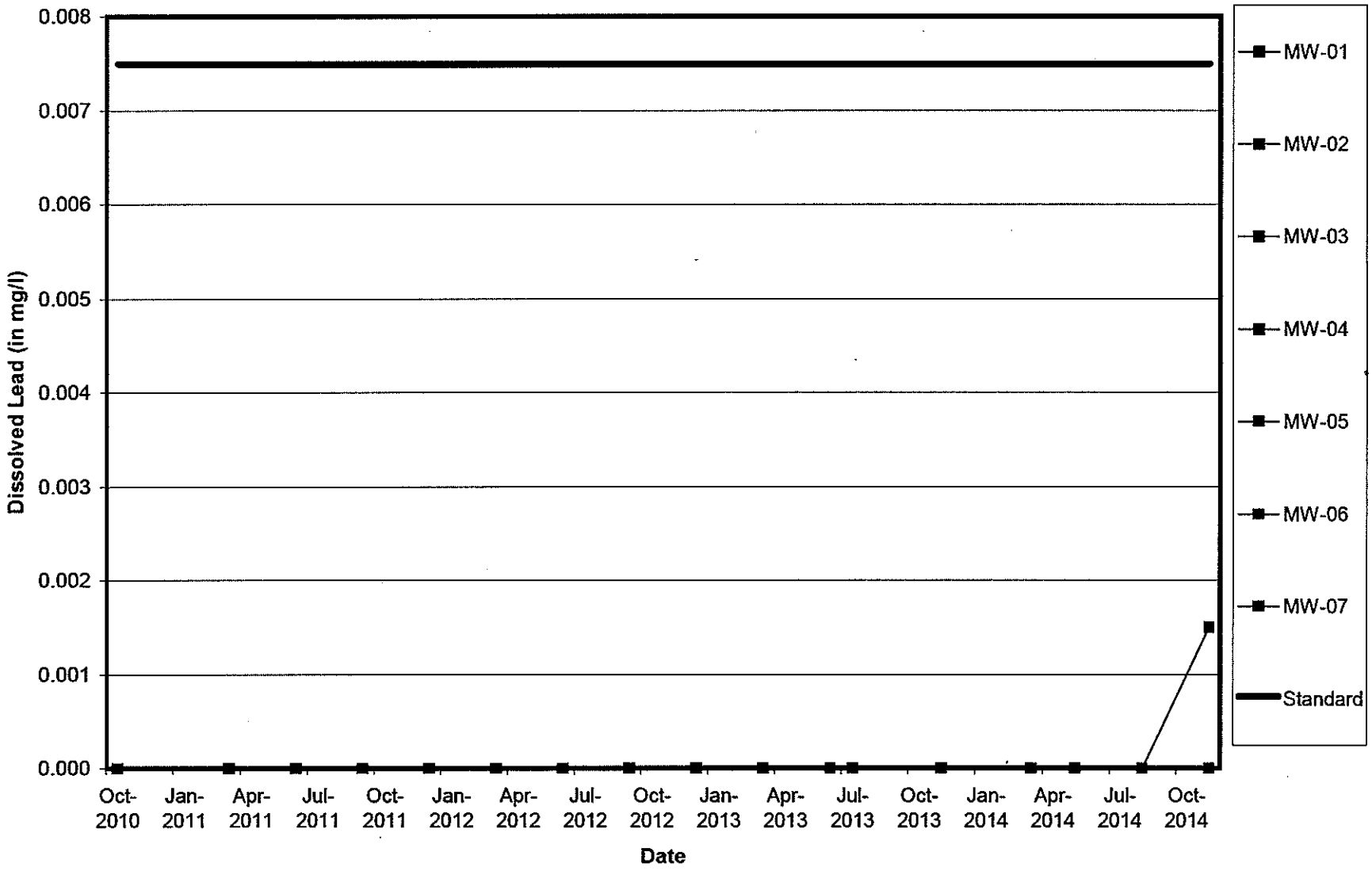
Dissolved Iron vs. Time



MWG13-15_45401

Midwest Generation Waukegan Station, Waukegan, IL

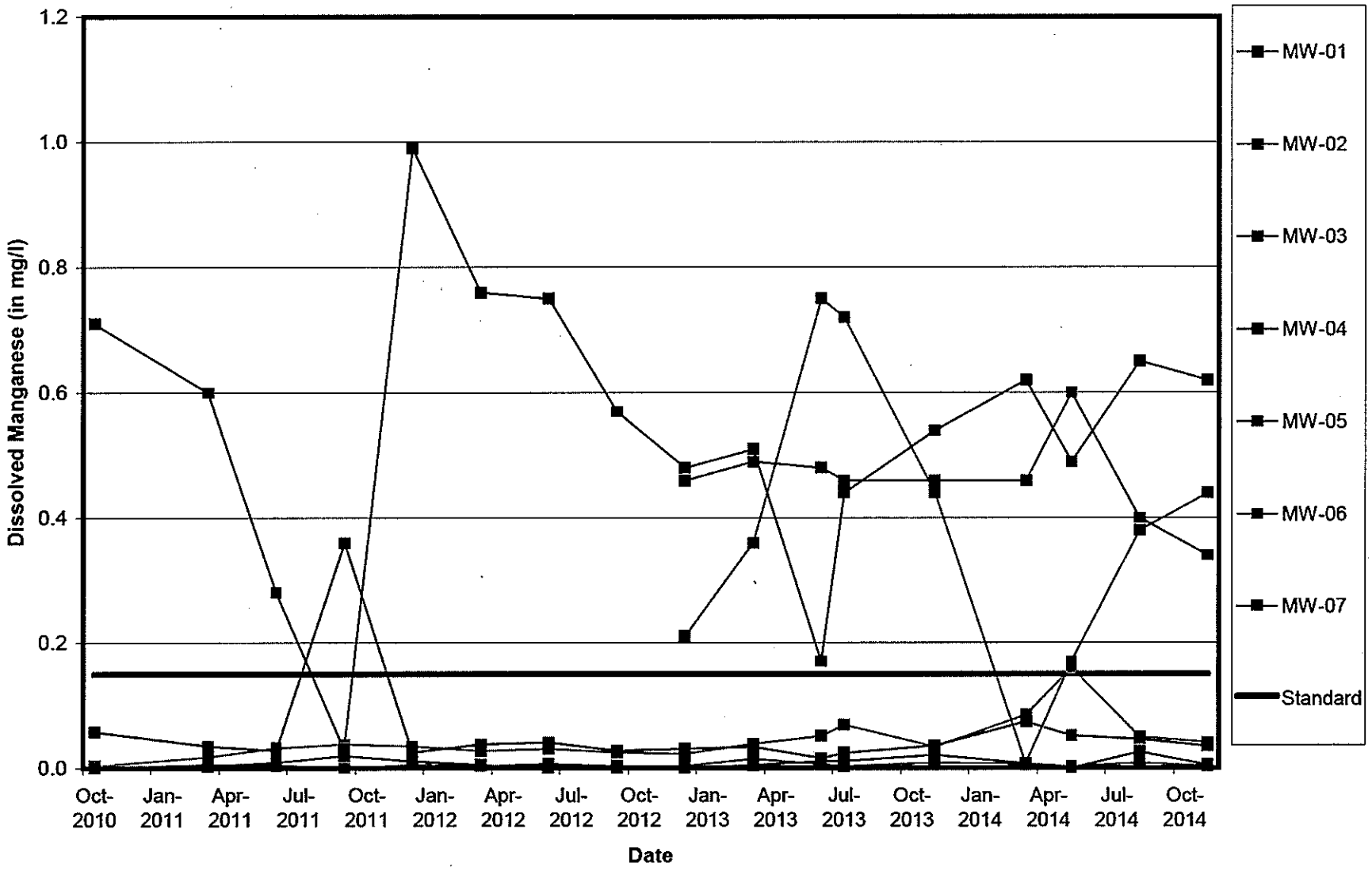
Dissolved Lead vs. Time



MWG13-15_45402

Midwest Generation Waukegan Station, Waukegan, IL

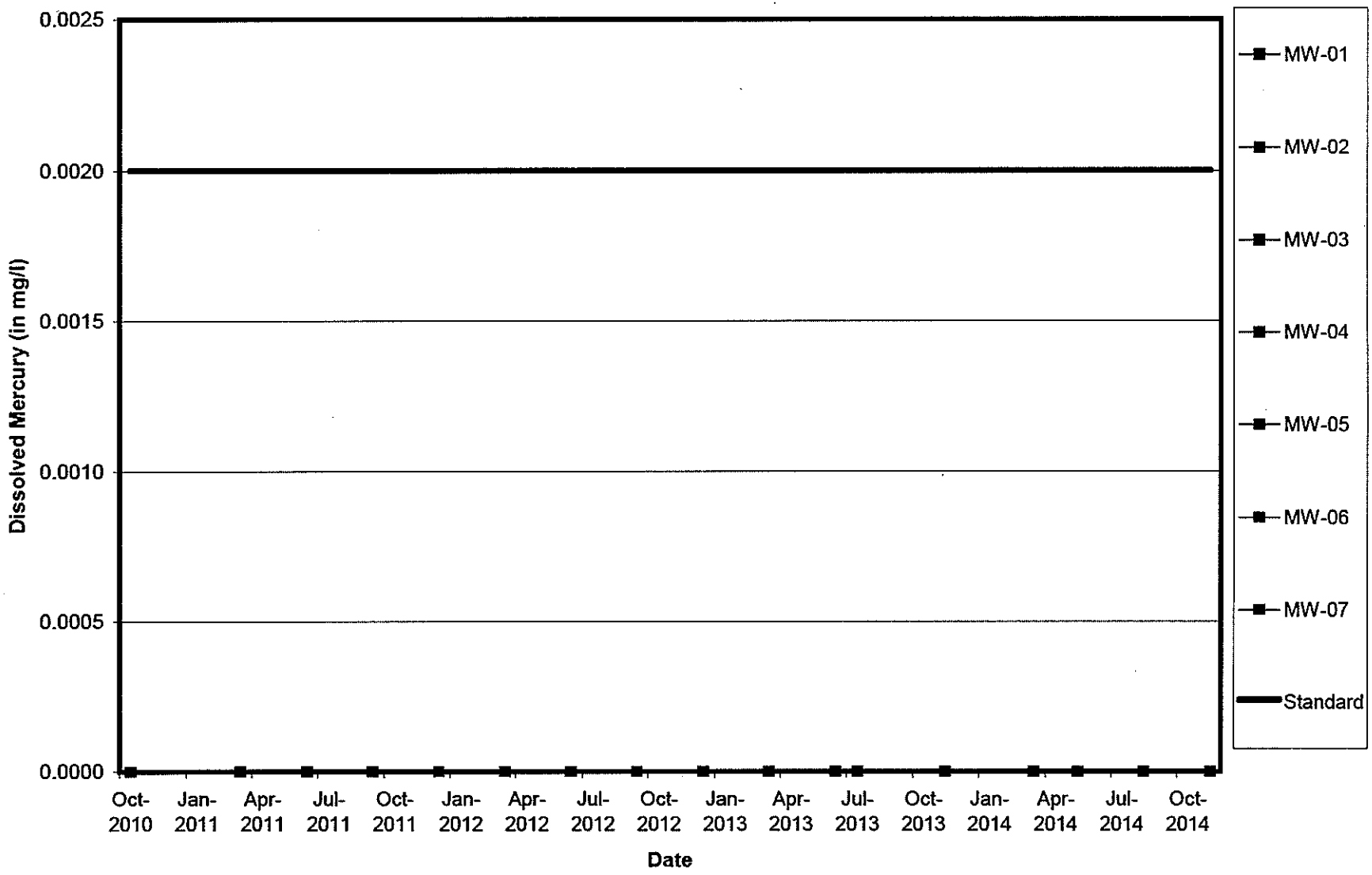
Dissolved Manganese vs. Time



MWG13-15_45403

Midwest Generation Waukegan Station, Waukegan, IL

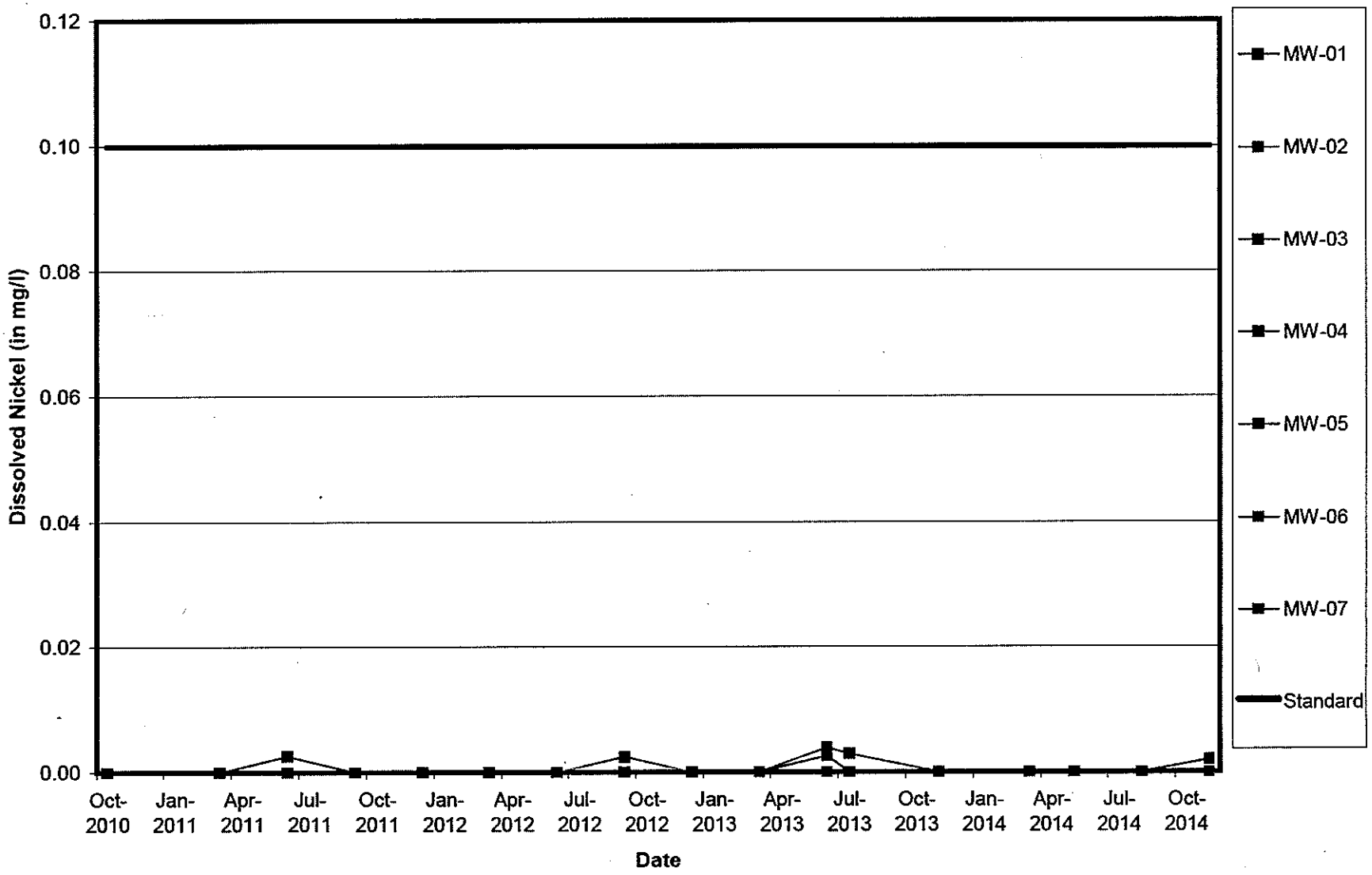
Dissolved Mercury vs. Time



MWG13-15_45404

Midwest Generation Waukegan Station, Waukegan, IL

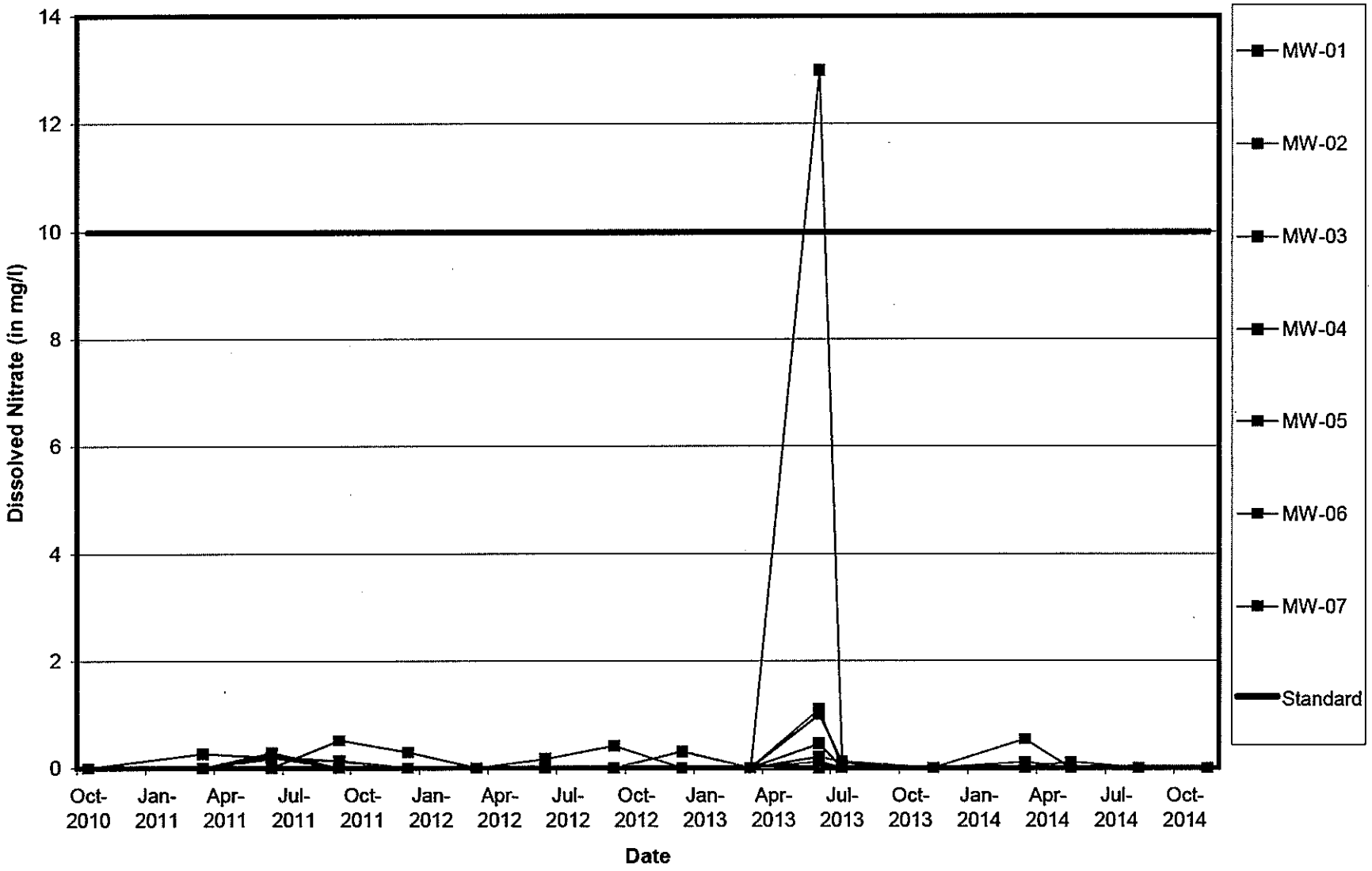
Dissolved Nickel vs. Time



MWG13-15_45405

Midwest Generation Waukegan Station, Waukegan, IL

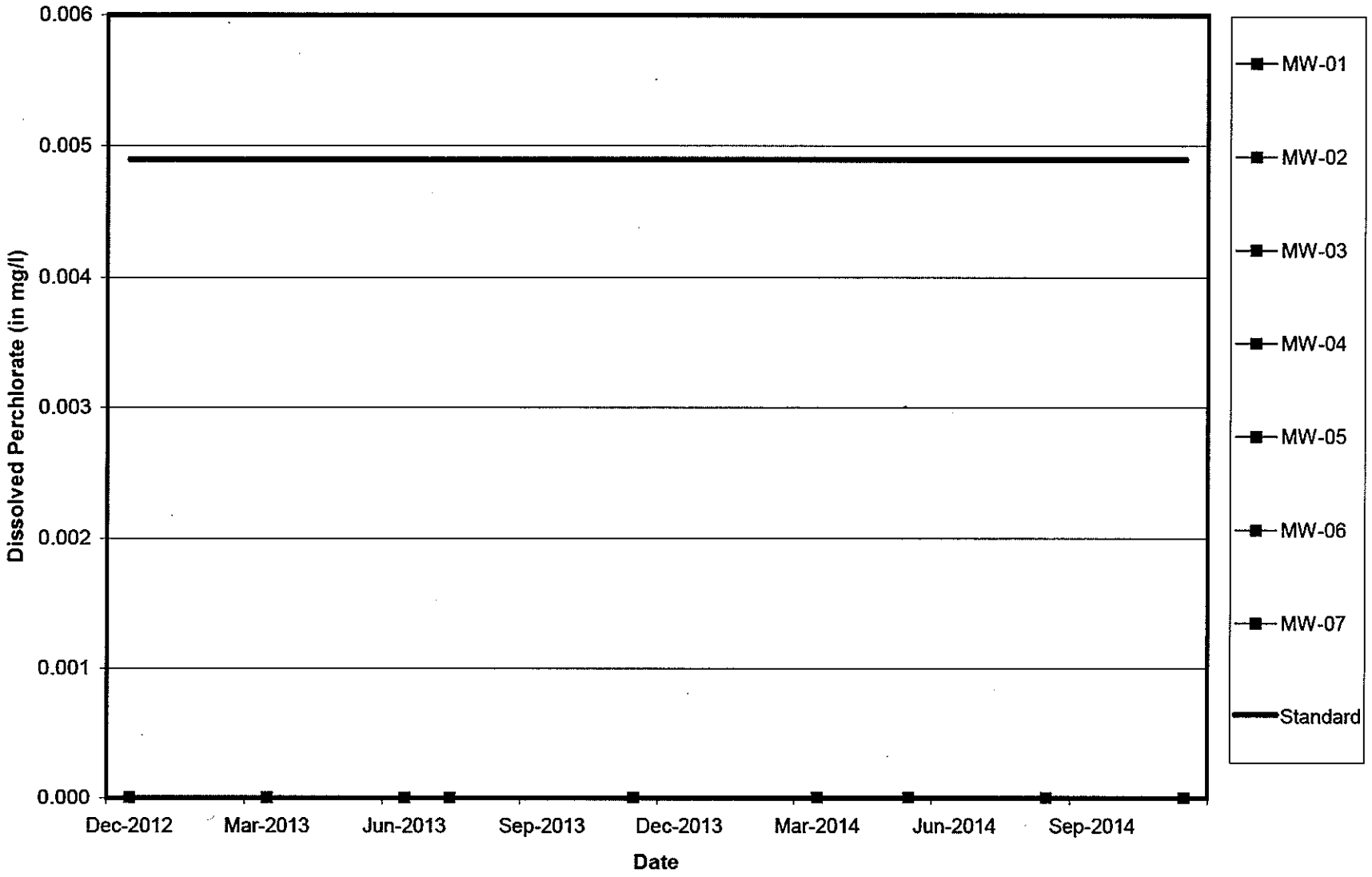
Dissolved Nitrate vs. Time



MWG13-15_45406

Midwest Generation Waukegan Station, Waukegan, IL

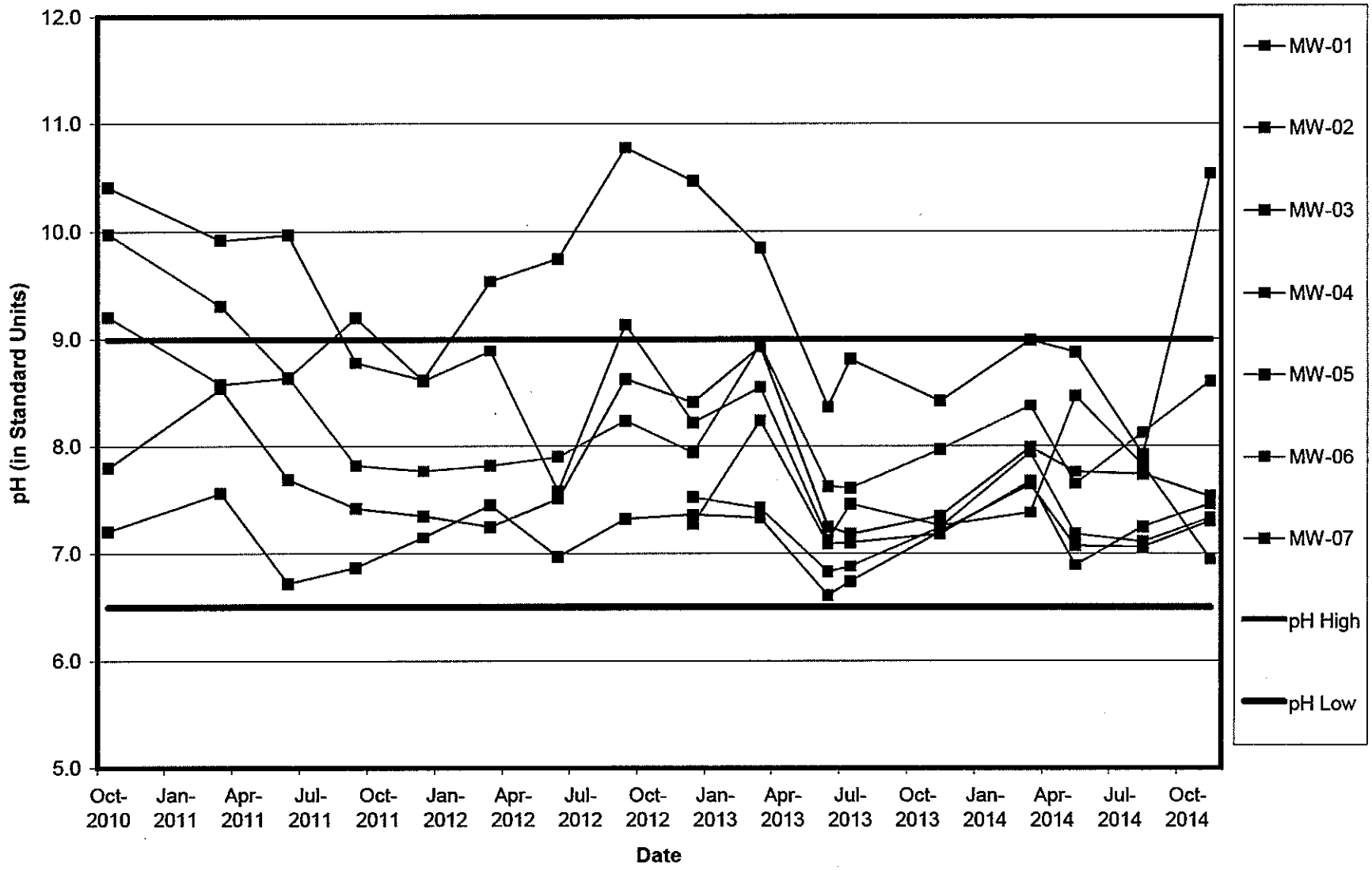
Dissolved Perchlorate vs. Time



MWG13-15_45407

Midwest Generation Waukegan Station, Waukegan, IL

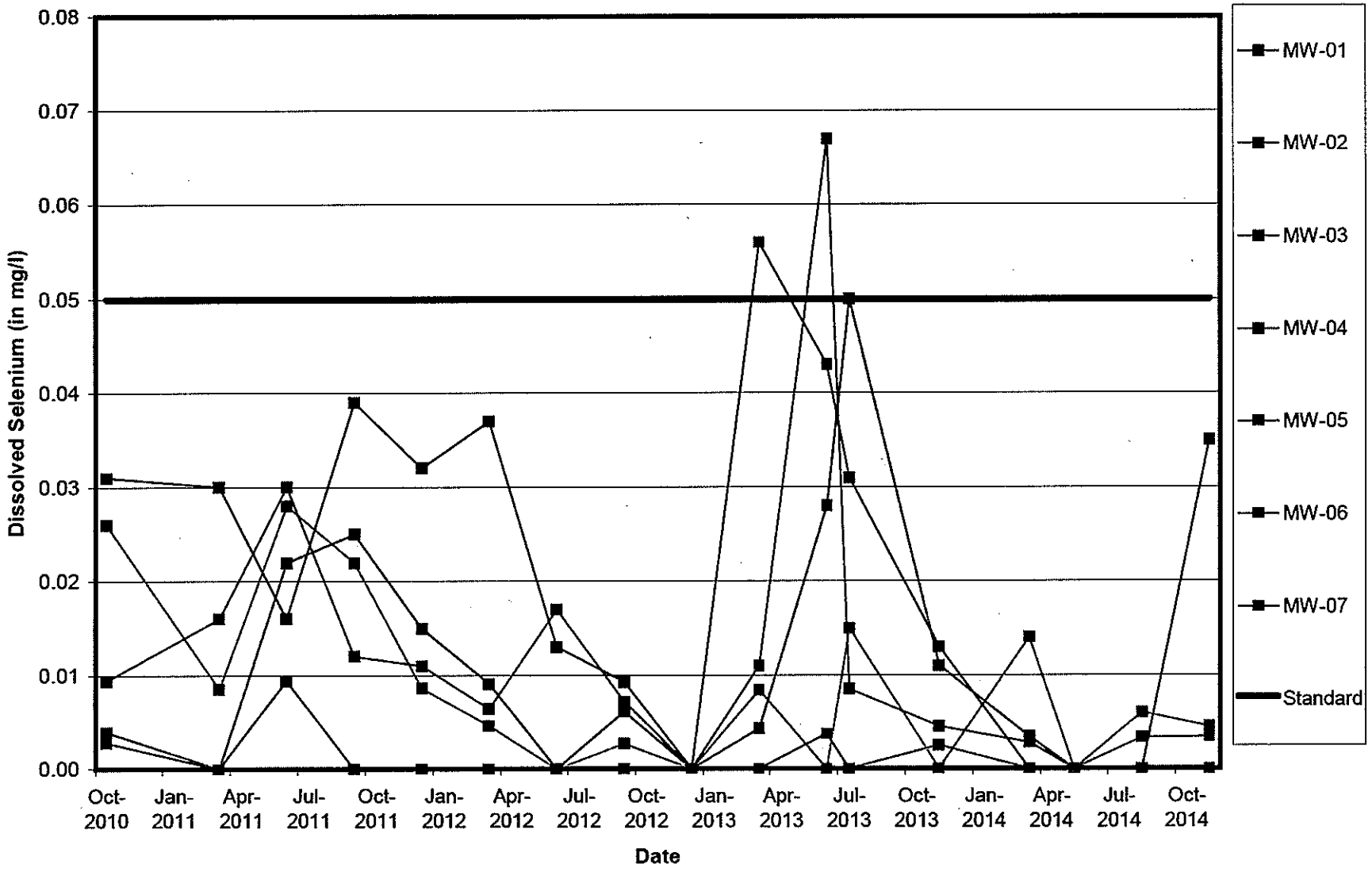
pH vs. Time



MWG13-15_45408

Midwest Generation Waukegan Station, Waukegan, IL

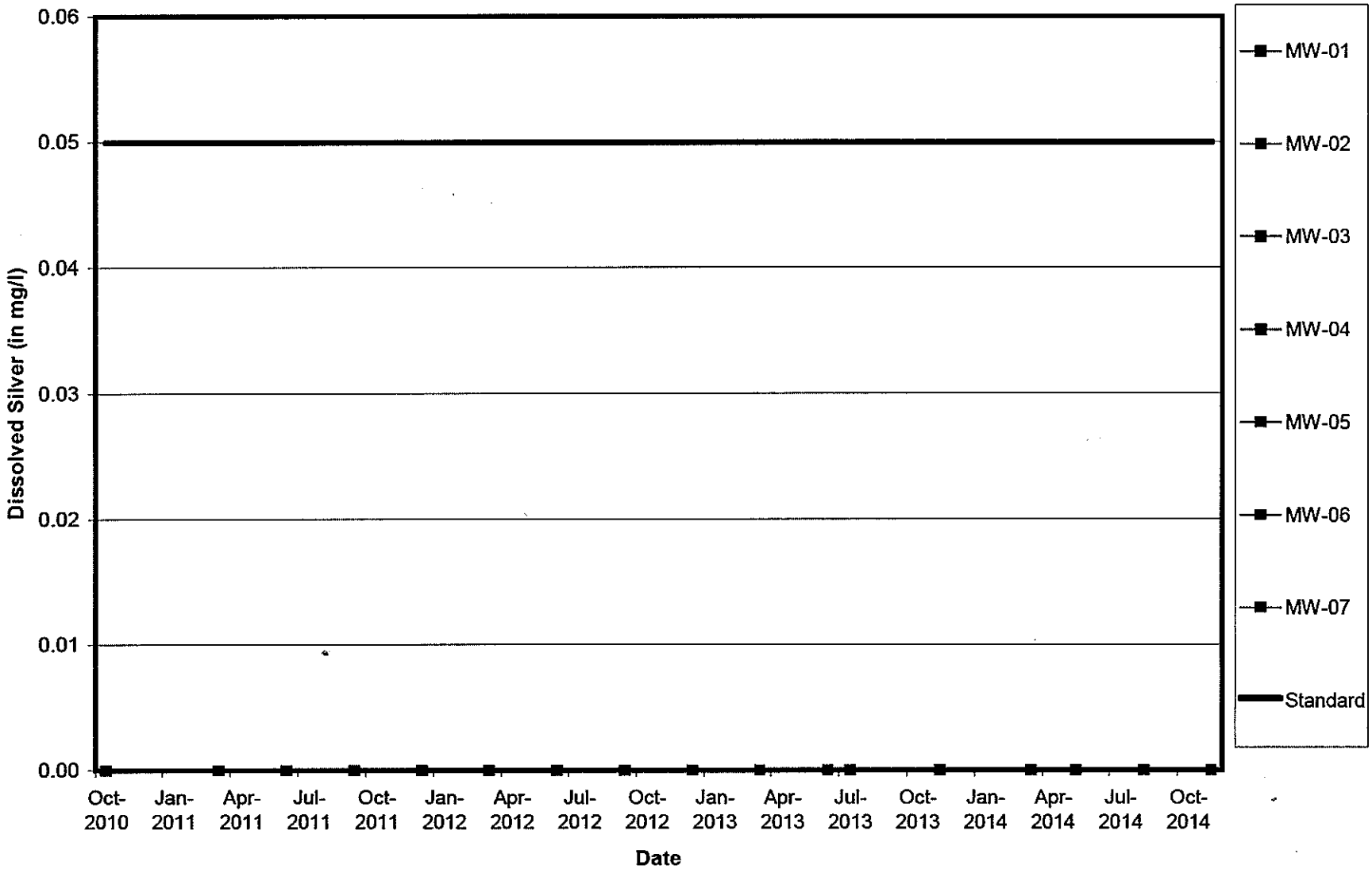
Dissolved Selenium vs. Time



MWG13-15_45409

Midwest Generation Waukegan Station, Waukegan, IL

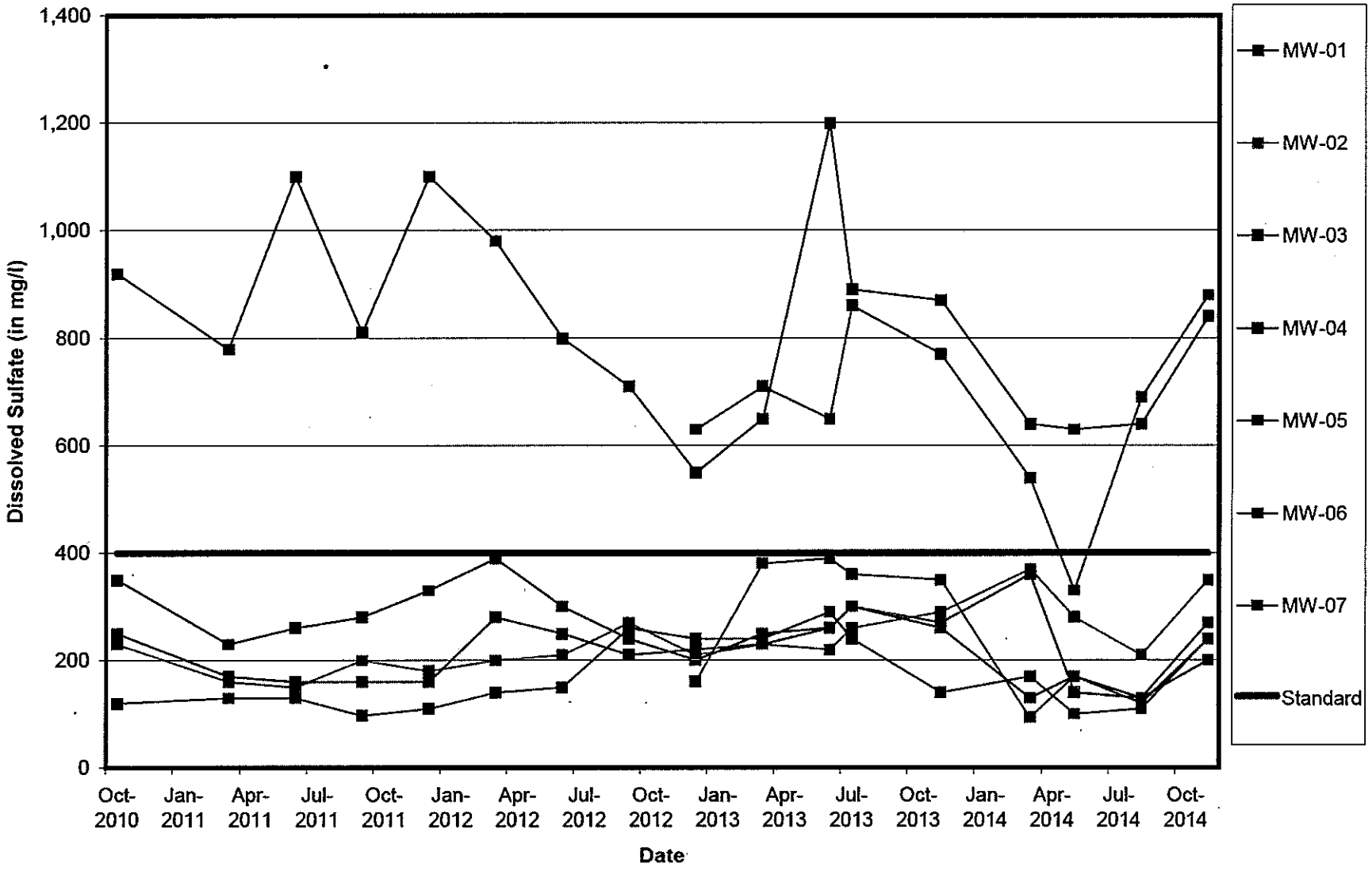
Dissolved Silver vs. Time



MWG13-15_45410

Midwest Generation Waukegan Station, Waukegan, IL

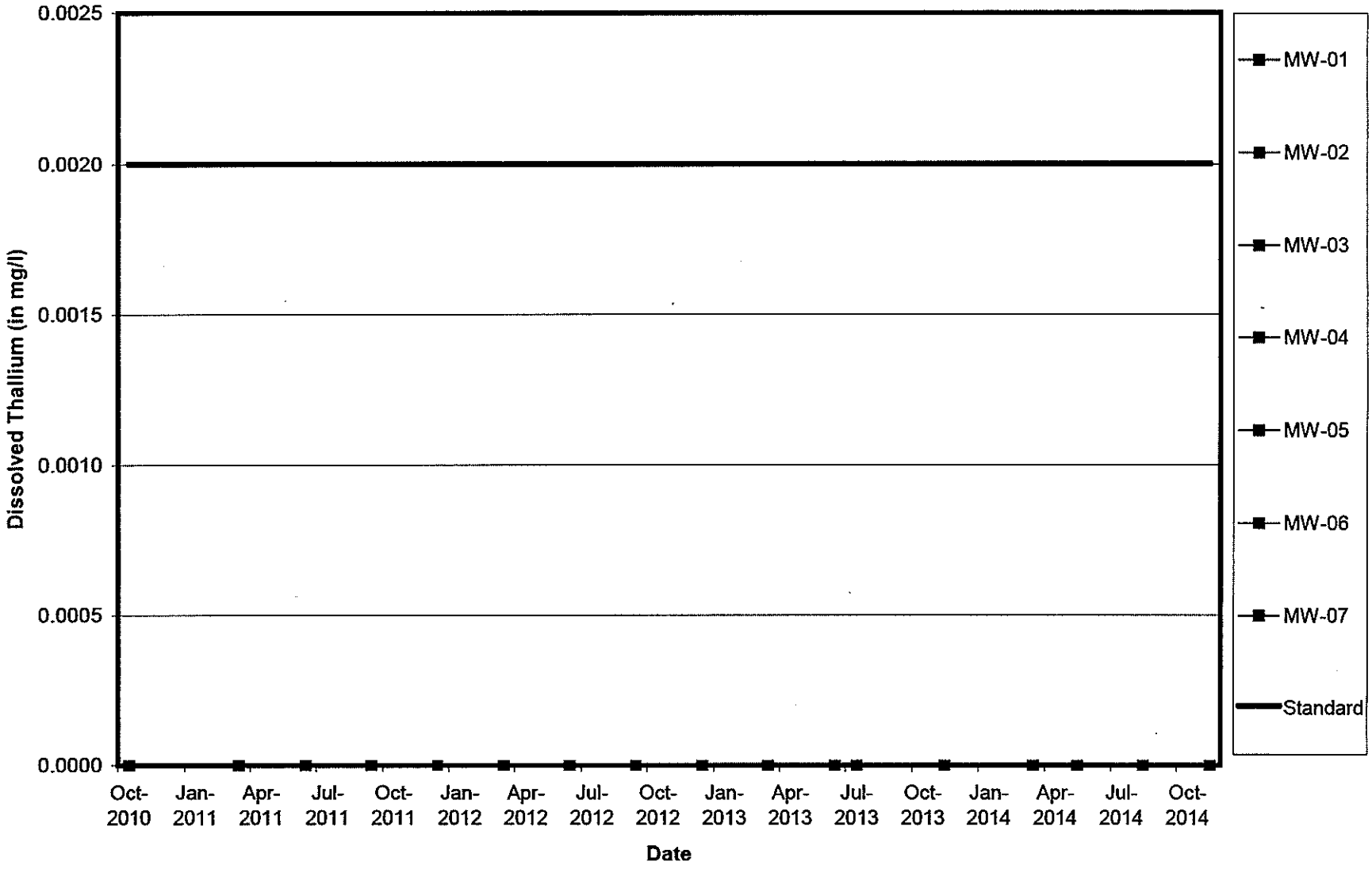
Dissolved Sulfate vs. Time



MWG13-15_45411

Midwest Generation Waukegan Station, Waukegan, IL

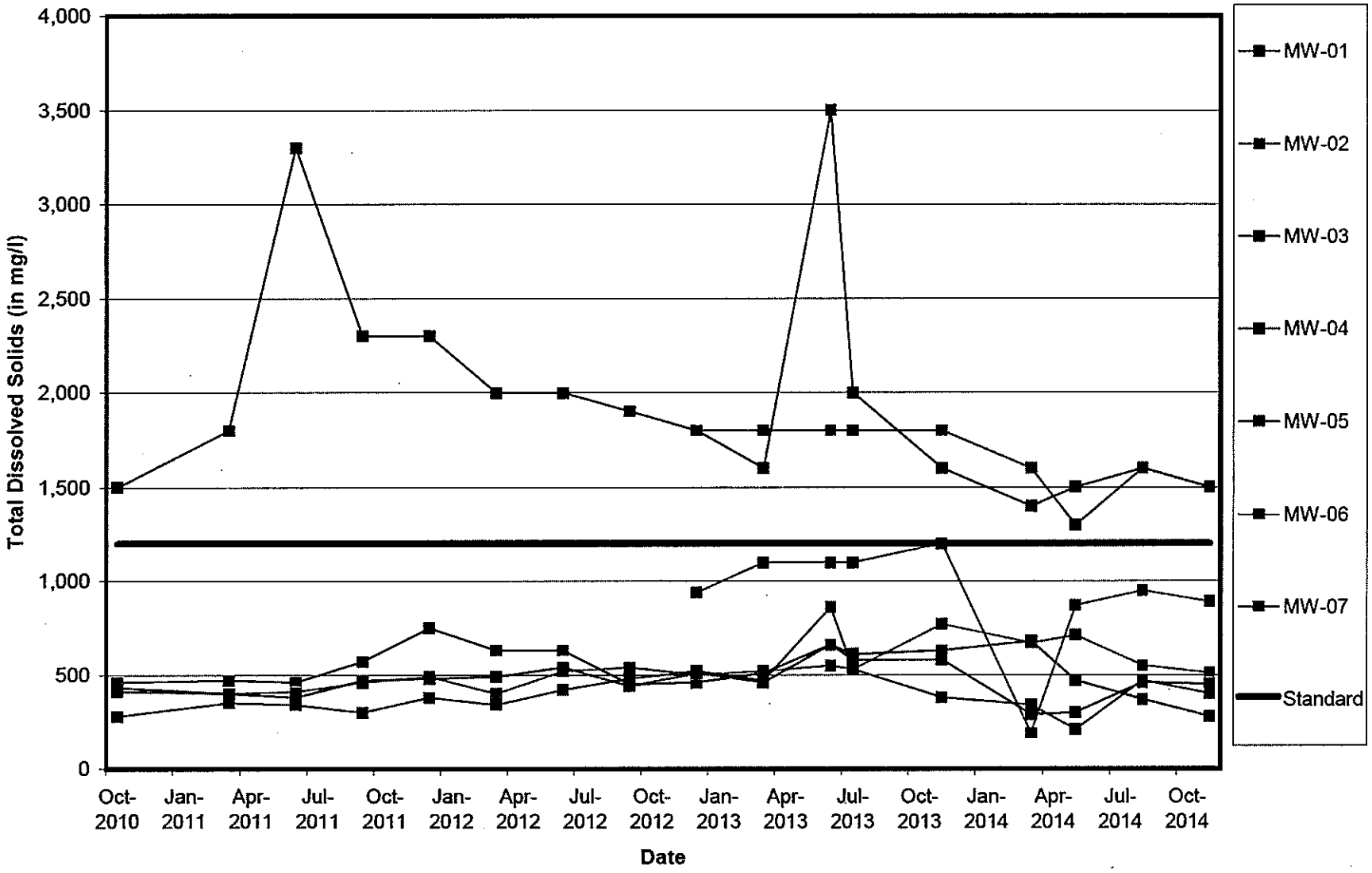
Dissolved Thallium vs. Time



MWG13-15_45412

Midwest Generation Waukegan Station, Waukegan, IL

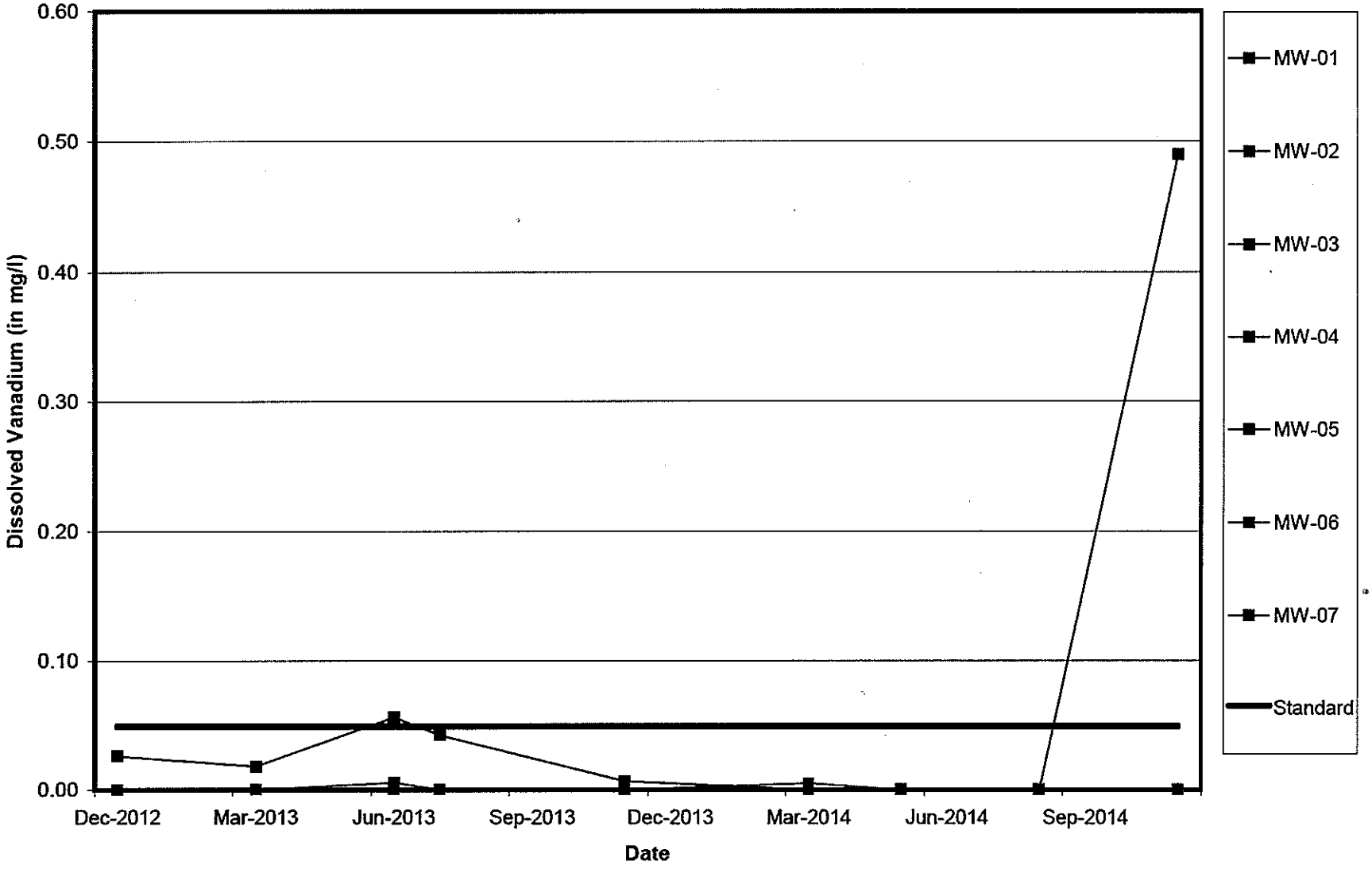
Total Dissolved Solids vs. Time



MWG13-15_45413

Midwest Generation Waukegan Station, Waukegan, IL

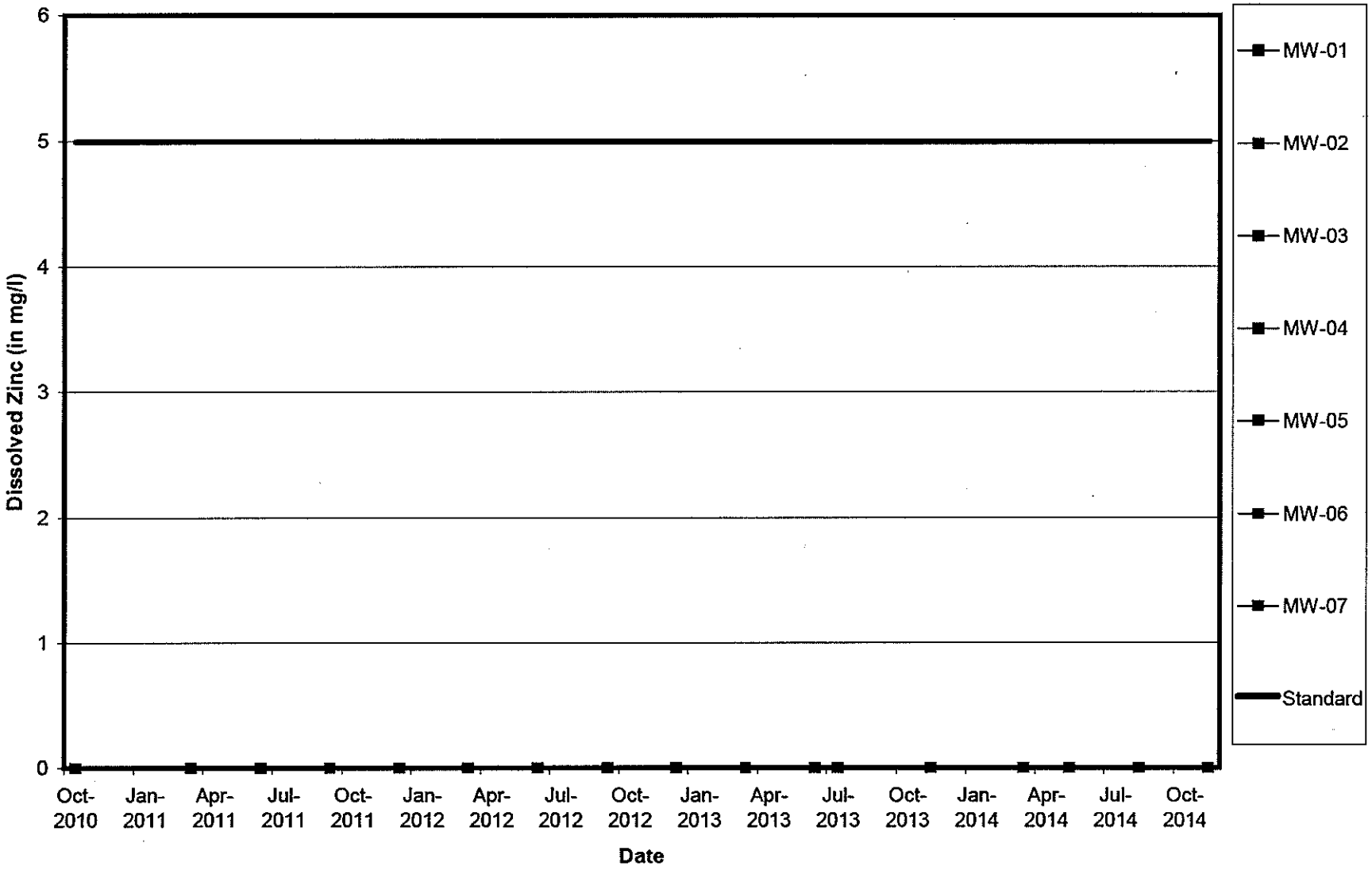
Dissolved Vanadium vs. Time



MWG13-15_45414

Midwest Generation Waukegan Station, Waukegan, IL

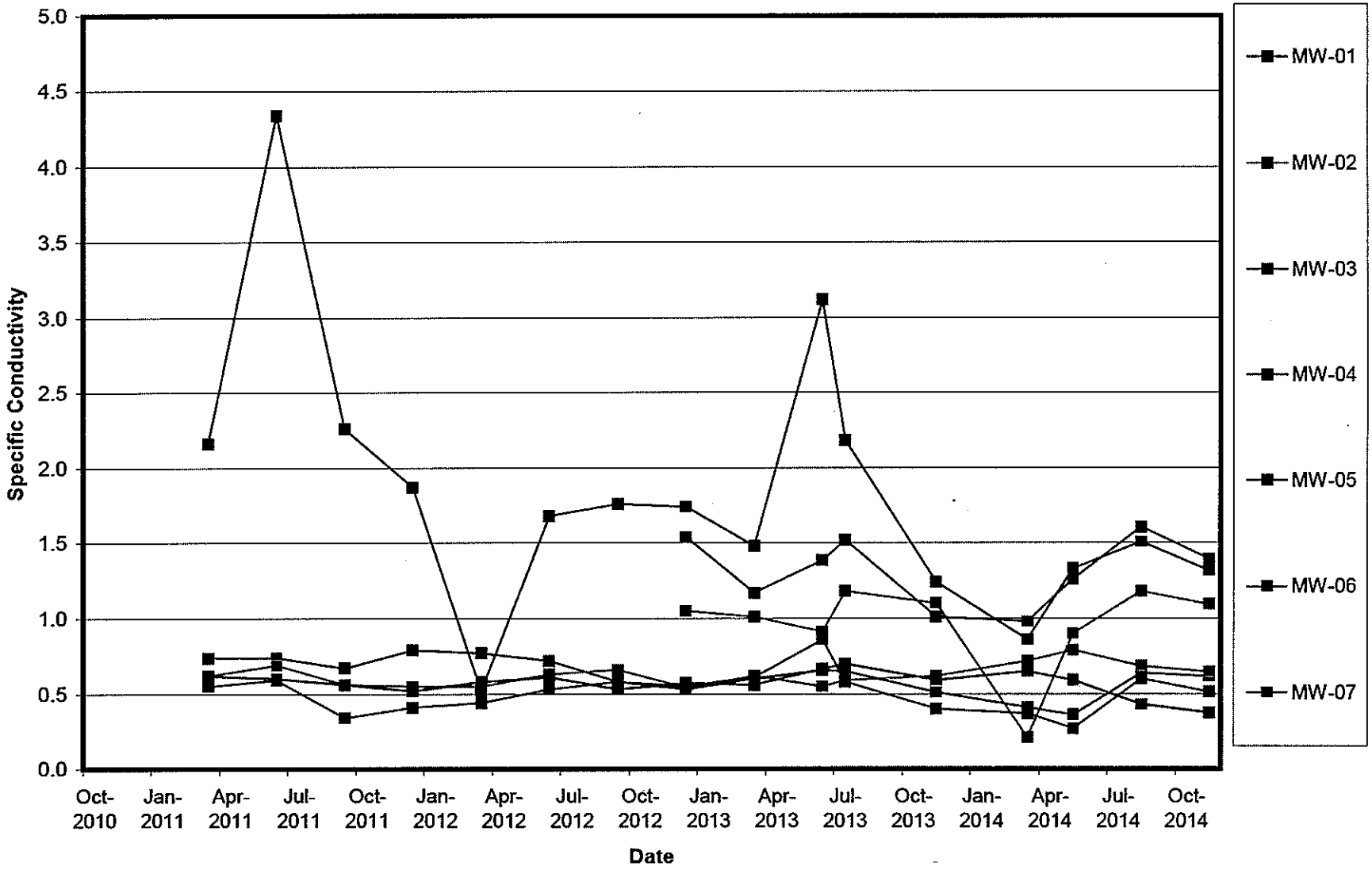
Dissolved Zinc vs. Time



MWG13-15_45415

Midwest Generation Waukegan Station, Waukegan, IL

Specific Conductivity vs. Time



MWG13-15_45416