



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

**CCR COMPLIANCE
ANNUAL GROUNDWATER MONITORING and
CORRECTIVE ACTION REPORT - 2020**

**Midwest Generation, LLC
Waukegan Station
401 E. Greenwood Avenue
Waukegan, Illinois**

Prepared By: KPRG and Associates, Inc.
14665 West Lisbon Road, Suite 1A
Brookfield, WI 53005

January 31, 2021

TABLE OF CONTENTS

OVERVIEW	1
1.0 INTRODUCTION	3
2.0 FIELD PROCEDURES AND GROUNDWATER FLOW EVALUATION	4
2.1 Field Procedures.....	4
2.2 Groundwater Flow Evaluation	4
3.0 ANALYTICAL DATA AND STATUS OF EVALUATIONS	6
3.1 Sampling Summary.....	6
3.2 Data Summary	6
3.3 Current Status.....	6
4.0 SUMMARY/CONCLUSIONS AND RECOMMENDATIONS.....	7
5.0 REFERENCES	8

FIGURES

- 1 – CCR Monitoring Wells Site Map
- 2 – CCR Groundwater Contour 04/2020
- 3 – CCR Groundwater Contour 11/2020

TABLES

- 1 – Groundwater Elevations
- 2 – Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate
- 3 – Groundwater Sampling Summary
- 4 – Detection Monitoring Appendix III Groundwater Analytical Results

APPENDIX

- A – Analytical Data Packages from 2020 Detection Monitoring

OVERVIEW

Groundwater monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule dated April 17, 2015 (CCR Rule) and subsequent amendments, have been completed for the ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Waukegan Generating Station. The wells sampled were selected to meet the monitoring requirements of the CCR Rule for the West and East Ash Ponds. The CCR monitoring well network around these ponds consists of eight monitoring wells (MW-01 through MW-04, MW-09, MW-11, MW-14 and MW-16). Wells MW-09, MW-11 and MW-14 are upgradient wells as shown on Figure 1.

This overview of the 2020 groundwater monitoring period is provided in accordance with revised requirements under Section 257.90(e)(6). Each required item is discussed separately below.

- Section 257.90(e)(6)(i) – At the start of the current monitoring period, the subject CCR unit was operating under the detection monitoring program outlined in Section 257.94.
- Section 257.90(e)(6)(ii) – At the end of the current monitoring period, the subject CCR unit is continuing to operate under the detection monitoring program outlined in Section 257.94.
- Section 257.90(e)(6)(iii) – The following statistically significant increases (SSIs) above established background for Appendix III detection monitoring constituents were noted during this monitoring period:
 - MW-01 – boron, pH, sulfate.
 - MW-02 – boron, pH (April only), sulfate.
 - MW-03 – boron, sulfate.
 - MW-04 – boron, sulfate.
 - MW-16 – boron, calcium (April only), sulfate and total dissolved solids (TDS; April only).

These constituent SSIs have been addressed previously under Alternate Source Demonstrations (ASDs) with determination being made that the SSIs are not associated with a release from the regulated units.

- Section 257.90(e)(6)(iv) – The subject units are not under assessment monitoring.

- Section 257.90(e)(6)(v) – The subject units are not under corrective action.
- Section 257.90(e)(6)(vi) – The subject units are not under corrective action.

1.0 INTRODUCTION

The Detection Monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule dated April 17, 2015 (CCR Rule) have been completed for the ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Waukegan Generating Station. The wells sampled were selected to meet the monitoring requirements of the CCR Rule for both the West and East Ash Ponds. The CCR monitoring well network around these ponds consists of eight monitoring wells (MW-01 through MW-04, MW-09, MW-11, MW-14 and MW-16). Wells MW-09, MW-11 and MW-14 are upgradient wells.

This annual report covers the work performed relative to CCR groundwater monitoring for the calendar year 2020. It does not duplicate information or activities previously reported for 2019. It is prepared in accordance with Section 257.90(e)(1-6) and summarizes the sampling procedures used, provides an evaluation of groundwater flow conditions, summarizes the analytical data generated, and summarizes conclusions and recommendations for the station going forward.

2.0 FIELD PROCEDURES AND GROUNDWATER FLOW EVALUATION

2.1 Field Procedures

As previously noted, the CCR groundwater monitoring network around the ash ponds at this facility consists of eight wells (MW-01, MW-02, MW-03, MW-04, MW-09, MW-11, MW-14 and MW-16) 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). All wells were found in good condition.

All groundwater samples were collected using the low-flow sampling technique from dedicated pumps. The samples were not filtered prior to analysis to provide for total metals concentrations as opposed to dissolved metals concentrations. One duplicate sample was collected from a randomly selected monitoring well per sampling event for quality assurance purposes. The duplicate samples from the April and November 2020 sampling events were from monitoring wells MW-09 and MW-16, respectively.

2.2 Groundwater Flow Evaluation

Water level data measurements were obtained from monitoring wells during each round of groundwater sampling. A complete round of water levels was collected prior to initiating sampling, and the water level data are summarized in Table 1. It is noted that water levels were also concurrently measured at other monitoring well locations in the area that are not part of the CCR monitoring network. The full set of water levels were used to generate a groundwater flow map for each sampling event. These maps are provided as Figures 2 and 3. A review of the maps indicates a consistent east to southeasterly groundwater flow direction beneath the ash ponds. In accordance with general groundwater sampling requirements under Section 257.93(c), Table 2 provides a summary of the flow direction and an estimated rate of groundwater flow for each sampling event. The flow rate was calculated using the following equation:

$$V_s = \frac{Kdh}{n_e dl}, \text{ where}$$

V_s is seepage velocity (distance/time)

K is hydraulic conductivity (distance/time)

dh/dl is hydraulic gradient (unitless)

n_e is effective porosity (unitless)

The average hydraulic conductivity of 4.04×10^{-3} ft/sec used in Table 2 was obtained from the Hydrogeologic Assessment Report dated February 2011 and prepared by Patrick

Engineering. The estimated effective porosity of the aquifer materials (0.35) was obtained from literature (Applied Hydrogeology, Fetter, 1980).

3.0 ANALYTICAL DATA AND STATUS OF EVALUATIONS

3.1 Sampling Summary

The groundwater sampling summary from 2020 is provided in Table 3, in accordance with 257.90 (e)(3).

3.2 Data Summary

The analytical data from the detection monitoring groundwater sampling for Appendix III parameters are provided in Table 4. Semi-annual groundwater sampling was completed for Appendix III in 2020 in accordance with detection monitoring requirements under Section 257.94. The table includes the sample dates and whether the specific well is considered upgradient or downgradient relative to groundwater flow and the regulated unit. Table 4 also includes calculated Prediction Limits (PLs) established in the initial CCR Groundwater Monitoring Statistical Evaluation Summary dated January 2018 for data comparison purposes. The downgradient intrawell prediction limits were established for the parameters which were part of the Alternate Source Demonstrations (see 2018 and 2019 CCR Compliance Reports). It is noted that the TDS at well MW-16, which was part of a previously completed ASD, continues to indicate a downward trend in concentration. All duplicate values were within an acceptable range. The analytical data packages from the detection monitoring events are provided in Appendix A. Groundwater sampling for Appendix IV was not performed in 2020 as this facility is in detection monitoring.

3.3 Current Status

The station remains in detection monitoring.

4.0 SUMMARY/CONCLUSIONS AND RECOMMENDATIONS

The detection monitoring requirements in accordance with the CCR Rule have been successfully met. At this time, it is recommended that the station stay in detection monitoring in accordance with Section 257.94.

5.0 REFERENCES

- Federal Register, Environmental Protection Agency, 40 CFR Parts 257 and 261, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule. Vol. 80, No. 74, Friday April 17, 2015.
- Patrick Engineering, Inc., Hydrogeologic Assessment Report – Waukegan Generating Station, Waukegan, IL. February 2011.
- KPRG and Associates, Inc., CCR Compliance Monitoring, Sampling and Analysis Plan, Midwest Generation, LLC Waukegan Generating Station. October 10, 2017.
- KPRG and Associates, Inc., CCR Compliance Annual Groundwater Monitoring and Corrective Action Report - 2018, Midwest Generation, LLC Waukegan Generating Station. January 31, 2019.
- KPRG and Associates, Inc., CCR Compliance Annual Groundwater Monitoring and Corrective Action Report - 2019, Midwest Generation, LLC Waukegan Generating Station. January 31, 2020.
- C.W. Fetter, Jr., Applied Hydrogeology. Charles E. Merrill Publishing Co., 1980.

FIGURES



ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 28 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

CCR MONITORING WELL SITE MAP

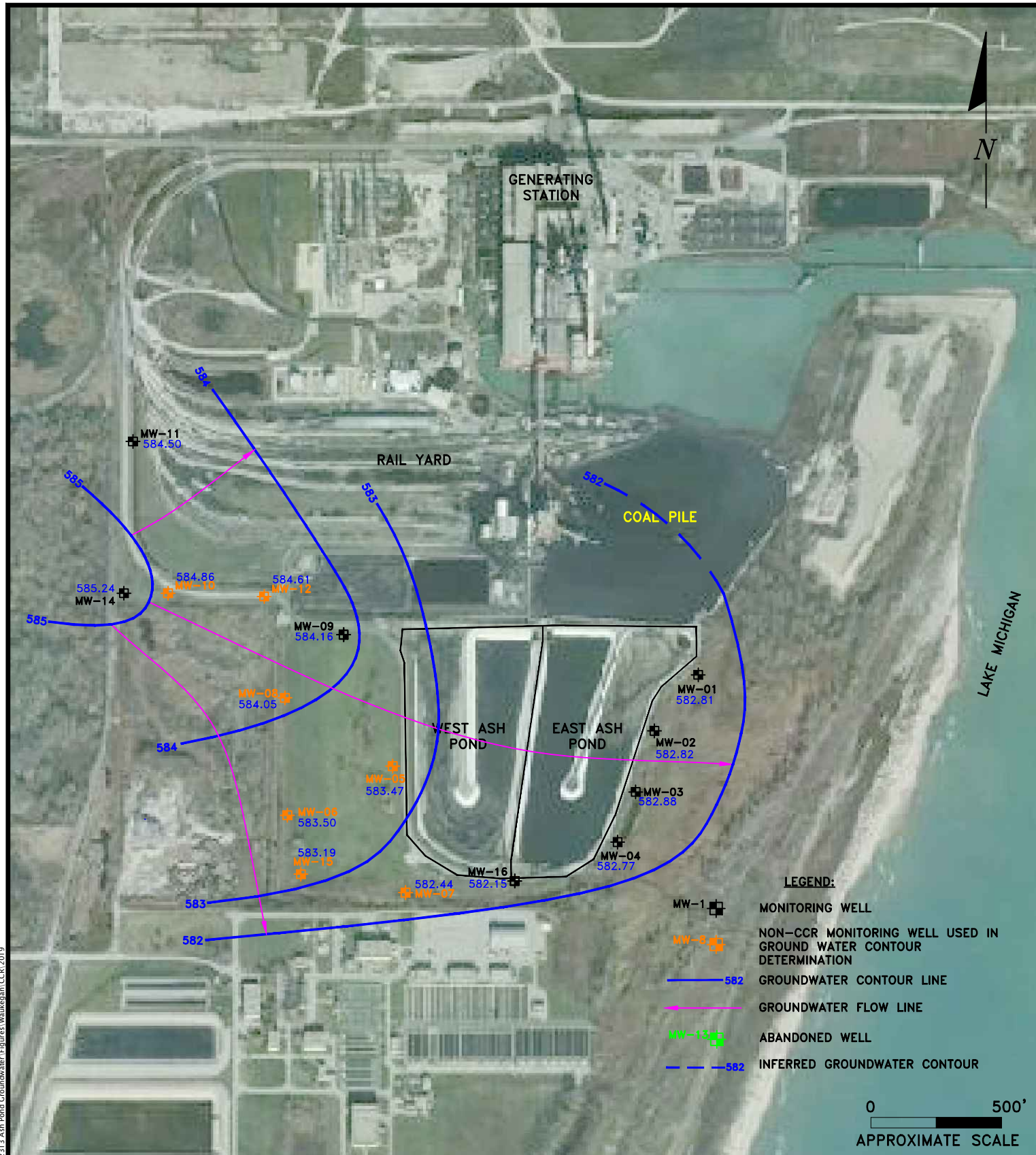
WAUKEGAN STATION
WAUKEGAN, ILLINOIS

Scale: 1" = 550'

Date: January 2, 2018

KPRG Project No. 12313.2

FIGURE 1



ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, inc.

14665 West Lisbon Road, Suite 28 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

GROUNDWATER CONTOUR MAP 04/2020

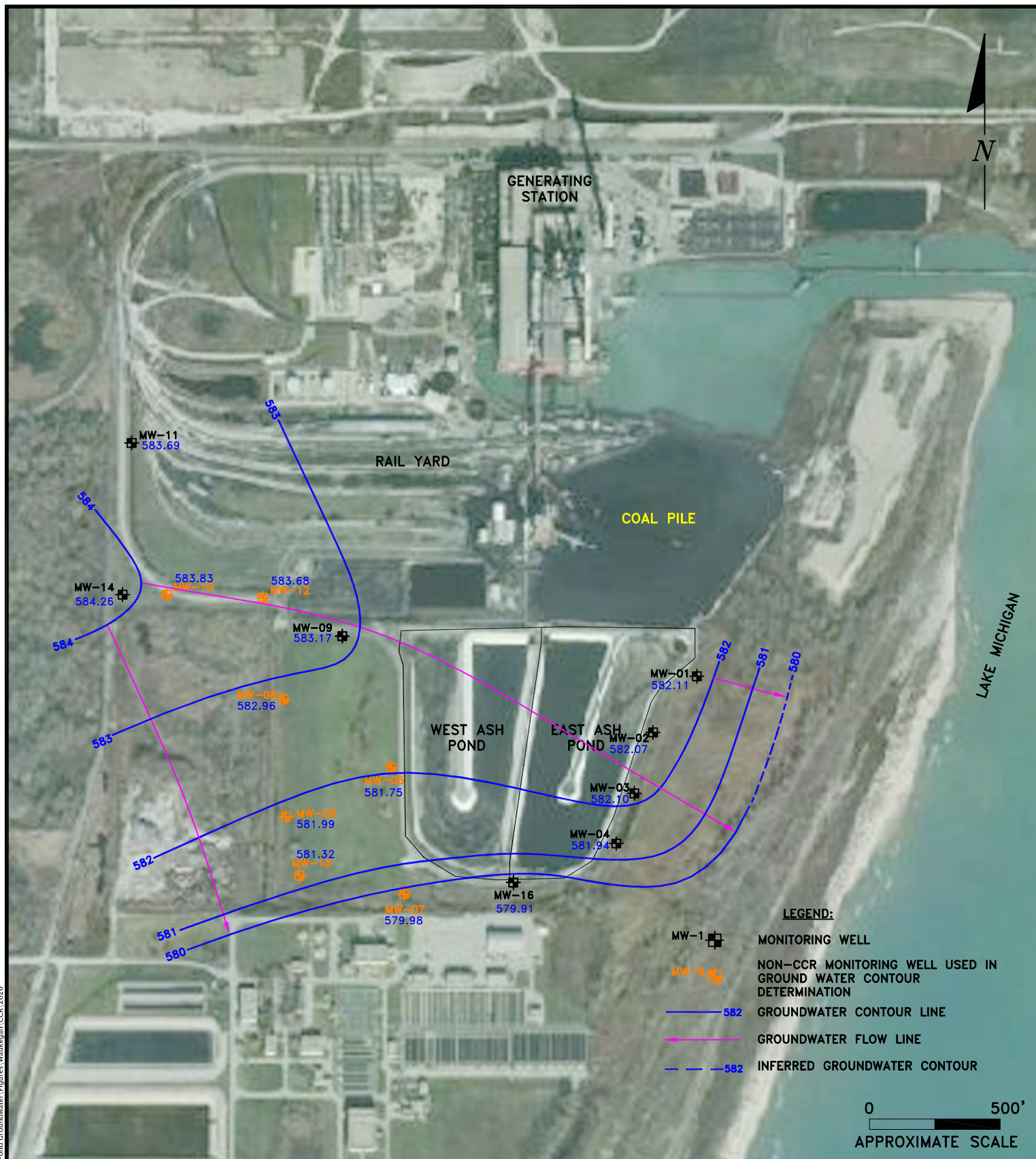
WAUKEGAN STATION
WAUKEGAN, ILLINOIS

Scale: 1" = 500'

Date: June 01, 2020

KPRG Project No. 12313.2

FIGURE 2



ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, inc.

14665 West Lisbon Road, Suite 1A 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

GROUNDWATER CONTOUR MAP 11/2020

WAUKEGAN STATION
WAUKEGAN, ILLINOIS

Scale: 1" = 500'

Date: December 30, 2020

KPRG Project No. 12313.2

FIGURE 3

TABLES

Table 1. Groundwater Elevations - Midwest Generation, LLC, Waukegan Station, Waukegan, IL

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-01	11/2/2015	603.12	20.75	582.37
	2/29/2016	603.12	20.71	582.41
	5/2/2016	603.12	20.89	582.23
	8/23/2016	603.12	22.01	581.11
	12/2/2016	603.62	22.27	581.35
	2/21/2017	603.62	22.42	581.20
	5/15/2017	603.62	20.52	583.10
	7/5/2017	603.62	21.81	581.81
	9/11/2017	603.62	21.47	582.15
	11/27/2017	603.62	21.82	581.80
	5/29/2018	603.62	19.43	584.19
	11/5/2018	603.62	20.45	583.17
	5/14/2019	603.62	19.81	583.81
	11/18/2019	603.62	19.89	583.73
MW-02	4/21/2020	603.62	20.81	582.81
	11/17/2020	603.62	21.51	582.11
	11/2/2015	603.04	20.71	582.33
	2/29/2016	603.04	20.59	582.45
	5/2/2016	603.04	20.82	582.22
	8/23/2016	603.04	22.04	581.00
	12/2/2016	603.39	22.13	581.26
	2/21/2017	603.39	22.24	581.15
	5/15/2017	603.39	20.25	583.14
	7/5/2017	603.39	21.59	581.80
	9/11/2017	603.39	21.21	582.18
	11/27/2017	603.39	21.63	581.76
	5/29/2018	603.39	19.12	584.27
	11/5/2018	603.39	20.19	583.20
MW-03	5/14/2019	603.39	19.55	583.84
	11/18/2019	603.39	19.60	583.79
	4/21/2020	603.39	20.57	582.82
	11/17/2020	603.39	21.32	582.07
	11/2/2015	602.91	20.37	582.54
	2/29/2016	602.91	20.43	582.48
	5/2/2016	602.91	20.66	582.25
	8/23/2016	602.91	22.12	580.79
	12/2/2016	603.70	22.52	581.18
	2/21/2017	603.70	22.64	581.06
	5/15/2017	603.70	20.55	583.15
	7/5/2017	603.70	21.92	581.78
	9/11/2017	603.70	21.55	582.15
	11/28/2017	603.70	21.96	581.74
MW-04	5/29/2018	603.70	19.40	584.30
	11/5/2018	603.70	20.48	583.22
	5/14/2019	603.70	19.80	583.90
	11/18/2019	603.70	20.05	583.65
	4/21/2020	603.70	20.82	582.88
	11/17/2020	603.70	21.60	582.10
	11/2/2015	603.19	20.83	582.36
	2/29/2016	603.19	20.70	582.49
	5/2/2016	603.19	20.94	582.25
	8/23/2016	603.19	22.69	580.50
	12/2/2016	603.17	22.18	580.99
	2/21/2017	603.17	22.36	580.81
	5/15/2017	603.17	20.04	583.13
	7/5/2017	603.17	21.46	581.71
	9/11/2017	603.17	21.05	582.12
	11/28/2017	603.17	21.54	581.63
	5/30/2018	603.17	18.88	584.29
	11/6/2018	603.17	19.96	583.21
	5/14/2019	603.17	19.35	583.82
	11/18/2019	603.17	19.36	583.81
	4/21/2020	603.17	20.40	582.77
	11/17/2020	603.17	21.23	581.94

Table 1. Groundwater Elevations - Midwest Generation, LLC, Waukegan Station, Waukegan, IL

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-09	11/2/2015	594.00	9.78	584.22
	2/29/2016	594.00	9.89	584.11
	5/2/2016	594.00	9.59	584.41
	8/23/2016	594.00	10.58	583.42
	12/2/2016	594.00	10.27	583.73
	2/21/2017	594.00	10.21	583.79
	5/15/2017	594.00	9.57	584.43
	7/6/2017	594.00	9.81	584.19
	9/11/2017	594.00	10.25	583.75
	11/29/2017	594.00	9.98	584.02
	5/31/2018	594.00	9.38	584.62
	11/6/2018	594.00	9.52	584.48
	5/14/2019	594.00	9.50	584.50
	11/18/2019	594.00	9.62	584.38
MW-11	4/21/2020	594.00	9.84	584.16
	11/17/2020	594.00	10.83	583.17
MW-11	11/2/2015	590.35	5.27	585.08
	2/29/2016	590.35	5.54	584.81
	5/2/2016	590.35	5.17	585.18
	8/23/2016	590.35	6.04	584.31
	12/2/2016	590.35	5.86	584.49
	2/21/2017	590.35	5.87	584.48
	5/15/2017	590.35	5.33	585.02
	7/6/2017	590.35	5.62	584.73
	9/11/2017	590.35	5.61	584.74
	11/30/2017	590.35	5.68	584.67
	5/31/2018	590.35	5.41	584.94
	11/6/2018	590.35	5.29	585.06
	5/14/2019	590.35	5.55	584.80
	11/18/2019	590.35	5.80	584.55
MW-14	4/21/2020	590.35	5.85	584.50
	11/17/2020	590.35	6.66	583.69
MW-14	11/2/2015	590.24	5.17	585.07
	2/29/2016	590.24	5.01	585.23
	5/2/2016	590.24	4.49	585.75
	8/23/2016	590.24	6.07	584.17
	12/2/2016	590.24	5.49	584.75
	2/21/2017	590.24	5.33	584.91
	5/15/2017	590.24	4.67	585.57
	7/6/2017	590.24	5.27	584.97
	9/11/2017	590.24	5.78	584.46
	11/30/2017	590.24	5.19	585.05
	6/1/2018	590.24	4.45	585.79
	11/6/2018	590.24	4.32	585.92
	5/14/2019	590.24	4.20	586.04
	11/18/2019	590.24	4.75	585.49
MW-16	4/21/2020	590.24	5.00	585.24
	11/17/2020	590.24	5.98	584.26
MW-16	11/2/2015	607.41	25.13	582.28
	2/29/2016	607.41	24.91	582.50
	5/2/2016	607.41	25.23	582.18
	8/23/2016	607.41	28.33	579.08
	12/2/2016	607.41	28.22	579.19
	2/21/2017	607.41	27.71	579.70
	5/15/2017	607.41	23.99	583.42
	7/6/2017	607.41	27.03	580.38
	9/11/2017	607.41	26.74	580.67
	11/27/2017	607.41	27.49	579.92
	6/1/2018	607.41	23.22	584.19
	11/6/2018	607.41	23.65	583.76
	5/14/2019	607.41	23.40	584.01
	11/18/2019	607.41	23.60	583.81
MW-16	4/21/2020	607.41	25.26	582.15
	11/17/2020	607.41	27.50	579.91

MSL - Mean Sea Level
TOC - Top of Casing

Table 2. Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate - Waukegan Generation Station.

DATE	Groundwater Flow Direction	Kavg (ft/sec)*	Average Hydraulic Gradient (ft/ft)	Porosity (unitless)**	Estimated Seepage Velocity (ft/day)
11/2/2015	Southeast	4.040E-03	0.0018	0.35	1.75
2/29/2016	Southeast	4.040E-03	0.0013	0.35	1.30
5/2/2016	Southeast	4.040E-03	0.0015	0.35	1.45
8/23/2016	East-Southeast	4.040E-03	0.0017	0.35	1.65
12/2/2016	East-Southeast	4.040E-03	0.0021	0.35	2.09
2/21/2017	East-Southeast	4.040E-03	0.0022	0.35	2.14
5/15/2017	East-Southeast	4.040E-03	0.0008	0.35	0.80
7/5/2017	East-Southeast	4.040E-03	0.0049	0.35	4.84
9/11/2017	East-Southeast	4.040E-03	0.0018	0.35	1.75
11/27/2017	East-Southeast	4.040E-03	0.0024	0.35	2.39
5/29/2018	East-Southeast	4.040E-03	0.0008	0.35	0.80
11/5/2018	East-Southeast	4.040E-03	0.0014	0.35	1.40
5/14/2019	East-Southeast	4.040E-03	0.0014	0.35	1.40
11/18/2019	East-Southeast	4.040E-03	0.0013	0.35	1.30
4/21/2020	East-Southeast	4.040E-03	0.0013	0.35	1.30
11/17/2020	East-Southeast	4.040E-03	0.0017	0.35	1.70

* Kavg - Average hydraulic conductivity (feet/second) from Hydrogeologic Assessment Report, Patrick Engineering, February 2011.

** - Porosity estimate from Applied Hydrogeology, Fetter, 1980.

Table 3. CCR Groundwater Sample Collection Summary for 2020 - Waukegan Generating Station

Well ID	Number of Groundwater Sampling Events	Dates of Groundwater Sampling Events	Detection Monitoring (D) versus Assessment Monitoring (A)
MW-09 (Background)	2	4/22/2020	D
		11/18/2020	D
MW-11 (Background)	2	4/22/2020	D
		11/19/2020	D
MW-14 (Background)	2	4/22/2020	D
		11/19/2020	D
MW-01 (Downgradient)	2	4/21/2020	D
		11/17/2020	D
MW-02 (Downgradient)	2	4/21/2020	D
		11/17/2020	D
MW-03 (Downgradient)	2	4/21/2020	D
		11/17/2020	D
MW-04 (Downgradient)	2	4/21/2020	D
		11/18/2020	D
MW-16 (Downgradient)	2	4/21/2020	D
		11/17/2020	D

Table 4. Semi-Annual Detection Monitoring Statistical Comparisons - Appendix III Groundwater Analytical Results Through 2020 - Midwest Generation, LLC, Waukegan Station, Waukegan, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
MW-09 up-gradient	11/4/2015	13	210	450	0.14	6.60	370	1700
	3/2/2016	35	380	720	0.11	7.02	970	2800
	5/3/2016	16	310	620	0.12	7.02	740	2500
	8/25/2016	4.5	130	270	0.21	7.13	190	1100
	12/8/2016	15	200	330	0.18	7.01	270	1300
	2/23/2017	14	190	290	0.12	7.68	320	1300
	5/16/2017	27	160	67	0.29	8.15	420	970
	7/6/2017	21	220	430	0.13	7.18	610	1800
	Pred. Limit*	43.9	449	963	0.33	8.53-5.92	1214	3499
	9/13/2017	21	250	420	0.14	7.17	520	1800
	11/29/2017	26	200	390	0.13	7.05	390	1600
	5/31/2018	32	200	29	0.1	6.85	490	1000
	11/6/2018	30	170	23	0.11	7.33	290	930
	5/15/2019	26	120	260	0.13	7.53	31	1000
	11/19/2019	22	160	17	0.16	8.04	300	750
MW-11 up-gradient	4/22/2020	22	140	9.2	0.18	7.81	360	700
	11/18/2020	28	250	290	0.18	7.43	420	1700
	11/5/2015	5.2	140	240	0.13	6.51	190	1100
	3/2/2016	4.0	170	240	0.1	7.16	210	1200
	5/5/2016	5.0	140	280	0.11	7.17	160	1000
	8/26/2016	3.5	180	240	0.13	6.97	110	1100
	12/7/2016	3.0	170	270	0.12	7.06	110	1200
	2/24/2017	2.4	180	220	4.9	6.61	170	1200
	5/18/2017	1.8	160	170	0.12	7.42	120	1000
	7/6/2017	2.4	160	190	0.14	7.33	130	1100
	Pred. Limit*	6.83	206	333	4.9	7.91-6.14	255	1341
	9/13/2017	1.9	140	150	0.26	7.16	96	870
	11/30/2017	2.2	170	200	0.14	6.99	93	1100
	5/31/2018	1.5	210	160	0.1	6.74	130	1100
	11/6/2018	2.3	170	150	0.12	7.21	78	990
MW-14 up-gradient	5/15/2019	3.2	120	260	0.13	7.14	31	1000
	11/19/2019	4.1	130	200	0.15	7.51	29	860
	4/22/2020	3.2	110	150	0.15	7.16	47	740
	11/19/2020	2.3	140	130	0.2	7.00	28	800
	11/5/2015	1.4	150	190	0.19	6.78	140	1000
	3/2/2016	0.93	150	110	0.17	7.24	150	870
	5/5/2016	1.2	170	120	0.18	7.17	190	980
	8/26/2016	1.5	200	210	0.12	7.00	190	1300
	12/7/2016	0.95	240	340	0.25	6.81	120	1100
	2/23/2017	0.73	150	99	0.19	6.88	110	730
	5/18/2017	0.81	120	130	0.3	7.62	70	590
	7/6/2017	1.2	190	180	0.13	7.29	190	1300
	Pred. Limit*	1.85	274	389	0.35	7.89-6.31	266	1676
	9/13/2017	2.3	180	190	0.15	7.20	270	1200
	11/30/2017	0.85	170	130	0.19	7.33	99	940
MW-01 down-gradient	6/1/2018	0.54	100	57	0.28	6.89	42	410
	11/6/2018	0.98	160	110	0.24	7.36	53	610
	5/15/2019	0.69	110	190	0.23	7.25	35	780
	11/19/2019	0.62	130	68	0.16	7.58	21	630
	4/22/2020	0.43	120	20	0.21	7.16	9.5	500
	11/19/2020	0.71	130	40	0.2	7.09	20	520
	11/2/2015	1.8	64	71	0.46	10.93	310	560
	3/1/2016	V	58	63	0.26	11.13	270	570
	5/4/2016	2.0	45	60	0.3	11.09	210	490
	8/23/2016	2.0	42	60	0.26	10.49	240	550
	12/5/2016	2.2	55	65	0.34	10.46	180	560
	2/21/2017	2.2	50	61	0.29	11.30	250	540
	5/15/2017	2.1	52	59	0.37	10.69	330	570
	7/5/2017	2.3	44	51	0.34	10.83	320	570
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	Pred. Limit*	2.52	NC	NC	NC	11.7-10.03	411.6	NC
	9/14/2017	2.4	71	47	0.24	10.45	430	770
	11/27/2017	2.7	84	43	0.11	7.85	330	840
	5/29/2018	2.4	54	58	0.33	8.44	350	610
	11/5/2018	2.0	38	43	0.25	8.70	210	630
	5/14/2019	2.2	56	45	0.18	9.85	250	560
	11/19/2019	2.3	38	39	0.24	10.58	240	530
	4/21/2020	2.8	55	25	0.22	9.40	240	470
	11/17/2020	3.3	120	95	0.14	7.97	250	640

Notes: All units are in mg/l except pH is in standard units.

Pred. Limit - Prediction Limit

Italics Date - Detection Monitoring and resample after statistical background establishment.

* - Intrawell Prediction Limit. All others are interwell comparisons.

** - Based on pooled background from MW-11/MW-14. All others based on MW-14 as background.

V- Serial dilution exceeds the control limits.

R- Resampling event

NA - Not analyzed. No confirmation resample required.

Bold - Potential statistically significant increase.**BOLD** - Potential statistically significant increase relative to intrawell Prediction Limit.**BOLD** - Above both interwell and intrawell Prediction Limits.

NC- Not Calculated.

Table 4. Semi-Annual Detection Monitoring Statistical Comparisons - Appendix III Groundwater Analytical Results Through 2020 - Midwest Generation, LLC, Waukegan Station, Waukegan, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
MW-02 down-gradient	11/2/2015	3.0	32	47	0.78	8.27	230	460
	3/1/2016	4.1	39	47	1.3	8.57	220	510
	5/4/2016	3.3	34	51	1.5	8.19	180	440
	8/23/2016	3.1	42	59	1.3	7.52	250	500
	12/5/2016	3.1	28	56	1.0	8.62	160	430
	2/21/2017	3.3	31	52	0.76	8.75	190	420
	5/15/2017	3.6	85	48	0.64	8.33	320	640
	7/5/2017	4.2	100	52	0.42	7.92	300	710
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	Pred. Limit*	4.73	NC	NC	NC	9.38-7.16	386.6	NC
	9/14/2017	<u>2.5</u>	87	54	0.44	8.19	340	780
	11/27/2017	<u>3.4</u>	69	57	0.62	7.34	200	570
	5/29/2018	<u>4.5</u>	160	43	0.40	6.85	420	990
	11/5/2018	<u>3.1</u>	77	59	0.61	8.06	180	610
	5/14/2019	<u>2.9</u>	47	49	1.0	8.30	140	430
	11/19/2019	<u>4.7</u>	140	43	0.7	7.37	270	900
MW-03 down-gradient	4/21/2020	<u>3.4</u>	86	48	1.0	8.02	250	580
	11/17/2020	<u>4.0</u>	79	20	0.82	7.67	310	610
	11/2/2015	2.3	72	87	0.51	9.26	270	570
	3/1/2016	2.9	61	70	0.33	7.33	220	530
	5/4/2016	2.4	42	74	0.56	7.25	170	470
	8/24/2016	2.0	70	59	0.3	9.13	200	430
	12/5/2016	2.4	57	60	0.41	7.62	120	440
	2/21/2017	2.2	56	65	0.33	7.56	180	460
	5/16/2017	3.9	110	61	0.27	7.90	320	820
	7/5/2017	3.0	60	60	0.28	7.46	200	470
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	Pred. Limit*	4.31	NC	NC	NC	9.26-7.25	378.9	NC
	9/14/2017	<u>2.1</u>	86	57	0.26	7.53	260	680
	11/28/2017	<u>2.6</u>	69	63	0.56	6.96	120	500
	5/29/2018	<u>2.4</u>	67	61	0.38	6.84	190	480
	11/5/2018	<u>2.4</u>	54	54	0.5	8.99	150	500
MW-04 down-gradient	5/14/2019	<u>4.2</u>	86	17	0.59	7.21	270	660
	11/19/2019	<u>4.2</u>	130	15	0.25	7.47	300	740
	4/21/2020	<u>3.8</u>	120	23	0.29	6.87	270	660
	11/17/2020	<u>3.8</u>	120	53	0.29	7.05	240	650
	11/3/2015	1.8	66	62	0.51	6.68	240	480
	3/1/2016	2.0	58	51	0.5	7.17	170	450
	5/4/2016	1.6	44	49	0.61	6.92	140	340
	8/24/2016	2.0	46	58	0.56	7.01	120	370
	12/5/2016	3.4	200	60	0.21	7.40	300	1000
	2/22/2017	2.4	150	41	0.17	7.44	290	850
	5/16/2017	2.5	170	29	0.32	7.94	400	970
	7/5/2017	3.6	200	51	0.29	7.09	520	1100
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	Pred. Limit*	4.42	NC	NC	NC	8.26-6.15	647.3	NC
	9/14/2017	<u>2.5</u>	180	45	0.28	7.04	480	1100
	11/28/2017	<u>2.3</u>	110	32	0.28	7.04	130	560
MW-16 down-gradient	5/30/2018	<u>3.0</u>	150	21	0.38	6.57	200	700
	11/6/2018	<u>2.5</u>	150	58	0.37	6.83	240	900
	5/14/2019	<u>3.3</u>	100	58	0.64	7.30	200	730
	11/19/2019	<u>2.9</u>	120	44	0.75	7.27	270	680
	4/21/2020	<u>2.9</u>	100	33	0.9	7.18	290	670
	11/18/2020	<u>3.1</u>	100	18	1.1	7.17	250	690
	11/3/2015	4.1	230	87	0.43	6.24	610	1400
	3/2/2016	3.1	360	130	0.35	6.76	990	1700
	5/2/2016	4.9	250	150	0.49	6.99	620	1600
	8/24/2016	3.6	130	53	0.71	7.00	330	830
	12/5/2016	3.8	160	52	0.51	7.03	280	920
	2/24/2017	6.5	200	67	0.2	5.76	570	1100
	5/16/2017	2.6	340	130	0.15	7.57	760	1700
	7/6/2017	9.5	190	70	0.57	7.35	480	1100
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	Pred. Limit*	10.94	456.4	NC	NC	8.45-5.23	1206	2257
MW-16 down-gradient	9/13/2017	<u>2.8</u>	190	55	0.61	7.33	460	970
	11/27/2017	<u>4.2</u>	140	58	0.71	7.16	270	760
	6/1/2018	<u>3</u>	380	130	0.32	6.53	890	1900
	8/22/2018 (R)	NA	190	NA	NA	NA	NA	1200
	11/6/2018	<u>3.9</u>	380	150	0.39	6.78	550	1900
	12/4/2018 (R)	NA	320	NA	NA	NA	NA	1600
	5/15/2019	<u>2.9</u>	400	65	0.31	6.67	990	2000
	11/19/2019	<u>7.2</u>	410	480	0.46	6.89	680	3100
	12/27/2019 (R)	NS	NS	NS	NS	NS	NS	2800
	4/21/2020	<u>7.7</u>	420	200	0.5	6.79	1100	2400
	11/17/2020	<u>3.2</u>	130	54	0.71	7.22	320	990

Notes: All units are in mg/l except pH is in standard units.

Pred. Limit - Prediction Limit

Italics Date - Detection Monitoring and resample after statistical background establishment.

* - Intrawell Prediction Limit. All others are interwell comparisons.

** - Based on pooled background from MW-11/MW-14. All others based on MW-14 as background.

V- Serial dilution exceeds the control limits.

R- Resampling event

NA - Not analyzed. No confirmation resample required.

Bold - Potential statistically significant increase.**BOLD** Potential statistically significant increase relative to intrawell Prediction Limit.**BOLD** Above both interwell and intrawell Prediction Limits.

NC- Not Calculated.

Appendix A
Analytical Data Packages from 2020 Detection Monitoring

ANALYTICAL REPORT

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

Laboratory Job ID: 500-180998-1
Client Project/Site: Waukegan CCR

For:
KPRG and Associates, Inc.
14665 West Lisbon Road,
Suite 1A
Brookfield, Wisconsin 53005

Attn: Richard Gnat



Authorized for release by:
5/6/2020 11:18:00 AM

Diana Mockler, Project Manager I
(219)252-7570
diana.mockler@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	15
QC Association	16
QC Sample Results	19
Chain of Custody	25
Receipt Checklists	32
Chronicle	35
Certification Summary	38



Case Narrative

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

Job ID: 500-180998-1

Job ID: 500-180998-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-180998-1

Comments

No additional comments.

Receipt

The samples were received on 4/22/2020 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.3° C and 2.3° C.

Metals

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

General Chemistry

Methods 375.4, SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-01 (500-180998-1), MW-02 (500-180998-2), MW-04 (500-180998-3), MW-03 (500-180998-4), MW-16 (500-180998-5), MW-11 (500-180998-6), MW-09 (500-180998-8), Duplicate (500-180998-9), (500-180998-C-6 MS) and (500-180998-C-6 MSD). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-487586 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method SM 4500 SO4 E: Due to the concentration of sulfates in the parent sample the MS/MSD was diluted after the spike. The spike amount was adjusted by the dilution factor.

(500-180998-C-6 MS) and (500-180998-C-6 MSD)

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

Method Summary

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

Job ID: 500-180998-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI

Protocol References:

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

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

Laboratory References:

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

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

Job ID: 500-180998-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-180998-1	MW-01	Water	04/21/20 11:16	04/22/20 10:10	
500-180998-2	MW-02	Water	04/21/20 12:01	04/22/20 10:10	
500-180998-3	MW-04	Water	04/21/20 13:16	04/22/20 10:10	
500-180998-4	MW-03	Water	04/21/20 14:06	04/22/20 10:10	
500-180998-5	MW-16	Water	04/21/20 14:56	04/22/20 10:10	
500-180998-6	MW-11	Water	04/22/20 09:36	04/23/20 09:45	
500-180998-7	MW-14	Water	04/22/20 10:54	04/23/20 09:45	
500-180998-8	MW-09	Water	04/22/20 11:51	04/23/20 09:45	
500-180998-9	Duplicate	Water	04/22/20 00:00	04/23/20 09:45	

Client Sample Results

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

Job ID: 500-180998-1

Client Sample ID: MW-01

Lab Sample ID: 500-180998-1

Date Collected: 04/21/20 11:16

Matrix: Water

Date Received: 04/22/20 10:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.8		0.50		mg/L		04/22/20 16:50	04/24/20 12:20	10
Calcium	55		0.20		mg/L		04/22/20 16:50	04/23/20 17:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	470		10		mg/L			04/24/20 01:42	1
Chloride	25		2.0		mg/L			05/02/20 09:32	1
Fluoride	0.22		0.10		mg/L			05/05/20 17:24	1
Sulfate	240		50		mg/L			04/30/20 12:52	10

Client Sample Results

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

Job ID: 500-180998-1

Client Sample ID: MW-02

Date Collected: 04/21/20 12:01

Date Received: 04/22/20 10:10

Lab Sample ID: 500-180998-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.4		0.50		mg/L		04/22/20 16:50	04/24/20 12:46	10
Calcium	86		0.20		mg/L		04/22/20 16:50	04/23/20 17:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	580		10		mg/L			04/24/20 01:44	1
Chloride	48		2.0		mg/L			05/02/20 09:35	1
Fluoride	0.97		0.10		mg/L			05/05/20 17:27	1
Sulfate	250		50		mg/L			04/30/20 12:52	10

Client Sample Results

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

Job ID: 500-180998-1

Client Sample ID: MW-04

Date Collected: 04/21/20 13:16

Date Received: 04/22/20 10:10

Lab Sample ID: 500-180998-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.9		0.50		mg/L		04/22/20 16:50	04/24/20 12:50	10
Calcium	100		0.20		mg/L		04/22/20 16:50	04/23/20 17:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	670		10		mg/L			04/24/20 01:47	1
Chloride	33		2.0		mg/L			05/02/20 09:36	1
Fluoride	0.90		0.10		mg/L			05/05/20 17:32	1
Sulfate	290		50		mg/L			04/30/20 12:52	10

Client Sample Results

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

Job ID: 500-180998-1

Client Sample ID: MW-03

Date Collected: 04/21/20 14:06

Date Received: 04/22/20 10:10

Lab Sample ID: 500-180998-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.8		0.50		mg/L		04/22/20 16:50	04/24/20 12:53	10
Calcium	120		0.20		mg/L		04/22/20 16:50	04/23/20 17:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	660		10		mg/L			04/24/20 01:50	1
Chloride	23		2.0		mg/L			05/02/20 09:36	1
Fluoride	0.29		0.10		mg/L			05/05/20 17:39	1
Sulfate	270		50		mg/L			04/30/20 12:56	10

Client Sample Results

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

Job ID: 500-180998-1

Client Sample ID: MW-16

Date Collected: 04/21/20 14:56

Date Received: 04/22/20 10:10

Lab Sample ID: 500-180998-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	7.7		1.0		mg/L		04/22/20 16:50	04/24/20 12:57	20
Calcium	420		4.0		mg/L		04/22/20 16:50	04/24/20 12:57	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2400		10		mg/L			04/24/20 01:52	1
Chloride	200		10		mg/L			05/02/20 10:13	5
Fluoride	0.50		0.10		mg/L			05/05/20 17:44	1
Sulfate	1100		200		mg/L			04/30/20 13:26	40

Client Sample Results

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

Job ID: 500-180998-1

Client Sample ID: MW-11

Date Collected: 04/22/20 09:36

Date Received: 04/23/20 09:45

Lab Sample ID: 500-180998-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.2		0.50		mg/L		04/28/20 07:16	05/04/20 15:07	10
Calcium	110		0.20		mg/L		04/28/20 07:16	04/30/20 16:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	740		10		mg/L			04/25/20 16:08	1
Chloride	150		10		mg/L			05/02/20 10:13	5
Fluoride	0.15		0.10		mg/L			05/05/20 17:59	1
Sulfate	47		10		mg/L			04/30/20 12:56	2

Client Sample Results

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

Job ID: 500-180998-1

Client Sample ID: MW-14

Date Collected: 04/22/20 10:54

Date Received: 04/23/20 09:45

Lab Sample ID: 500-180998-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.43		0.050		mg/L		04/28/20 07:16	05/04/20 15:11	1
Calcium	120		0.20		mg/L		04/28/20 07:16	04/30/20 16:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	500		10		mg/L			04/25/20 16:10	1
Chloride	20		2.0		mg/L			05/02/20 09:42	1
Fluoride	0.21		0.10		mg/L			05/05/20 18:06	1
Sulfate	9.5		5.0		mg/L			04/30/20 12:24	1

Client Sample Results

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

Job ID: 500-180998-1

Client Sample ID: MW-09

Date Collected: 04/22/20 11:51

Date Received: 04/23/20 09:45

Lab Sample ID: 500-180998-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	22		5.0		mg/L		04/28/20 07:16	05/04/20 15:37	100
Calcium	140		0.20		mg/L		04/28/20 07:16	04/30/20 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	700		10		mg/L			04/25/20 16:13	1
Chloride	9.2		2.0		mg/L			05/02/20 09:43	1
Fluoride	0.18		0.10		mg/L			05/05/20 18:10	1
Sulfate	360		50		mg/L			04/30/20 13:01	10

Client Sample Results

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

Job ID: 500-180998-1

Client Sample ID: Duplicate

Lab Sample ID: 500-180998-9

Date Collected: 04/22/20 00:00

Matrix: Water

Date Received: 04/23/20 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	22		5.0		mg/L		04/28/20 07:16	05/04/20 15:40	100
Calcium	140		0.20		mg/L		04/28/20 07:16	04/30/20 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	700		10		mg/L			04/25/20 16:16	1
Chloride	9.2		2.0		mg/L			05/02/20 09:45	1
Fluoride	0.18		0.10		mg/L			05/05/20 18:13	1
Sulfate	350		50		mg/L			04/30/20 13:01	10

Definitions/Glossary

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

Job ID: 500-180998-1

Qualifiers

Metals

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

General Chemistry

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

Glossary

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

QC Association Summary

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

Job ID: 500-180998-1

Metals

Prep Batch: 539348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-1	MW-01	Total Recoverable	Water	3005A	
500-180998-2	MW-02	Total Recoverable	Water	3005A	
500-180998-3	MW-04	Total Recoverable	Water	3005A	
500-180998-4	MW-03	Total Recoverable	Water	3005A	
500-180998-5	MW-16	Total Recoverable	Water	3005A	
MB 500-539348/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-539348/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-180998-1 MS	MW-01	Total Recoverable	Water	3005A	
500-180998-1 MSD	MW-01	Total Recoverable	Water	3005A	
500-180998-1 DU	MW-01	Total Recoverable	Water	3005A	

Analysis Batch: 539642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-1	MW-01	Total Recoverable	Water	6020A	539348
500-180998-2	MW-02	Total Recoverable	Water	6020A	539348
500-180998-3	MW-04	Total Recoverable	Water	6020A	539348
500-180998-4	MW-03	Total Recoverable	Water	6020A	539348
MB 500-539348/1-A	Method Blank	Total Recoverable	Water	6020A	539348
LCS 500-539348/2-A	Lab Control Sample	Total Recoverable	Water	6020A	539348
500-180998-1 MS	MW-01	Total Recoverable	Water	6020A	539348
500-180998-1 MSD	MW-01	Total Recoverable	Water	6020A	539348
500-180998-1 DU	MW-01	Total Recoverable	Water	6020A	539348

Analysis Batch: 539883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-1	MW-01	Total Recoverable	Water	6020A	539348
500-180998-2	MW-02	Total Recoverable	Water	6020A	539348
500-180998-3	MW-04	Total Recoverable	Water	6020A	539348
500-180998-4	MW-03	Total Recoverable	Water	6020A	539348
500-180998-5	MW-16	Total Recoverable	Water	6020A	539348
MB 500-539348/1-A	Method Blank	Total Recoverable	Water	6020A	539348
LCS 500-539348/2-A	Lab Control Sample	Total Recoverable	Water	6020A	539348
500-180998-1 MS	MW-01	Total Recoverable	Water	6020A	539348
500-180998-1 MSD	MW-01	Total Recoverable	Water	6020A	539348
500-180998-1 DU	MW-01	Total Recoverable	Water	6020A	539348

Prep Batch: 540005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-6	MW-11	Total Recoverable	Water	3005A	
500-180998-7	MW-14	Total Recoverable	Water	3005A	
500-180998-8	MW-09	Total Recoverable	Water	3005A	
500-180998-9	Duplicate	Total Recoverable	Water	3005A	
MB 500-540005/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-540005/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-180998-7 MS	MW-14	Total Recoverable	Water	3005A	
500-180998-7 MSD	MW-14	Total Recoverable	Water	3005A	
500-180998-7 DU	MW-14	Total Recoverable	Water	3005A	

Analysis Batch: 540706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-6	MW-11	Total Recoverable	Water	6020A	540005

Eurofins TestAmerica, Chicago

QC Association Summary

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

Job ID: 500-180998-1

Metals (Continued)

Analysis Batch: 540706 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-7	MW-14	Total Recoverable	Water	6020A	540005
500-180998-8	MW-09	Total Recoverable	Water	6020A	540005
500-180998-9	Duplicate	Total Recoverable	Water	6020A	540005
MB 500-540005/1-A	Method Blank	Total Recoverable	Water	6020A	540005
LCS 500-540005/2-A	Lab Control Sample	Total Recoverable	Water	6020A	540005
500-180998-7 MS	MW-14	Total Recoverable	Water	6020A	540005
500-180998-7 MSD	MW-14	Total Recoverable	Water	6020A	540005
500-180998-7 DU	MW-14	Total Recoverable	Water	6020A	540005

Analysis Batch: 541044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-6	MW-11	Total Recoverable	Water	6020A	540005
500-180998-7	MW-14	Total Recoverable	Water	6020A	540005
500-180998-8	MW-09	Total Recoverable	Water	6020A	540005
500-180998-9	Duplicate	Total Recoverable	Water	6020A	540005
MB 500-540005/1-A	Method Blank	Total Recoverable	Water	6020A	540005
LCS 500-540005/2-A	Lab Control Sample	Total Recoverable	Water	6020A	540005
500-180998-7 MS	MW-14	Total Recoverable	Water	6020A	540005
500-180998-7 MSD	MW-14	Total Recoverable	Water	6020A	540005
500-180998-7 DU	MW-14	Total Recoverable	Water	6020A	540005

General Chemistry

Analysis Batch: 487586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-180998-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-180998-3	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-180998-4	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-180998-5	MW-16	Total/NA	Water	SM 4500 SO4 E	
500-180998-6	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-180998-7	MW-14	Total/NA	Water	SM 4500 SO4 E	
500-180998-8	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-180998-9	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 400-487586/5	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-487586/6	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
LCSD 400-487586/26	Lab Control Sample Dup	Total/NA	Water	SM 4500 SO4 E	
MRL 400-487586/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-180998-6 MS	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-180998-6 MSD	MW-11	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 539423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-1	MW-01	Total/NA	Water	SM 2540C	
500-180998-2	MW-02	Total/NA	Water	SM 2540C	
500-180998-3	MW-04	Total/NA	Water	SM 2540C	
500-180998-4	MW-03	Total/NA	Water	SM 2540C	
500-180998-5	MW-16	Total/NA	Water	SM 2540C	
MB 500-539423/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-539423/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Chicago

QC Association Summary

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

Job ID: 500-180998-1

General Chemistry

Analysis Batch: 539771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-6	MW-11	Total/NA	Water	SM 2540C	
500-180998-7	MW-14	Total/NA	Water	SM 2540C	
500-180998-8	MW-09	Total/NA	Water	SM 2540C	
500-180998-9	Duplicate	Total/NA	Water	SM 2540C	
MB 500-539771/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-539771/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 540786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-1	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-180998-2	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-180998-3	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-180998-4	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-180998-5	MW-16	Total/NA	Water	SM 4500 Cl- E	
500-180998-6	MW-11	Total/NA	Water	SM 4500 Cl- E	
500-180998-7	MW-14	Total/NA	Water	SM 4500 Cl- E	
500-180998-8	MW-09	Total/NA	Water	SM 4500 Cl- E	
500-180998-9	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-540786/47	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-540786/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-180998-1 MS	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-180998-1 MSD	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-180998-8 MS	MW-09	Total/NA	Water	SM 4500 Cl- E	
500-180998-8 MSD	MW-09	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 541183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-180998-1	MW-01	Total/NA	Water	SM 4500 F C	
500-180998-2	MW-02	Total/NA	Water	SM 4500 F C	
500-180998-3	MW-04	Total/NA	Water	SM 4500 F C	
500-180998-4	MW-03	Total/NA	Water	SM 4500 F C	
500-180998-5	MW-16	Total/NA	Water	SM 4500 F C	
500-180998-6	MW-11	Total/NA	Water	SM 4500 F C	
500-180998-7	MW-14	Total/NA	Water	SM 4500 F C	
500-180998-8	MW-09	Total/NA	Water	SM 4500 F C	
500-180998-9	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-541183/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-541183/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

QC Sample Results

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

Job ID: 500-180998-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-539348/1-A

Matrix: Water

Analysis Batch: 539642

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 539348

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050	^	0.050		mg/L		04/22/20 16:50	04/23/20 16:59	1
Calcium	<0.20		0.20		mg/L		04/22/20 16:50	04/23/20 16:59	1

Lab Sample ID: MB 500-539348/1-A

Matrix: Water

Analysis Batch: 539883

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 539348

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		04/22/20 16:50	04/24/20 12:13	1

Lab Sample ID: LCS 500-539348/2-A

Matrix: Water

Analysis Batch: 539642

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 539348

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10.0	10.1		mg/L		101	80 - 120

Lab Sample ID: LCS 500-539348/2-A

Matrix: Water

Analysis Batch: 539883

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 539348

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	0.950		mg/L		95	80 - 120

Lab Sample ID: 500-180998-1 MS

Matrix: Water

Analysis Batch: 539642

Client Sample ID: MW-01

Prep Type: Total Recoverable

Prep Batch: 539348

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	55		10.0	68.1	4	mg/L		128	75 - 125

Lab Sample ID: 500-180998-1 MS

Matrix: Water

Analysis Batch: 539883

Client Sample ID: MW-01

Prep Type: Total Recoverable

Prep Batch: 539348

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	2.8		1.00	3.90		mg/L		110	75 - 125

Lab Sample ID: 500-180998-1 MSD

Matrix: Water

Analysis Batch: 539642

Client Sample ID: MW-01

Prep Type: Total Recoverable

Prep Batch: 539348

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Calcium	55		10.0	65.0	4	mg/L		98	75 - 125	5	20

QC Sample Results

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

Job ID: 500-180998-1

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

Lab Sample ID: 500-180998-1 MSD

Matrix: Water

Analysis Batch: 539883

Client Sample ID: MW-01

Prep Type: Total Recoverable

Prep Batch: 539348

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	2.8		1.00	3.65		mg/L		85	75 - 125	7	20

Lab Sample ID: 500-180998-1 DU

Matrix: Water

Analysis Batch: 539642

Client Sample ID: MW-01

Prep Type: Total Recoverable

Prep Batch: 539348

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Calcium	55		55.7		mg/L		0.8	20

Lab Sample ID: 500-180998-1 DU

Matrix: Water

Analysis Batch: 539883

Client Sample ID: MW-01

Prep Type: Total Recoverable

Prep Batch: 539348

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	2.8		2.77		mg/L		1	20

Lab Sample ID: MB 500-540005/1-A

Matrix: Water

Analysis Batch: 540706

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 540005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.20		0.20		mg/L		04/28/20 07:16	04/30/20 16:06	1

Lab Sample ID: MB 500-540005/1-A

Matrix: Water

Analysis Batch: 541044

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 540005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		04/28/20 07:16	05/04/20 14:46	1

Lab Sample ID: LCS 500-540005/2-A

Matrix: Water

Analysis Batch: 540706

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 540005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10.0	9.51		mg/L		95	80 - 120

Lab Sample ID: LCS 500-540005/2-A

Matrix: Water

Analysis Batch: 541044

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 540005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	0.982		mg/L		98	80 - 120

Lab Sample ID: 500-180998-7 MS

Matrix: Water

Analysis Batch: 540706

Client Sample ID: MW-14

Prep Type: Total Recoverable

Prep Batch: 540005

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	120		10.0	126	4	mg/L		88	75 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

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

Job ID: 500-180998-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: 500-180998-7 MS

Matrix: Water

Analysis Batch: 541044

Client Sample ID: MW-14
Prep Type: Total Recoverable
Prep Batch: 540005

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.43		1.00	1.35		mg/L		92	75 - 125

Lab Sample ID: 500-180998-7 MSD

Matrix: Water

Analysis Batch: 540706

Client Sample ID: MW-14
Prep Type: Total Recoverable
Prep Batch: 540005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Calcium	120		10.0	129	4	mg/L		121	75 - 125	3	20

Lab Sample ID: 500-180998-7 MSD

Matrix: Water

Analysis Batch: 541044

Client Sample ID: MW-14
Prep Type: Total Recoverable
Prep Batch: 540005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Boron	0.43		1.00	1.37		mg/L		93	75 - 125	1	20

Lab Sample ID: 500-180998-7 DU

Matrix: Water

Analysis Batch: 540706

Client Sample ID: MW-14
Prep Type: Total Recoverable
Prep Batch: 540005

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Calcium	120		122		mg/L		4	20

Lab Sample ID: 500-180998-7 DU

Matrix: Water

Analysis Batch: 541044

Client Sample ID: MW-14
Prep Type: Total Recoverable
Prep Batch: 540005

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Boron	0.43		0.441		mg/L		2	20

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

Lab Sample ID: MB 500-539423/1

Matrix: Water

Analysis Batch: 539423

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			04/24/20 01:19	1

Lab Sample ID: LCS 500-539423/2

Matrix: Water

Analysis Batch: 539423

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	268		mg/L		107	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

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

Job ID: 500-180998-1

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

Lab Sample ID: MB 500-539771/1

Matrix: Water

Analysis Batch: 539771

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			04/25/20 15:27	1

Lab Sample ID: LCS 500-539771/2

Matrix: Water

Analysis Batch: 539771

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	250		mg/L		100	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-540786/47

Matrix: Water

Analysis Batch: 540786

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			05/02/20 10:12	1

Lab Sample ID: LCS 500-540786/13

Matrix: Water

Analysis Batch: 540786

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	53.1		mg/L		106	85 - 115

Lab Sample ID: 500-180998-1 MS

Matrix: Water

Analysis Batch: 540786

Client Sample ID: MW-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25		50.0	74.9		mg/L		100	75 - 125

Lab Sample ID: 500-180998-1 MSD

Matrix: Water

Analysis Batch: 540786

Client Sample ID: MW-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	25		50.0	74.4		mg/L		99	75 - 125	1	20

Lab Sample ID: 500-180998-8 MS

Matrix: Water

Analysis Batch: 540786

Client Sample ID: MW-09

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.2		50.0	59.2		mg/L		100	75 - 125

QC Sample Results

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

Job ID: 500-180998-1

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

Lab Sample ID: 500-180998-8 MSD
Matrix: Water
Analysis Batch: 540786

Client Sample ID: MW-09
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9.2		50.0	59.6		mg/L		101	75 - 125	1	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-541183/3
Matrix: Water
Analysis Batch: 541183

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			05/05/20 16:05	1

Lab Sample ID: LCS 500-541183/4
Matrix: Water
Analysis Batch: 541183

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.8		mg/L		108	80 - 120

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-487586/5
Matrix: Water
Analysis Batch: 487586

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			04/30/20 12:12	1

Lab Sample ID: LCS 400-487586/6
Matrix: Water
Analysis Batch: 487586

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.7		mg/L		98	90 - 110

Lab Sample ID: MRL 400-487586/3
Matrix: Water
Analysis Batch: 487586

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	<5.0		mg/L		97	50 - 150

Lab Sample ID: 500-180998-6 MS
Matrix: Water
Analysis Batch: 487586

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	47		10.0	54.0	4	mg/L		73	77 - 128

QC Sample Results

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

Job ID: 500-180998-1

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 500-180998-6 MSD

Matrix: Water

Analysis Batch: 487586

Client Sample ID: MW-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	47		10.0	56.3	4	mg/L	—	96	77 - 128	4	5

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact		Project Manager: Rich Gnat		Site Contact: Mitchel Dolan		Date: 4/21/20		COC No:	
KPRG and Associates, Inc.		Tel/Fax: (262) 781-0475		Lab Contact: Eric Lang		Carrier: FedEx		COC No: 1 of 1 COCs	
14665 West Lisbon Road, Suite 1A		Analysis Turnaround Time							
Brookfield, WI 53154		☐ CALENDAR DAYS ☐ WORKING DAYS							
(262) 781-0475 Phone		TAT if different from Below _____							
(262) 781-0478 FAX		☐ 2 weeks							
Project Name: Waukegan CCR		☐ 1 week							
Site: Waukegan Station - Waukegan, IL		☐ 2 days							
P O # 12313.2		☐ 1 day							

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Total Metals	Cl, FI, SO4, TDS	Residue	500-180998 COC	Sample Specific Notes:
MW-01	4/21	1116	G	W	2	N	N	x	x			
MW-02		1201										
MW-04		1316										
MW-03		1406										
MW-16		1456										

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: 0.3	Corr'd: 1.3	Therm ID No.:
Relinquished by: Mitchel Dolan <i>MD</i>	Company: KPRG	Date/Time: 4/21/20/1600	Received by: FEDEX	Company:
Relinquished by:	Company:	Date/Time:	Received by: <i>JA</i>	Company: <i>TA</i>
Relinquished by:	Company:	Date/Time:	Received by: <i>JA</i>	Company: <i>TA</i>

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

2417 Bond Street

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Chain of Custody Record

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:[illegible]

ORIGIN ID:FEPA (262) 622-1143
KPRG

414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 21APR20
ACTWT: 33.95 LB
CAD: 6994085/SSFE2102
DIMS: 16x11x15 IN
BILL THIRD PARTY

TO **TEST AMERICA**
ATTN: SAMPLE RECEIVING
2417 BOND ST

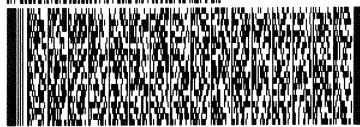
UNIVERSITY PARK IL 60484

(999) 999-9999

REF:

DEPT:

PO1



FedEx
Express



1 of 3

TRK# 3921 0898 7385

MASTER

79 JOTA

WED - 22 APR 3:00P
STANDARD OVERNIGHT

AHS

60484

IL-US ORD



30qt.



500-18C998 Way

Client Information (Sub Contract Lab)				Sampler: Lab PM: Lang, Eric A.		Carrier Tracking No(s): 500-134403.1	
Client Contact: Shipping/Receiving				Phone: Eric A. Lang		State of Origin: Illinois	
Company: TestAmerica Laboratories, Inc.				E-Mail: eric.lang@testamericainc.com		Page: Page 1 of 1	
Address: 3355 McLeone Drive, Pensacola, FL 32514				Accreditations Required (See note): NELAP - Illinois		Job #: 500-180998-1	
Phone: 850-474-1001(Tel) 850-478-2671(Fax)				PO #: 50011597		Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)	
Email: SSOW#:				Project #: 50011597		Other: 	
Site: NRG Midwest Generation Waukegan				Due Date Requested: 5/6/2020		Analysis Requested: 	
				TAT Requested (days): 			
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=solid, O=other, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers
MW-01 (500-180998-1)	4/21/20	11:16 Central	Water	Water	X	X	1
MW-02 (500-180998-2)	4/21/20	12:01 Central	Water	Water	X	X	1
MW-04 (500-180998-3)	4/21/20	13:16 Central	Water	Water	X	X	1
MW-03 (500-180998-4)	4/21/20	14:06 Central	Water	Water	X	X	1
MW-16 (500-180998-5)	4/21/20	14:56 Central	Water	Water	X	X	1
Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.							
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Empty Kit Relinquished by: Date: Time: Relinquished by: Stephanie Hamandberg Date/Time: 4/22/20 1600 Company: TH-GHI Relinquished by: Date/Time: Company: Relinquished by: Date/Time: Company: Custody Seals Intact: Yes Custody Seal No.: 							
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client ☐ Disposal By Lab ☐ Archive For Months Special Instructions/QC Requirements: Method of Shipment: Received by: Waukegan Hamandberg Date/Time: 4-23-2020 956 Company: TH-GHI Received by: Date/Time: Company: Received by: Date/Time: Company: Cooler Temperature(s) °C and Other Remarks: 4.1°C DGA							

TestAmerica

LEADER IN ENVIRONMENTAL TESTING

IN ID: JOTA (708) 534-5200
SAMPLE LOGIN
TESTAMERICA LABS
2417 BOND ST
UNIVERSITY PARK, IL 60484
UNITED STATES US

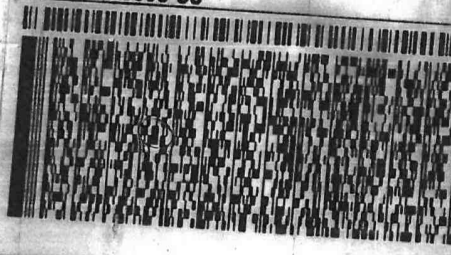
SHIP DATE: 23APR20
ACTWGT: 20.00 LB MAN
CAD: 33264/CAFE3311

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA PENSACOLA
3355 MCLEMORE DR.

PENSACOLA FL 32514

(860) 474-1001
REF: 180998 SS



FedEx
Express

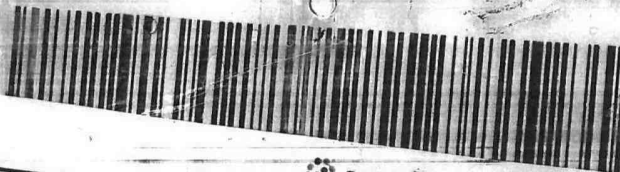


TRK# 1648 4106 3191
0201

FRI - 24 APR 10:30A
PRIORITY OVERNIGHT

XH PNSA

32514
FL-US BFM



eurofins

Environment Testing
TestAmerica

1007325

eurofins

Environment Testing
TestAmerica

Temperature Controlled

IF THIS SHIPMENT IS DELAYED IN TRANSIT,
STORE REFRIGERATED (2° TO 8° C / 36° TO 47° F)

Custody Sea

DATE

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-180998-1

Login Number: 180998

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3, 2.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-180998-1

Login Number: 180998

List Number: 2

Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola

List Creation: 04/23/20 04:57 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
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	4.1°C IR-9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-180998-1

Login Number: 180998

List Number: 3

Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola

List Creation: 04/24/20 06:02 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
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	0.2°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Chronicle

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

Job ID: 500-180998-1

Client Sample ID: MW-01

Lab Sample ID: 500-180998-1

Date Collected: 04/21/20 11:16

Matrix: Water

Date Received: 04/22/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			539348	04/22/20 16:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	539642	04/23/20 17:06	FXG	TAL CHI
Total Recoverable	Prep	3005A			539348	04/22/20 16:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	539883	04/24/20 12:20	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	539423	04/24/20 01:42	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	540786	05/02/20 09:32	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	541183	05/05/20 17:24	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487586	04/30/20 12:52	HES	TAL PEN

Client Sample ID: MW-02

Lab Sample ID: 500-180998-2

Date Collected: 04/21/20 12:01

Matrix: Water

Date Received: 04/22/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			539348	04/22/20 16:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	539642	04/23/20 17:25	FXG	TAL CHI
Total Recoverable	Prep	3005A			539348	04/22/20 16:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	539883	04/24/20 12:46	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	539423	04/24/20 01:44	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	540786	05/02/20 09:35	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	541183	05/05/20 17:27	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487586	04/30/20 12:52	HES	TAL PEN

Client Sample ID: MW-04

Lab Sample ID: 500-180998-3

Date Collected: 04/21/20 13:16

Matrix: Water

Date Received: 04/22/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			539348	04/22/20 16:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	539642	04/23/20 17:28	FXG	TAL CHI
Total Recoverable	Prep	3005A			539348	04/22/20 16:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	539883	04/24/20 12:50	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	539423	04/24/20 01:47	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	540786	05/02/20 09:36	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	541183	05/05/20 17:32	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487586	04/30/20 12:52	HES	TAL PEN

Client Sample ID: MW-03

Lab Sample ID: 500-180998-4

Date Collected: 04/21/20 14:06

Matrix: Water

Date Received: 04/22/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			539348	04/22/20 16:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	539642	04/23/20 17:32	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

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

Job ID: 500-180998-1

Client Sample ID: MW-03

Date Collected: 04/21/20 14:06

Date Received: 04/22/20 10:10

Lab Sample ID: 500-180998-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			539348	04/22/20 16:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	539883	04/24/20 12:53	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	539423	04/24/20 01:50	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	540786	05/02/20 09:36	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	541183	05/05/20 17:39	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487586	04/30/20 12:56	HES	TAL PEN

Client Sample ID: MW-16

Date Collected: 04/21/20 14:56

Date Received: 04/22/20 10:10

Lab Sample ID: 500-180998-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			539348	04/22/20 16:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	539883	04/24/20 12:57	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	539423	04/24/20 01:52	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	540786	05/02/20 10:13	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	541183	05/05/20 17:44	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		40	487586	04/30/20 13:26	HES	TAL PEN

Client Sample ID: MW-11

Date Collected: 04/22/20 09:36

Date Received: 04/23/20 09:45

Lab Sample ID: 500-180998-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540005	04/28/20 07:16	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	540706	04/30/20 16:38	FXG	TAL CHI
Total Recoverable	Prep	3005A			540005	04/28/20 07:16	LMN	TAL CHI
Total Recoverable	Analysis	6020A		10	541044	05/04/20 15:07	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	539771	04/25/20 16:08	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	540786	05/02/20 10:13	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	541183	05/05/20 17:59	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	487586	04/30/20 12:56	HES	TAL PEN

Client Sample ID: MW-14

Date Collected: 04/22/20 10:54

Date Received: 04/23/20 09:45

Lab Sample ID: 500-180998-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540005	04/28/20 07:16	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	540706	04/30/20 16:42	FXG	TAL CHI
Total Recoverable	Prep	3005A			540005	04/28/20 07:16	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	541044	05/04/20 15:11	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	539771	04/25/20 16:10	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	540786	05/02/20 09:42	EAT	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

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

Job ID: 500-180998-1

Client Sample ID: MW-14

Date Collected: 04/22/20 10:54

Date Received: 04/23/20 09:45

Lab Sample ID: 500-180998-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	541183	05/05/20 18:06	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	487586	04/30/20 12:24	HES	TAL PEN

Client Sample ID: MW-09

Date Collected: 04/22/20 11:51

Date Received: 04/23/20 09:45

Lab Sample ID: 500-180998-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540005	04/28/20 07:16	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	540706	04/30/20 17:00	FXG	TAL CHI
Total Recoverable	Prep	3005A			540005	04/28/20 07:16	LMN	TAL CHI
Total Recoverable	Analysis	6020A		100	541044	05/04/20 15:37	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	539771	04/25/20 16:13	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	540786	05/02/20 09:43	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	541183	05/05/20 18:10	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487586	04/30/20 13:01	HES	TAL PEN

Client Sample ID: Duplicate

Date Collected: 04/22/20 00:00

Date Received: 04/23/20 09:45

Lab Sample ID: 500-180998-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540005	04/28/20 07:16	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	540706	04/30/20 17:03	FXG	TAL CHI
Total Recoverable	Prep	3005A			540005	04/28/20 07:16	LMN	TAL CHI
Total Recoverable	Analysis	6020A		100	541044	05/04/20 15:40	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	539771	04/25/20 16:16	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	540786	05/02/20 09:45	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	541183	05/05/20 18:13	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487586	04/30/20 13:01	HES	TAL PEN

Laboratory References:

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

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

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

Job ID: 500-180998-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-20 *

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Chicago

ANALYTICAL REPORT

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

Laboratory Job ID: 500-191301-1
Client Project/Site: Waukegan CCR

For:
KPRG and Associates, Inc.
14665 West Lisbon Road,
Suite 1A
Brookfield, Wisconsin 53005

Attn: Richard Gnat



Authorized for release by:
12/7/2020 5:46:04 PM

Diana Mockler, Project Manager I
(219)252-7570
Diana.Mockler@Eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	13
QC Association	14
QC Sample Results	16
Chain of Custody	19
Receipt Checklists	25
Chronicle	28
Certification Summary	31



Case Narrative

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

Job ID: 500-191301-1

Job ID: 500-191301-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-191301-1

Comments

No additional comments.

Receipt

The samples were received on 11/18/2020 2:10 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were -0.6° C, 0.8° C and 4.3° C.

Metals

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

General Chemistry

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

Method Summary

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

Job ID: 500-191301-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CF
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI

Protocol References:

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

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

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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

Sample Summary

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

Job ID: 500-191301-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-191301-1	MW-16	Water	11/17/20 12:33	11/18/20 14:10	
500-191301-2	MW-01	Water	11/17/20 13:26	11/18/20 14:10	
500-191301-3	MW-02	Water	11/17/20 14:25	11/18/20 14:10	
500-191301-4	Duplicate	Water	11/17/20 00:00	11/18/20 14:10	
500-191301-5	MW-03	Water	11/17/20 15:12	11/18/20 14:10	
500-191301-6	MW-04	Water	11/18/20 09:46	11/19/20 13:30	
500-191301-7	MW-09	Water	11/18/20 14:56	11/19/20 13:30	

Client Sample Results

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

Job ID: 500-191301-1

Client Sample ID: MW-16

Lab Sample ID: 500-191301-1

Date Collected: 11/17/20 12:33

Matrix: Water

Date Received: 11/18/20 14:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.2		0.50		mg/L		11/20/20 18:28	11/25/20 14:28	10
Calcium	130		0.20		mg/L		11/20/20 18:28	11/24/20 15:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	990		150		mg/L			11/20/20 17:15	1
Chloride	54		2.0		mg/L			11/30/20 07:50	1
Fluoride	0.71		0.10		mg/L			12/02/20 11:07	1
Sulfate	320		100		mg/L			11/25/20 12:10	20

Client Sample Results

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

Job ID: 500-191301-1

Client Sample ID: MW-01

Lab Sample ID: 500-191301-2

Date Collected: 11/17/20 13:26

Matrix: Water

Date Received: 11/18/20 14:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.3		0.50		mg/L		11/20/20 18:28	11/25/20 14:32	10
Calcium	120		0.20		mg/L		11/20/20 18:28	11/24/20 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	640		30		mg/L			11/20/20 17:15	1
Chloride	95		10		mg/L			11/30/20 08:13	5
Fluoride	0.14		0.10		mg/L			12/02/20 11:21	1
Sulfate	250		50		mg/L			11/25/20 12:12	10

Client Sample Results

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

Job ID: 500-191301-1

Client Sample ID: MW-02

Lab Sample ID: 500-191301-3

Date Collected: 11/17/20 14:25

Matrix: Water

Date Received: 11/18/20 14:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4.0		0.50		mg/L		11/20/20 18:28	11/25/20 14:35	10
Calcium	79		0.20		mg/L		11/20/20 18:28	11/24/20 15:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	610		30		mg/L			11/20/20 17:15	1
Chloride	20		2.0		mg/L			11/30/20 07:53	1
Fluoride	0.82		0.10		mg/L			12/02/20 11:25	1
Sulfate	310		50		mg/L			11/25/20 12:12	10

Client Sample Results

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

Job ID: 500-191301-1

Client Sample ID: Duplicate

Lab Sample ID: 500-191301-4

Date Collected: 11/17/20 00:00

Matrix: Water

Date Received: 11/18/20 14:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.3		0.50		mg/L		11/20/20 18:28	11/25/20 14:38	10
Calcium	140		0.20		mg/L		11/20/20 18:28	11/24/20 15:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	800		30		mg/L			11/20/20 17:15	1
Chloride	54		2.0		mg/L			11/30/20 07:53	1
Fluoride	0.71		0.10		mg/L			12/02/20 11:28	1
Sulfate	320		50		mg/L			11/25/20 12:12	10

Client Sample Results

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

Job ID: 500-191301-1

Client Sample ID: MW-03

Date Collected: 11/17/20 15:12

Date Received: 11/18/20 14:10

Lab Sample ID: 500-191301-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.8		0.50		mg/L		11/20/20 18:28	11/25/20 14:42	10
Calcium	120		0.20		mg/L		11/20/20 18:28	11/24/20 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	650		30		mg/L			11/20/20 17:15	1
Chloride	53		2.0		mg/L			11/30/20 07:54	1
Fluoride	0.29		0.10		mg/L			12/02/20 11:31	1
Sulfate	240		50		mg/L			11/25/20 12:13	10

Client Sample Results

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

Job ID: 500-191301-1

Client Sample ID: MW-04

Lab Sample ID: 500-191301-6

Date Collected: 11/18/20 09:46

Matrix: Water

Date Received: 11/19/20 13:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.1		0.50		mg/L		11/20/20 18:28	11/25/20 14:45	10
Calcium	100		0.20		mg/L		11/20/20 18:28	11/24/20 15:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	690		30		mg/L			11/23/20 09:04	1
Chloride	18		2.0		mg/L			11/30/20 07:54	1
Fluoride	1.1		0.10		mg/L			12/02/20 11:36	1
Sulfate	250		50		mg/L			11/25/20 12:13	10

Client Sample Results

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

Job ID: 500-191301-1

Client Sample ID: MW-09

Lab Sample ID: 500-191301-7

Date Collected: 11/18/20 14:56

Matrix: Water

Date Received: 11/19/20 13:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	28		5.0		mg/L		11/20/20 18:28	11/25/20 14:48	100
Calcium	250		0.20		mg/L		11/20/20 18:28	11/24/20 15:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1700		150		mg/L			11/23/20 09:04	1
Chloride	290		10		mg/L			11/30/20 08:14	5
Fluoride	0.18		0.10		mg/L			12/02/20 11:43	1
Sulfate	420		50		mg/L			11/25/20 12:14	10

Definitions/Glossary

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

Job ID: 500-191301-1

Qualifiers

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

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

Job ID: 500-191301-1

Metals

Prep Batch: 573375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191301-1	MW-16	Total Recoverable	Water	3005A	
500-191301-2	MW-01	Total Recoverable	Water	3005A	
500-191301-3	MW-02	Total Recoverable	Water	3005A	
500-191301-4	Duplicate	Total Recoverable	Water	3005A	
500-191301-5	MW-03	Total Recoverable	Water	3005A	
500-191301-6	MW-04	Total Recoverable	Water	3005A	
500-191301-7	MW-09	Total Recoverable	Water	3005A	
MB 500-573375/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-573375/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 574028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191301-1	MW-16	Total Recoverable	Water	6020A	573375
500-191301-2	MW-01	Total Recoverable	Water	6020A	573375
500-191301-3	MW-02	Total Recoverable	Water	6020A	573375
500-191301-4	Duplicate	Total Recoverable	Water	6020A	573375
500-191301-5	MW-03	Total Recoverable	Water	6020A	573375
500-191301-6	MW-04	Total Recoverable	Water	6020A	573375
500-191301-7	MW-09	Total Recoverable	Water	6020A	573375
MB 500-573375/1-A	Method Blank	Total Recoverable	Water	6020A	573375
LCS 500-573375/2-A	Lab Control Sample	Total Recoverable	Water	6020A	573375

Analysis Batch: 574090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191301-1	MW-16	Total Recoverable	Water	6020A	573375
500-191301-2	MW-01	Total Recoverable	Water	6020A	573375
500-191301-3	MW-02	Total Recoverable	Water	6020A	573375
500-191301-4	Duplicate	Total Recoverable	Water	6020A	573375
500-191301-5	MW-03	Total Recoverable	Water	6020A	573375
500-191301-6	MW-04	Total Recoverable	Water	6020A	573375
500-191301-7	MW-09	Total Recoverable	Water	6020A	573375
MB 500-573375/1-A	Method Blank	Total Recoverable	Water	6020A	573375
LCS 500-573375/2-A	Lab Control Sample	Total Recoverable	Water	6020A	573375

General Chemistry

Analysis Batch: 300156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191301-1	MW-16	Total/NA	Water	SM 2540C	
500-191301-2	MW-01	Total/NA	Water	SM 2540C	
500-191301-3	MW-02	Total/NA	Water	SM 2540C	
500-191301-4	Duplicate	Total/NA	Water	SM 2540C	
500-191301-5	MW-03	Total/NA	Water	SM 2540C	
MB 310-300156/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-300156/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-191301-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 300260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191301-6	MW-04	Total/NA	Water	SM 2540C	
500-191301-7	MW-09	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Chicago

QC Association Summary

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

Job ID: 500-191301-1

General Chemistry (Continued)

Analysis Batch: 300260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-300260/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-300260/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 574070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191301-1	MW-16	Total/NA	Water	SM 4500 SO4 E	
500-191301-2	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-191301-3	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-191301-4	Duplicate	Total/NA	Water	SM 4500 SO4 E	
500-191301-5	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-191301-6	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-191301-7	MW-09	Total/NA	Water	SM 4500 SO4 E	
MB 500-574070/97	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-574070/98	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-191301-1 MS	MW-16	Total/NA	Water	SM 4500 SO4 E	
500-191301-1 MSD	MW-16	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 574488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191301-1	MW-16	Total/NA	Water	SM 4500 Cl- E	
500-191301-2	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-191301-3	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-191301-4	Duplicate	Total/NA	Water	SM 4500 Cl- E	
500-191301-5	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-191301-6	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-191301-7	MW-09	Total/NA	Water	SM 4500 Cl- E	
MB 500-574488/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-574488/58	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 575004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191301-1	MW-16	Total/NA	Water	SM 4500 F C	
500-191301-2	MW-01	Total/NA	Water	SM 4500 F C	
500-191301-3	MW-02	Total/NA	Water	SM 4500 F C	
500-191301-4	Duplicate	Total/NA	Water	SM 4500 F C	
500-191301-5	MW-03	Total/NA	Water	SM 4500 F C	
500-191301-6	MW-04	Total/NA	Water	SM 4500 F C	
500-191301-7	MW-09	Total/NA	Water	SM 4500 F C	
MB 500-575004/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-575004/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

QC Sample Results

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

Job ID: 500-191301-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-573375/1-A
Matrix: Water
Analysis Batch: 574028

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573375

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.20		0.20		mg/L		11/20/20 18:28	11/24/20 13:36	1

Lab Sample ID: MB 500-573375/1-A
Matrix: Water
Analysis Batch: 574090

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573375

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		11/20/20 18:28	11/25/20 13:21	1

Lab Sample ID: LCS 500-573375/2-A
Matrix: Water
Analysis Batch: 574028

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10.0	9.31		mg/L		93	80 - 120

Lab Sample ID: LCS 500-573375/2-A
Matrix: Water
Analysis Batch: 574090

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	0.945		mg/L		95	80 - 120

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

Lab Sample ID: MB 310-300156/1
Matrix: Water
Analysis Batch: 300156

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	<30		30		mg/L			11/20/20 17:15	1

Lab Sample ID: LCS 310-300156/2
Matrix: Water
Analysis Batch: 300156

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	1000	996		mg/L		100	90 - 110

Lab Sample ID: 500-191301-4 DU
Matrix: Water
Analysis Batch: 300156

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	800		770		mg/L		3	24

Eurofins TestAmerica, Chicago

QC Sample Results

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

Job ID: 500-191301-1

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

Lab Sample ID: MB 310-300260/1

Matrix: Water

Analysis Batch: 300260

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	<30		30		mg/L			11/23/20 09:04	1

Lab Sample ID: LCS 310-300260/2

Matrix: Water

Analysis Batch: 300260

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	1000	1030		mg/L		103	90 - 110

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-574488/12

Matrix: Water

Analysis Batch: 574488

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			11/30/20 07:35	1

Lab Sample ID: LCS 500-574488/58

Matrix: Water

Analysis Batch: 574488

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.5		mg/L		99	85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-575004/3

Matrix: Water

Analysis Batch: 575004

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			12/02/20 10:41	1

Lab Sample ID: LCS 500-575004/4

Matrix: Water

Analysis Batch: 575004

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	11.3		mg/L		113	80 - 120

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-574070/97

Matrix: Water

Analysis Batch: 574070

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			11/25/20 12:10	1

Eurofins TestAmerica, Chicago

QC Sample Results

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

Job ID: 500-191301-1

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 500-574070/98

Matrix: Water

Analysis Batch: 574070

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	21.6		mg/L		108	80 - 120		

Lab Sample ID: 500-191301-1 MS

Matrix: Water

Analysis Batch: 574070

Client Sample ID: MW-16

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	320		20.0	345	4	mg/L		129	75 - 125		

Lab Sample ID: 500-191301-1 MSD

Matrix: Water

Analysis Batch: 574070

Client Sample ID: MW-16

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	320		20.0	333	4	mg/L		69	75 - 125	4	20

2417 Bond Street

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Rich Gnat		Site Contact:		Date: 11/18/2020		COC No:			
KPRG and Associates, Inc.		Tel/Fax: (262) 781-0475		Lab Contact: Eric Lang		Carrier: FedEx Eurofin		1 of 3 COCs			
14665 West Lisbon Road, Suite 1A		Analysis Turnaround Time						Sampler:			
Brookfield, WI 53154		☐ CALENDAR DAYS ☐ WORKING DAYS						For Lab Use Only:			
(262) 781-0475 Phone		TAT if different from Below _____						Walk-in Client:			
(262) 781-0478 FAX		☐ 2 weeks						Lab Sampling:			
Project Name: Waukegan CCR		☐ 1 week									
Site: Waukegan Station - Waukegan, IL		☐ 2 days						Job / SDG No.:			
P O # 12313.2		☐ 1 day						500-191301			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Total Metals	Cl, F _i , SO ₄ , TDS	Sample Specific Notes:
MW-16	11/17/20	12:33	G	W	3	N	N	x	x	x	
MW-1	11/17/20	13:26	G	W	3	N	N	X	X	X	
MW-2	11/17	14:25	G	W	3	N	N	X	X	X	
DUP	11/17	-	G	W	3	N	N	X	X	X	
MW-3	11/17	15:12	G	W	3	N	N	X	X	X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							4	1	4		
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months				
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: 0.7 Corr'd: 0.8		Therm ID No.:						
Relinquished by: Michael Riss	Company: KPRG		Date/Time: 17:00 11/17/20	Received by: [Signature]		Company: JA	Date/Time: 11/18/20	1373			
Relinquished by: [Signature]	Company: JDA 1410		Date/Time: 11/18/20	Received by: [Signature]		Company: JA	Date/Time: 11/18/20	1410			
Relinquished by: [Signature]	Company: [Blank]		Date/Time: [Blank]	Received by: [Signature]		Company: EPA-OH	Date/Time: 11/18/20	1410			

2417 Bond Street

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

[illegible]



Environment Testing
TestAmerica



Cooler/Sample Receipt and Temperature Log

Client Information			
Client: <u>ETA Chicago</u>			
City/State:	CITY <u>Univ. Park</u>	STATE <u>IL</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>11.19.20</u>	TIME <u>9:45</u>	Received By: <u>BLM</u>
Delivery Type: ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____			
Condition of Goods/Examination			
Sample(s) received in Cooler?	☒ Yes ☐ No	If yes: Cooler ID: _____	
Multiple Coolers?	☐ Yes ☒ No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?	☒ Yes ☐ No	If yes: Cooler custody seals intact? ☒ Yes ☐ No	
Sample Custody Seals Present?	☐ Yes ☒ No	If yes: Sample custody seals intact? ☐ Yes ☐ No	
Trip Blank Present?	☐ Yes ☒ No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant:	☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE		
Thermometer ID:	<u>N</u>		
Correction Factor (°C):	<u>+0.0</u>		
Temp Blank Temp Criteria: If temp blank or temp blank temp is above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>1.5</u>		
Corrected Temp (°C):			
Sample Container Temperature			
Container(s) used:	CONTAINER 1 <u>500mL NT</u>	CONTAINER 2	
Uncorrected Temp (°C):	<u>1.5</u>		
Corrected Temp (°C):	<u>1.5</u>		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Phone: 708-534-5200 Fax: 708-534-5211

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>Chicago</u>			
City/State: <u>CITY University Park IL</u>		Project: <u>NRG</u>	
Receipt Information			
Date/Time Received: <u>DATE 11/20/20</u> <u>TIME 1055</u>		Received By: <u>DM</u>	
Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?		If yes: Cooler ID:	
☒ Yes ☐ No			
Multiple Coolers?		If yes: Cooler # _____ of _____	
☐ Yes ☒ No			
Cooler Custody Seals Present?		If yes: Cooler custody seals intact?	
☒ Yes ☐ No		☒ Yes ☐ No	
Sample Custody Seals Present?		If yes: Sample custody seals intact?	
☐ Yes ☒ No		☐ Yes ☐ No	
Trip Blank Present?		If yes: Which VOA samples are in cooler? ↓	
☐ Yes ☒ No			
Temperature Record			
Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE			
Thermometer ID: <u>P</u>		Correction Factor (°C): <u>-0.1</u>	
* Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature.			
Uncorrected Temp (°C):		Corrected Temp (°C):	
Sample Container Temperature			
Container(s) used:	CONTAINER 1 <u>PL 500 NT</u>	CONTAINER 2	
Uncorrected Temp (°C):	<u>0.4</u>		
Corrected Temp (°C):	<u>0.5</u>		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No			
a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-191301-1

Login Number: 191301

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8,4.3,-0.6 SAMPLES NOT FROZEN
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-191301-1

Login Number: 191301

List Number: 2

Creator: Marzen, Brita K

List Source: Eurofins TestAmerica, Cedar Falls

List Creation: 11/19/20 11:18 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-191301-1

Login Number: 191301

List Number: 3

Creator: Bovy, Lorrainna L

List Source: Eurofins TestAmerica, Cedar Falls

List Creation: 11/20/20 11:32 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
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?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Chronicle

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

Job ID: 500-191301-1

Client Sample ID: MW-16

Lab Sample ID: 500-191301-1

Date Collected: 11/17/20 12:33

Matrix: Water

Date Received: 11/18/20 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	574028	11/24/20 15:00	FXG	TAL CHI
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	574090	11/25/20 14:28	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	300156	11/20/20 17:15	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		1	574488	11/30/20 07:50	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	575004	12/02/20 11:07	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	574070	11/25/20 12:10	RES	TAL CHI

Client Sample ID: MW-01

Lab Sample ID: 500-191301-2

Date Collected: 11/17/20 13:26

Matrix: Water

Date Received: 11/18/20 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	574028	11/24/20 15:04	FXG	TAL CHI
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	574090	11/25/20 14:32	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	300156	11/20/20 17:15	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	574488	11/30/20 08:13	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	575004	12/02/20 11:21	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	574070	11/25/20 12:12	RES	TAL CHI

Client Sample ID: MW-02

Lab Sample ID: 500-191301-3

Date Collected: 11/17/20 14:25

Matrix: Water

Date Received: 11/18/20 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	574028	11/24/20 15:07	FXG	TAL CHI
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	574090	11/25/20 14:35	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	300156	11/20/20 17:15	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		1	574488	11/30/20 07:53	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	575004	12/02/20 11:25	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	574070	11/25/20 12:12	RES	TAL CHI

Client Sample ID: Duplicate

Lab Sample ID: 500-191301-4

Date Collected: 11/17/20 00:00

Matrix: Water

Date Received: 11/18/20 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	574028	11/24/20 15:11	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

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

Job ID: 500-191301-1

Client Sample ID: Duplicate

Date Collected: 11/17/20 00:00

Date Received: 11/18/20 14:10

Lab Sample ID: 500-191301-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	574090	11/25/20 14:38	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	300156	11/20/20 17:15	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		1	574488	11/30/20 07:53	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	575004	12/02/20 11:28	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	574070	11/25/20 12:12	RES	TAL CHI

Client Sample ID: MW-03

Date Collected: 11/17/20 15:12

Date Received: 11/18/20 14:10

Lab Sample ID: 500-191301-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	574028	11/24/20 15:14	FXG	TAL CHI
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	574090	11/25/20 14:42	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	300156	11/20/20 17:15	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		1	574488	11/30/20 07:54	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	575004	12/02/20 11:31	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	574070	11/25/20 12:13	RES	TAL CHI

Client Sample ID: MW-04

Date Collected: 11/18/20 09:46

Date Received: 11/19/20 13:30

Lab Sample ID: 500-191301-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	574028	11/24/20 15:18	FXG	TAL CHI
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	574090	11/25/20 14:45	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	300260	11/23/20 09:04	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		1	574488	11/30/20 07:54	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	575004	12/02/20 11:36	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	574070	11/25/20 12:13	RES	TAL CHI

Client Sample ID: MW-09

Date Collected: 11/18/20 14:56

Date Received: 11/19/20 13:30

Lab Sample ID: 500-191301-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	574028	11/24/20 15:21	FXG	TAL CHI
Total Recoverable	Prep	3005A			573375	11/20/20 18:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		100	574090	11/25/20 14:48	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

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

Job ID: 500-191301-1

Client Sample ID: MW-09

Date Collected: 11/18/20 14:56

Date Received: 11/19/20 13:30

Lab Sample ID: 500-191301-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	300260	11/23/20 09:04	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	574488	11/30/20 08:14	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	575004	12/02/20 11:43	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	574070	11/25/20 12:14	RES	TAL CHI

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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

Accreditation/Certification Summary

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

Job ID: 500-191301-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-21

Laboratory: Eurofins TestAmerica, Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-21
Georgia	State	IA100001 (OR)	09-29-21
Illinois	NELAP	200024	11-29-20
Iowa	State	007	12-01-21
Kansas	NELAP	E-10341	01-31-21
Minnesota	NELAP	019-999-319	12-31-21
Minnesota (Petrofund)	State	3349	08-22-21
North Dakota	State	R-186	09-29-21
Oregon	NELAP	IA100001	09-29-21
USDA	US Federal Programs	P330-19-00003	01-02-22

ANALYTICAL REPORT

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

Laboratory Job ID: 500-191468-1
Client Project/Site: Waukegan CCR

For:
KPRG and Associates, Inc.
14665 West Lisbon Road,
Suite 1A
Brookfield, Wisconsin 53005

Attn: Richard Gnat



Authorized for release by:
12/8/2020 9:03:19 AM

Diana Mockler, Project Manager I
(219)252-7570
Diana.Mockler@Eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	8
QC Association	9
QC Sample Results	10
Chain of Custody	12
Receipt Checklists	15
Chronicle	17
Certification Summary	18



Case Narrative

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

Job ID: 500-191468-1

Job ID: 500-191468-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-191468-1

Comments

No additional comments.

Receipt

The samples were received on 11/20/2020 12:00 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.2° C, 1.6° C and 1.9° C.

Metals

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

General Chemistry

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

Method Summary

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

Job ID: 500-191468-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CF
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI

Protocol References:

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

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

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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

Sample Summary

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

Job ID: 500-191468-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-191468-1	MW-11 ELUC	Water	11/19/20 09:27	11/20/20 12:00	
500-191468-2	MW-14 ELUC	Water	11/19/20 10:33	11/20/20 12:00	

Client Sample Results

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

Job ID: 500-191468-1

Client Sample ID: MW-11 ELUC

Lab Sample ID: 500-191468-1

Date Collected: 11/19/20 09:27

Matrix: Water

Date Received: 11/20/20 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.3		0.25		mg/L		11/25/20 07:24	12/01/20 15:20	5
Calcium	140		0.20		mg/L		11/25/20 07:24	11/27/20 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	800		60		mg/L			11/25/20 09:41	1
Chloride	130		10		mg/L			12/01/20 11:39	5
Fluoride	0.20		0.10		mg/L			12/04/20 15:57	1
Sulfate	28		5.0		mg/L			11/25/20 12:18	1

Client Sample Results

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

Job ID: 500-191468-1

Client Sample ID: MW-14 ELUC

Lab Sample ID: 500-191468-2

Date Collected: 11/19/20 10:33

Matrix: Water

Date Received: 11/20/20 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.71		0.10		mg/L		11/25/20 07:24	12/01/20 15:23	2
Calcium	130		0.20		mg/L		11/25/20 07:24	11/27/20 14:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	520		30		mg/L			11/25/20 09:41	1
Chloride	40		2.0		mg/L			12/01/20 10:47	1
Fluoride	0.20		0.10		mg/L			12/04/20 16:03	1
Sulfate	20		5.0		mg/L			11/25/20 12:18	1

Definitions/Glossary

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

Job ID: 500-191468-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

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

Job ID: 500-191468-1

Metals

Prep Batch: 573977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191468-1	MW-11 ELUC	Total Recoverable	Water	3005A	
500-191468-2	MW-14 ELUC	Total Recoverable	Water	3005A	
MB 500-573977/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-573977/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 574489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191468-1	MW-11 ELUC	Total Recoverable	Water	6020A	573977
500-191468-2	MW-14 ELUC	Total Recoverable	Water	6020A	573977
MB 500-573977/1-A	Method Blank	Total Recoverable	Water	6020A	573977
LCS 500-573977/2-A	Lab Control Sample	Total Recoverable	Water	6020A	573977

Analysis Batch: 574929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191468-1	MW-11 ELUC	Total Recoverable	Water	6020A	573977
500-191468-2	MW-14 ELUC	Total Recoverable	Water	6020A	573977
MB 500-573977/1-A	Method Blank	Total Recoverable	Water	6020A	573977
LCS 500-573977/2-A	Lab Control Sample	Total Recoverable	Water	6020A	573977

General Chemistry

Analysis Batch: 300617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191468-1	MW-11 ELUC	Total/NA	Water	SM 2540C	
500-191468-2	MW-14 ELUC	Total/NA	Water	SM 2540C	
MB 310-300617/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-300617/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 574070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191468-1	MW-11 ELUC	Total/NA	Water	SM 4500 SO4 E	
500-191468-2	MW-14 ELUC	Total/NA	Water	SM 4500 SO4 E	
MB 500-574070/97	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-574070/98	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 574734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191468-1	MW-11 ELUC	Total/NA	Water	SM 4500 CI- E	
500-191468-2	MW-14 ELUC	Total/NA	Water	SM 4500 CI- E	
MB 500-574734/12	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-574734/13	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 575559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191468-1	MW-11 ELUC	Total/NA	Water	SM 4500 F C	
500-191468-2	MW-14 ELUC	Total/NA	Water	SM 4500 F C	
MB 500-575559/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-575559/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

QC Sample Results

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

Job ID: 500-191468-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-573977/1-A
Matrix: Water
Analysis Batch: 574489

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.20		0.20		mg/L		11/25/20 07:24	11/27/20 13:50	1

Lab Sample ID: MB 500-573977/1-A
Matrix: Water
Analysis Batch: 574929

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		11/25/20 07:24	12/01/20 15:13	1

Lab Sample ID: LCS 500-573977/2-A
Matrix: Water
Analysis Batch: 574489

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573977

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10.0	8.78		mg/L		88	80 - 120

Lab Sample ID: LCS 500-573977/2-A
Matrix: Water
Analysis Batch: 574929

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573977

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.06		mg/L		106	80 - 120

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

Lab Sample ID: MB 310-300617/1
Matrix: Water
Analysis Batch: 300617

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	<30		30		mg/L			11/25/20 09:41	1

Lab Sample ID: LCS 310-300617/2
Matrix: Water
Analysis Batch: 300617

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	1000	1030		mg/L		103	90 - 110

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-574734/12
Matrix: Water
Analysis Batch: 574734

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			12/01/20 10:36	1

Eurofins TestAmerica, Chicago

QC Sample Results

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

Job ID: 500-191468-1

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

Lab Sample ID: LCS 500-574734/13

Matrix: Water

Analysis Batch: 574734

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.3		mg/L		99	85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-575559/3

Matrix: Water

Analysis Batch: 575559

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			12/04/20 13:58	1

Lab Sample ID: LCS 500-575559/4

Matrix: Water

Analysis Batch: 575559

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.4		mg/L		104	80 - 120

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-574070/97

Matrix: Water

Analysis Batch: 574070

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			11/25/20 12:10	1

Lab Sample ID: LCS 500-574070/98

Matrix: Water

Analysis Batch: 574070

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	21.6		mg/L		108	80 - 120

2417 Bond Street

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

[illegible]



Environment Testing
TestAmerica

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>ETA Chicago</u>			
City/State:	CITY <u>Univ. Park</u>	STATE <u>IL</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>11.2.20</u>	TIME <u>9:40</u>	Received By: <u>BLM</u>
Delivery Type: ☐ UPS ☒ FedEx <u>SAT</u> ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee			
☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____			
Condition of Cooler/Container			
Sample(s) received in Cooler?		☒ Yes ☐ No	If yes: Cooler ID: _____
Multiple Coolers?		☐ Yes ☒ No	If yes: Cooler # _____ of _____
Cooler Custody Seals Present?		☒ Yes ☐ No	If yes: Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?		☐ Yes ☒ No	If yes: Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?		☐ Yes ☒ No	If yes: Which VOA samples are in cooler? ↓
Temperature Record			
Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE			
Thermometer ID: <u>N</u>		Correction Factor (°C): <u>70.5</u>	
Temperature			
Uncorrected Temp (°C): <u>2.7</u>		Corrected Temp (°C): <u>2.1</u>	
Sample Container Temperature			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No			
a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-191468-1

Login Number: 191468

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2,1.9,1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-191468-1

Login Number: 191468

List Number: 2

Creator: Bovy, Lorrainna L

List Source: Eurofins TestAmerica, Cedar Falls

List Creation: 11/23/20 07:37 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
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?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Chronicle

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

Job ID: 500-191468-1

Client Sample ID: MW-11 ELUC

Lab Sample ID: 500-191468-1

Date Collected: 11/19/20 09:27

Matrix: Water

Date Received: 11/20/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			573977	11/25/20 07:24	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	574489	11/27/20 14:00	FXG	TAL CHI
Total Recoverable	Prep	3005A			573977	11/25/20 07:24	LMN	TAL CHI
Total Recoverable	Analysis	6020A		5	574929	12/01/20 15:20	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	300617	11/25/20 09:41	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	574734	12/01/20 11:39	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	575559	12/04/20 15:57	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	574070	11/25/20 12:18	RES	TAL CHI

Client Sample ID: MW-14 ELUC

Lab Sample ID: 500-191468-2

Date Collected: 11/19/20 10:33

Matrix: Water

Date Received: 11/20/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			573977	11/25/20 07:24	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	574489	11/27/20 14:04	FXG	TAL CHI
Total Recoverable	Prep	3005A			573977	11/25/20 07:24	LMN	TAL CHI
Total Recoverable	Analysis	6020A		2	574929	12/01/20 15:23	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	300617	11/25/20 09:41	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		1	574734	12/01/20 10:47	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	575559	12/04/20 16:03	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	574070	11/25/20 12:18	RES	TAL CHI

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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

Accreditation/Certification Summary

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

Job ID: 500-191468-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-21

Laboratory: Eurofins TestAmerica, Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-21
Georgia	State	IA100001 (OR)	09-29-21
Illinois	NELAP	200024	11-29-20
Iowa	State	007	12-01-21
Kansas	NELAP	E-10341	01-31-21
Minnesota	NELAP	019-999-319	12-31-21
Minnesota (Petrofund)	State	3349	08-22-21
North Dakota	State	R-186	09-29-21
Oregon	NELAP	IA100001	09-29-21
USDA	US Federal Programs	P330-19-00003	01-02-22