K P R G

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

CCR COMPLIANCE
ANNUAL GROUNDWATER MONITORING and CORRECTIVE ACTION REPORT - 2019

Midwest Generation, LLC
Joliet #9 Generating Station
1601 South Patterson Road
Joliet, Illinois

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January 31, 2020

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1.0 INTRODUCTION

The groundwater sampling for the 2019 semi-annual assessment monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.95, 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 disposal unit (Lincoln Stone Quarry [LSQ]) monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Joliet #9 Generating Station. The CCR monitoring well network consists of ten monitoring wells (R08S, G20S, G30S, R32S, G44S, G45S, G46S, G47S, G48S and T03S) as shown on Figure 1. Wells T03S and G45S are considered background monitoring wells. The assessment groundwater monitoring network was expanded in the 4th quarter 2018 to assist in defining the nature and extent of impacts as required under 257.95(g)(1). The expanded assessment network includes wells G31S, G33S, T01S, T02S, T04S, T05S, T06S, T08S and T09S. It is noted that Figure 1 also includes twelve extraction wells (X101 through X112) along the south side of the LSQ which are part of an interim corrective action which intercepts southward migration of groundwater from the LSQ.

The first and second CCR Compliance Annual Groundwater Monitoring and Corrective Action reports were submitted January 24, 2018, and January 31, 2019, respectively. This third annual report covers the work performed relative to CCR groundwater monitoring during the calendar year 2019. It does not duplicate information or activities previously reported for 2017 or 2018. It is prepared in accordance with Section 257.90(e)(1-5) and summarizes the sampling procedures used, provides an evaluation of groundwater flow conditions, summarizes the analytical data generated, presents the statistical evaluations and assessment monitoring completed, identifies the other key compliance actions completed during the year and provides the current status of the site compliance activities along with recommendations.

2.0 FIELD PROCEDURES AND GROUNDWATER FLOW EVALUATION

2.1 Field Procedures

As previously noted, the CCR groundwater monitoring network around the LSQ at the Joliet #9 facility consists of ten monitoring wells (R08S, G20S, G30S, R32S, G44S, G45S, G46S, G47S, G48S and T03S) and an expanded assessment network which includes wells G31S, G33S, T01S, T02S, T04S, T05S, T06S, T08S and T09S as shown on Figure 1. As part of sampling procedures, the integrity of all monitoring wells was inspected and water levels obtained using an electronic water level meter (see summary of water level discussion below). All wells were found in good condition with locked protector casings and intact concrete surface seals.

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.

2.2 Groundwater Flow Evaluation

Water level data measurements were obtained from each well during each round of groundwater monitoring. A complete round of water levels was collected prior to initiating sampling, and the water level data are summarized in Table 1. The water levels were used to generate a groundwater flow map for each sampling event which are provided as Figures 2 and 3. 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. A review of the maps indicates groundwater flow to the north and west from the LSQ. Groundwater moving to the south due to dewatering operations at the nearby Vulcan Quarry is captured by the extraction well system along the southern perimeter of the LSQ and discharged back into the LSQ. In accordance with general groundwater sampling requirements under Section 257.93(c), Table 2 provides a summary of the natural flow direction (i.e., not affected by extraction well or Vulcan Quarry pumping) and an estimated rate of groundwater flow for each sampling event. The flow rate was calculated using the following equation:

$$V_s = \frac{K dh}{n_e dl}$$, 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 1.38×10^{-5} ft/sec used in Table 2 was obtained from the Revised Groundwater Impact Assessment Lincoln Stone Quarry Landfill – Addendum to IEPA Application Logs 2004-052 and 2009-213 dated March 13, 2013. The estimated effective porosity of the aquifer materials (0.05) was also obtained from the above noted document.

3.0 ANALYTICAL DATA AND STATUS OF EVALUATIONS

3.1 Sampling Summary

The groundwater sampling summary from 2019 is provided in Table 3, in accordance with 257.90 (e)(3).

3.2 Data Summary

As discussed in Section 1.0, this site is in assessment monitoring. The analytical data from the assessment monitoring groundwater sampling for Appendix III and IV parameters are provided in Tables 4 and 5, respectively for the standard monitoring wells, and in Tables 6 and 7 for the expanded assessment wells, respectively. Tables 4 and 6 include Prediction Limits (PLs) for Appendix III parameters and Tables 5 and 7 include site specific Groundwater Protection Standards (GWPSs) for detected Appendix IV constituents. All tables include the sample dates and whether the specific well is considered upgradient or downgradient relative to groundwater flow and the regulated unit(s). All duplicate values were within an acceptable range. The analytical data packages from these sampling events are provided in Appendix A.

3.3 Current Status

The site continues to be in semi-annual assessment monitoring. Additional study is being considered and developed for refining the definition of the extent of impacts in accordance with Section 257.95(g)(1), as necessary.

4.0 OTHER ACTIONS COMPLETED

During the reporting year 2019, the following additional key actions were competed:

- Assessment of Corrective Measures
- Public Meeting

Each is discussed separately below.

4.1 Assessment of Corrective Measures

An assessment of corrective measures for closure of the LSQ Main Quarry was performed in accordance with Section 257.96(c)(1) to 257.96(c)(3) to address water quality impacts above established GWPSs. The report included a detailed summary of the local geology/hydrogeology and conceptual site model. The status of the nature and extent of impacts evaluation was also summarized and presented. The four corrective measures assessed for closure of the Main Quarry were:

- Complete removal of all the CCR in the Main Quarry,
- Wet closure of the CCR in the Main Quarry,
- Dry closure of the CCR in the Main Quarry using a soil and geomembrane final cover system, and
- Dry closure of the CCR in the Main Quarry using the ClosureTurf cover system.

The results of the assessment were detailed in a submittal titled CCR Compliance Assessment of Corrective Measures Report Lincoln Stone Quarry Dated May 31, 2019. The report was posted in the facility record as required under 257.969(f).

4.2 Public Meeting

In accordance with Section 257.96(e), a public meeting was held on August 27, 2019 to present and discuss the results of the assessment of corrective measures and obtain comments/input prior to selecting final proposed remedy. The meeting included a poster displays documenting the history of the site, the geology/hydrogeology, defined groundwater impacts, and key components of the engineering evaluations of the corrective measures assessed. Final remedy has not yet been selected.

5.0 SUMMARY/CONCLUSIONS AND RECOMMENDATIONS

The site continues to be in semi-annual assessment monitoring. The assessment monitoring requirements in accordance with the CCR rule are being successfully met. Various wells showed concentrations of four Appendix IV parameters above the established GWPSs. Specifically, these were molybdenum (CCR wells T03S, R08S, R32S, G44S, G46S, G47S, G48S and expanded network wells G312S, T02S, T05S, T08S, T09S), lithium (CCR wells R08S, G20S, R32S, G46S, G47S and expanded network wells G31S, T01S, and T09S), arsenic (CCR wells G46S, G47S, G48S and expanded network wells T01S, T02S, T05S, T08S) and cobalt (expanded network well T02S). It is noted that this cobalt detection is a one-time occurrence, and cobalt has not been detected above its established GWPS in the other wells within the CCR or expanded monitoring network.

The groundwater monitoring network was expanded to include nine additional monitoring wells to assist in the nature and extent of impacts evaluation in support of the assessment of corrective measures as required under Section 257.95(g)(1). An assessment of corrective measures was completed and detailed in a submittal titled CCR Compliance Assessment of Corrective Measures Report Lincoln Stone Quarry Dated May 31, 2019. The report was posted in the facility record as required under 257.969(f). In accordance with Section 257.96(e), a public meeting was held to present the results of the assessment of corrective measures and obtain comment/input prior to the selection of final remedy.

At this time it is recommended to continue with assessment monitoring in accordance with Section 257.95 and formalize selection of remedy in accordance with Section 257.97. It is noted that once the final remedy is selected, initiation of remedial activities must occur within 90-days in accordance with Section 257.98.

6.0 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.

- KPRG and Associates, Inc. and Geo-Hydro, Inc., Revised Groundwater Impact Assessment Lincoln Stone Quarry Landfill – Addendum to IEPA Application Logs 2004-052 and 2009-213. March 13, 2013.

- KPRG and Associates, Inc., CCR Assessment of Corrective Measures Joliet #9 Generating Station Time Extension. March 28, 2019.

- KPRG and Associates, Inc., CCR Compliance Assessment of Corrective Measures Report Lincoln Stone Quarry. May 31, 2019.

- KPRG and Associates, Inc., CCR Compliance Monitoring, Sampling and Analysis Plan, Midwest Generation, LLC Joliet #9 Generating Station. October 10, 2017.

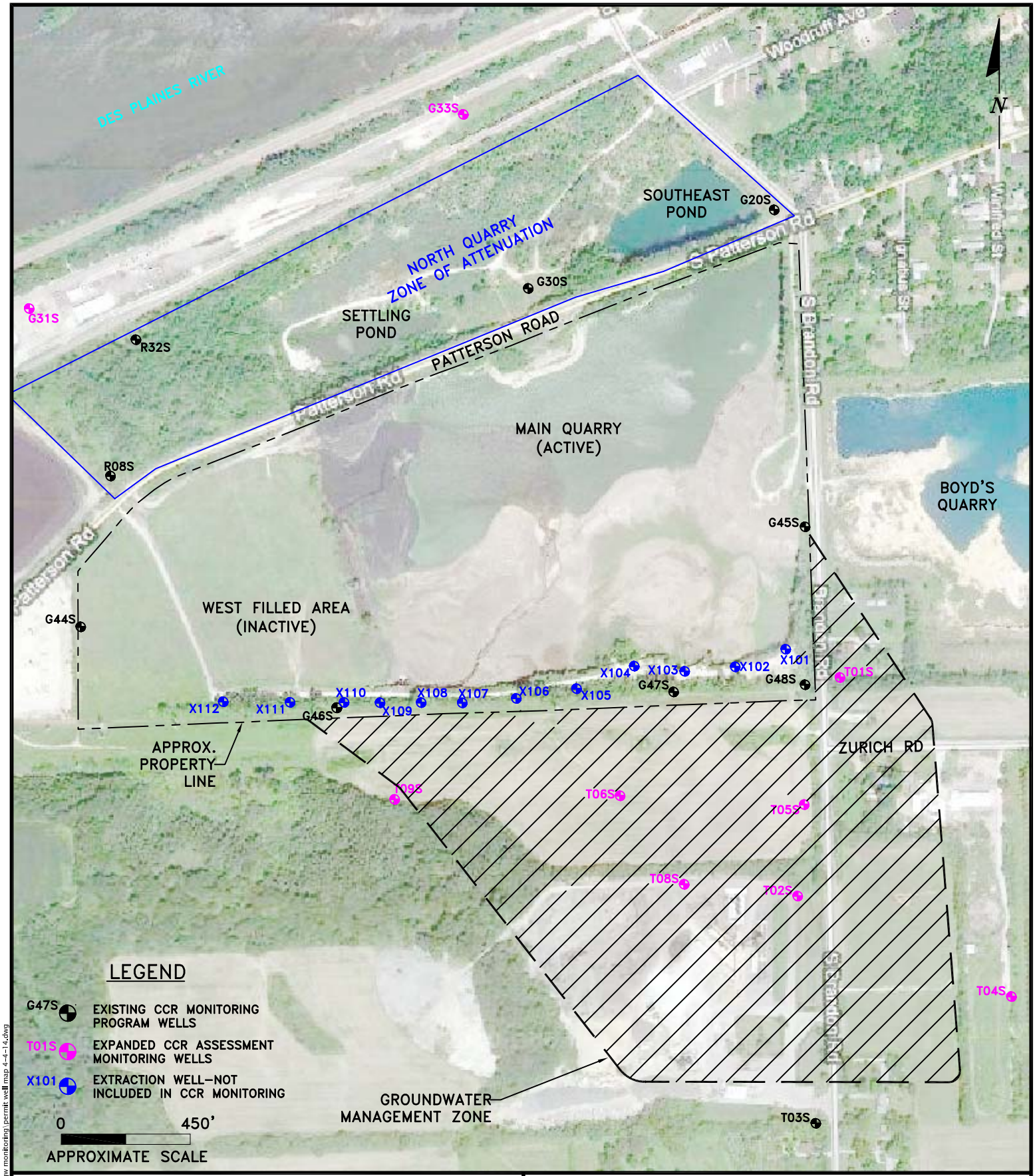
- KPRG and Associates, Inc., Statistical Evaluation Summary CCR Groundwater Monitoring Joliet #9 Generating Station. January 12, 2018.

- KPRG and Associates, Inc., Initial Assessment Monitoring Data Evaluation CCR Groundwater Monitoring Joliet #9 Generating Station. April 12, 2018.

- KPRG and Associates, Inc., Statistical Evaluation Summary CCR Groundwater Assessment Monitoring Powerton Generation Station. October 4, 2018; Revised October 18, 2018.

- KPRG and Associates, Inc., CCR Compliance Statistical Approach for Groundwater Data Evaluation, Midwest Generation, LLC Joliet #9 Generating Station. October 10, 2017.

FIGURES



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CCR MONITORING WELL NETWORK WELL LOCATION MAP

LINCOLN STONE QUARRY
JOLIET, ILLINOIS

Scale: 1" = 450' | Date: May 17, 2019

KPRG Project No. 12313 | FIGURE 1

DES PLAINES RIVER
±505

NORTH QUARRY

SETTLING POND
±509

SOUTHEAST POND
±520

MAIN QUARRY
±542

BOYD'S QUARRY
±551

WEST FILLED AREA
(INACTIVE)

PATTERSON ROAD

S Patterson Rd

Patterson Rd

Woodruff Ave

W Wisconsin Ave

Robert Rd

Seneca St

Pico St

Singleton Pl

Mt Zion Baptist Church

Refuge Mission United Holy Church

W Zarley Blvd

Tulare St

W Zurich Rd

Zurich Rd

Selma St

McKinley St

Woodard St

Lorraine Ave

Cascilia Ave

Stateline Rd

PROPERTY LINE

G42S 515.65
G33S 512.25
G41S 511.06
G31S 512.32
R32S 518.86
G30S 523.12
G20S 541.03
R08S 514.23
P40S 541.63
G45S 540.33
G44S 508.80
G39S 507.59
T09S 501.44
T06S 509.16
T07S 506.18
T08S 503.02
T02S 497.83
T03S 497.16
T10S 497.79
T05S 506.75
T04S 478.81
T11S 509.59
T01S 508.87
G48S 521.71
G47S 519.21
G38S 518.01
505.08
501.06
491.98
486.40
484.65
486.83
493.64
491.40
488.34
486.65
499.66
492.35

LEGEND

- G47S — MONITORING WELL
- X101 — MONITORING WELL
- G47S — NON-CCR MONITORING WELL USED IN GROUNDWATER CONTOUR DETERMINATION
- 510 — GROUNDWATER CONTOUR
- GROUNDWATER FLOW LINE

Note: This map includes water levels from other surrounding wells not within CCR network.

0 450'
APPROXIMATE SCALE

N

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CCR GROUNDWATER CONTOUR SECOND QUARTER 2019

LINCOLN STONE QUARRY
JOLIET, ILLINOIS

Scale: 1" = 450' | Date: July 17, 2019

KPRG Project No. 11306 | FIGURE 2

W:\projects\midwest generation\12313 Ash Pond Groundwater\Figures\Joliet #9\Joliet 9 CCR 2Q2019 GW map.dwg

DES PLAINES RIVER
±505

NORTH QUARRY

SETTLING POND
±509

SOUTHEAST POND
±520

MAIN QUARRY
±542

BOYD'S QUARRY
±551

WEST FILLED AREA
(INACTIVE)

PROPERTY LINE

PATTERSON ROAD

S Patterson Rd

Patterson Rd

Ferry Rd

Woodruff Ave

W Wisconsin Ave

Singleton Pl

Mt Zion Baptist Church

Selkirk St

Pico Ct

Pico St

McKinley St

Refuge Mission United Holy Church

Seneca St

Robert Rd

Lorraine Ave

Wonder St

Ethel Ave

Stephon Rd

Gazella Ave

W Zarley Blvd

Tulare St

W Zurich Rd

Zurich Rd

G31S 508.89
G32S 517.90
R08S 511.84
G33S 510.02
G41S 510.38
G42S 524.62
G30S 523.17
G20S 559.09
G44S 506.57
G45S 503.83
G39S 505.28
G38S 518.00
G47S 520.12
G48S 522.48
T11S 508.88
T07S 508.41
T09S 501.83
T06S 508.59
T05S 506.31
T07S 505.47
T08S 502.24
T02S 496.80
T04S 479.28
T10S 499.67
T03S 496.05
P40S 541.33
G45S 541.52

X101 readings: 488.58, 494.59, 486.02, 486.64, 491.88, 487.56, 498.72, 489.81, 485.35, 505.05, 489.77, 498.60

510, 520, 530, 540, 550, 500, 490, 480

LEGEND

- G47S — CCR MONITORING WELL
- X101 — EXTRACTION WELL
- G38S — NON-CCR MONITORING WELL USED IN GROUNDWATER CONTOUR DETERMINATION
- 510 — GROUNDWATER CONTOUR
- GROUNDWATER FLOW LINE

Note: This map includes water levels from other surrounding wells not within CCR network.

0 450'
APPROXIMATE SCALE

N

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CCR GROUNDWATER CONTOUR FOURTH QUARTER 2019

LINCOLN STONE QUARRY
JOLIET, ILLINOIS

Scale: 1" = 450' | Date: January 23, 2020

KPRG Project No. 11306 | FIGURE 3

W:\projects\midwest generation\12313 Ash Pond Groundwater\Figures\Joliet #9\Joliet 9 CCR 4Q2019 GW map.dwg

TABLES

Table 1. Groundwater Elevations, Midwest Generation, LLC, Joliet Station #9

Well ID	Date[1]	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
R08S	Nov-2015	578.65	66.74	511.91
	May-2016	578.65	67.02	511.63
	Jun-2016	578.65	67.50	511.15
	Aug-2016	578.65	67.47	511.18
	Nov-2016	578.65	67.84	510.81
	Feb-2017	578.65	69.28	509.37
	May-2017	578.65	67.56	511.09
	Jul-2017	578.65	67.54	511.11
	Sep-2017	578.65	65.72	512.93
	Nov-2017	578.65	64.83	513.82
	Mar-2018	578.65	65.12	513.53
	May-2018	578.65	65.31	513.34
	Oct-2018	578.62	65.48	513.14
	May-2019	578.62	67.24	511.38
	Nov-2019	578.62	66.78	511.84
G20S	Nov-2015	580.33	55.33	525.00
	May-2016	580.33	51.32	529.01
	Jun-2016	580.33	53.14	527.19
	Aug-2016	580.33	61.32	519.01
	Nov-2016	580.33	54.69	525.64
	Feb-2017	580.33	52.41	527.92
	May-2017	580.33	46.06	534.27
	Jul-2017	580.33	47.85	532.48
	Sep-2017	580.33	49.02	531.31
	Nov-2017	580.33	52.57	527.76
	Mar-2018	580.33	46.65	533.68
	May-2018	580.33	48.83	531.50
	Oct-2018	580.91	49.46	531.45
	May-2019	580.91	39.03	541.88
	Nov-2019	580.91	41.82	539.09
G30S	Nov-2015	524.40	2.74	521.66
	May-2016	524.40	2.53	521.87
	Jun-2016	524.40	3.54	520.86
	Aug-2016	524.40	2.45	521.95
	Nov-2016	524.40	2.57	521.83
	Feb-2017	524.40	2.13	522.27
	May-2017	524.40	1.69	522.71
	Jul-2017	524.40	1.96	522.44
	Sep-2017	524.40	1.84	522.56
	Nov-2017	524.40	1.48	522.92
	Mar-2018	524.40	1.48	522.92
	May-2018	524.40	1.62	522.78
	Oct-2018	524.70	2.51	522.19
	May-2019	524.70	1.57	523.13
	Nov-2019	524.70	1.53	523.17
R32S	Nov-2015	536.81	19.99	516.82
	May-2016	536.81	19.72	517.09
	Jun-2016	536.81	20.51	516.30
	Aug-2016	536.81	20.51	516.30
	Nov-2016	536.81	20.24	516.57
	Feb-2017	536.81	21.12	515.69
	May-2017	536.81	19.33	517.48
	Jul-2017	536.81	19.38	517.43
	Sep-2017	536.81	17.91	518.90
	Nov-2017	536.81	16.32	520.49
	Mar-2018	536.81	16.98	519.83
	May-2018	536.81	20.26	516.55
	Oct-2018	536.99	18.32	518.67
	May-2019	536.99	19.28	517.71
	Nov-2019	536.99	19.09	517.90

MSL - Mean Sea Level
TOC - Top of Casing
[1] - Date of water levels collected at beginning of quarter, actual sample date may vary.

Table 1. Groundwater Elevations, Midwest Generation, LLC, Joliet Station #9

Well ID	Date[1]	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
G44S	Nov-2015	586.69	80.54	506.15
	May-2016	586.69	80.42	506.27
	Jun-2016	586.69	80.68	506.01
	Aug-2016	586.69	80.65	506.04
	Nov-2016	586.69	80.69	506.00
	Feb-2017	586.69	84.34	502.35
	May-2017	586.69	82.14	504.55
	Jul-2017	586.69	81.13	505.56
	Sep-2017	586.69	80.15	506.54
	Nov-2017	586.69	77.10	509.59
	Mar-2018	586.69	78.74	507.95
	May-2018	586.69	80.17	506.52
	Oct-2018	586.53	78.21	508.32
	May-2019	586.53	80.05	506.48
	Nov-2019	586.53	79.96	506.57
G45S	Nov-2015	603.31	68.90	534.41
	May-2016	603.31	67.28	536.03
	Jun-2016	603.31	68.88	534.43
	Aug-2016	603.31	68.39	534.92
	Nov-2016	603.31	66.69	536.62
	Feb-2017	603.31	65.34	537.97
	May-2017	603.31	63.07	540.24
	Jul-2017	603.31	63.44	539.87
	Sep-2017	603.31	63.10	540.21
	Nov-2017	603.31	62.28	541.03
	Mar-2018	603.31	61.82	541.49
	May-2018	603.31	68.50	534.81
	Oct-2018	603.90	66.74	537.16
	May-2019	603.90	62.72	541.18
	Nov-2019	603.90	62.38	541.52
G46S	Nov-2015	601.32	95.78	505.54
	May-2016	601.32	96.74	504.58
	Jun-2016	601.32	97.31	504.01
	Aug-2016	601.32	97.32	504.00
	Nov-2016	601.32	97.50	503.82
	Feb-2017	601.32	98.14	503.18
	May-2017	601.32	98.43	502.89
	Jul-2017	601.32	98.96	502.36
	Sep-2017	601.32	96.61	504.71
	Nov-2017	601.32	95.65	505.67
	Mar-2018	601.32	96.80	504.52
	May-2018	601.32	95.59	505.73
	Oct-2018	601.43	91.34	510.09
	May-2019	601.43	101.40	500.03
	Nov-2019	601.43	100.01	503.83
G47S	Nov-2015	612.32	99.44	512.88
	May-2016	612.32	95.48	516.84
	Jun-2016	612.32	96.58	515.74
	Aug-2016	612.32	96.79	515.53
	Nov-2016	612.32	88.96	523.36
	Feb-2017	612.32	96.41	515.91
	May-2017	612.32	92.61	519.71
	Jul-2017	612.32	93.53	518.79
	Sep-2017	612.32	93.50	518.82
	Nov-2017	612.32	92.57	519.75
	Mar-2018	612.32	93.63	518.69
	May-2018	612.32	93.51	518.81
	Oct-2018	612.10	96.29	515.81
	May-2019	612.10	91.78	520.32
	Nov-2019	612.10	91.98	520.12

MSL - Mean Sea Level
TOC - Top of Casing
[1] - Date of water levels collected at beginning of quarter, actual sample date may vary.

Table 1. Groundwater Elevations, Midwest Generation, LLC, Joliet Station #9

Well ID	Date[1]	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
G48S	Nov-2015	620.77	106.83	513.94
	May-2016	620.77	105.20	515.57
	Jun-2016	620.77	104.95	515.82
	Aug-2016	620.77	104.77	516.00
	Nov-2016	620.77	102.41	518.36
	Feb-2017	620.77	103.05	517.72
	May-2017	620.77	100.06	520.71
	Jul-2017	620.77	102.31	518.46
	Sep-2017	620.77	102.88	517.89
	Nov-2017	620.77	100.83	519.94
	Mar-2018	620.77	99.77	521.00
	May-2018	620.77	100.74	520.03
	Oct-2018	620.78	105.79	514.99
	May-2019	620.78	98.18	522.60
	Nov-2019	620.78	98.30	522.48
T03S	Nov-2015	629.65	136.30	493.35
	May-2016	629.65	135.24	494.41
	Jun-2016	629.65	134.26	495.39
	Aug-2016	629.65	134.13	495.52
	Nov-2016	629.65	135.03	494.62
	Feb-2017	629.65	134.92	494.73
	May-2017	629.65	131.87	497.78
	Jul-2017	629.65	135.99	493.66
	Sep-2017	629.65	136.40	493.25
	Nov-2017	629.65	133.61	496.04
	Mar-2018	629.65	131.05	498.60
	May-2018	629.65	134.42	495.23
	Oct-2018	629.89	140.03	489.86
	May-2019	629.89	125.79	504.10
	Oct-2019	629.89	133.84	496.05
G31S	Dec-2018	535.78	25.70	510.08
	Jun-2019	535.78	23.46	512.32
	Oct-2019	535.78	26.89	508.89
G33S	Dec-2018	535.66	27.06	508.60
	Jun-2019	535.66	23.41	512.25
	Oct-2019	535.66	25.64	510.02
T01S	Dec-2018	621.78	115.39	506.39
	Jun-2019	621.78	112.91	508.87
	Oct-2019	621.78	113.37	508.41
T02S	Dec-2018	626.16	133.88	492.28
	Jun-2019	626.16	128.33	497.83
	Oct-2019	626.16	129.36	496.80
T04S	Dec-2018	631.35	158.00	473.35
	Jun-2019	631.35	152.54	478.81
	Oct-2019	631.35	152.07	479.28
T05S	Dec-2018	623.45	123.78	499.67
	Jun-2019	623.45	116.70	506.75
	Oct-2019	623.45	117.14	506.31
T06S	Dec-2018	621.02	112.72	508.30
	Jun-2019	621.02	111.86	509.16
	Oct-2019	621.02	112.43	508.59
T08S	Dec-2018	627.39	128.97	498.42
	Jun-2019	627.39	124.37	503.02
	Oct-2019	627.39	125.15	502.24
T09S	Dec-2018	603.74	94.75	508.99
	Jun-2019	603.74	102.30	501.44
	Oct-2019	603.74	101.91	501.83

MSL - Mean Sea Level
TOC - Top of Casing
[1] - Date of water levels collected at beginning of quarter, actual sample date may vary.

Table 2. Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate - Joliet #9 Generation Station (Lincoln Stone Quarry).

DATE	Natural Groundwater Flow Direction	K_{avg} (ft/sec)*	Average Hydraulic Gradient (ft/ft)	Porosity (unitless)**	Estimated Seepage Velocity (ft/day)
11/2015	Northerly and Westerly	1.38E-05	0.0293	0.05	0.70
5/2016	Northerly and Westerly	1.38E-05	0.0289	0.05	0.69
6/2016	Northerly and Westerly	1.38E-05	0.0287	0.05	0.68
8/2016	Northerly and Westerly	1.38E-05	0.0293	0.05	0.70
11/2016	Northerly and Westerly	1.38E-05	0.0301	0.05	0.72
2/2017	Northerly and Westerly	1.38E-05	0.0431	0.05	1.03
5/2017	Northerly and Westerly	1.38E-05	0.0364	0.05	0.87
7/2017	Northerly and Westerly	1.38E-05	0.0378	0.05	0.90
8/2017	Northerly and Westerly	1.38E-05	0.0364	0.05	0.87
11/2017	Northerly and Westerly	1.38E-05	0.0319	0.05	0.76
3/2018	Northerly and Westerly	1.38E-05	0.0384	0.05	0.92
5/2018	Northerly and Westerly	1.38E-05	0.0222	0.05	0.53
12/2018	Northerly and Westerly	1.38E-05	0.0321	0.05	0.77
6/2019	Northerly and Westerly	1.38E-05	0.0282	0.05	0.67
11/2019	Northerly and Westerly	1.38E-05	0.0269	0.05	0.64

* K_{avg} - Average hydraulic conductivity (feet/second) from Revised Groundwater Impacts assessment Lincoln Stone Quarry, 3/13/2013.

** - Porosity estimate from Revised Groundwater Impacts assessment Lincoln Stone Quarry, 3/13/2013.

Table 3. CCR Groundwater Sample Collection Summary for 2019 - Joliet #9 Lincoln Stone Quarry

Well ID	Number of Groundwater Sampling Events	Dates of Groundwater Sampling Events	Detection Monitoring (D) versus Assessment Monitoring (A)
G45S (Upgradient)	2	6/29/2019	A
		11/14/2019	A
T03S (Upgradient)	2	6/24/2019	A
		10/28/2019	A
R08S (Downgradient)	2	6/19/2019	A
		11/19/2019	A
G20S (Downgradient)	2	6/18/2019	A
		11/5/2019	A
G30S (Downgradient)	2	6/26/2019	A
		11/6/2019	A
R32S (Downgradient)	2	6/27/2019	A
		11/6/2019	A
G44S (Downgradient)	2	6/19/2019	A
		11/12/2019	A
G46S (Downgradient)	2	6/19/2019	A
		11/13/2019	A
G47S (Downgradient)	2	6/28/2019	A
		11/7/2019	A
G48S (Downgradient)	2	6/25/2019	A
		11/7/2019	A
G31S (Downgradient)	2	6/24/2019	A
		11/13/2019	A
G33S (Downgradient)	2	6/24/2019	A
		11/4/2019	A
T01S (Downgradient)	2	6/26/2019	A
		12/26/2019	A
T02S (Downgradient)	2	6/25/2019	A
		11/6/2019	A
T04S (Downgradient)	2	6/27/2019	A
		12/27/2019	A
T05S (Downgradient)	2	6/20/2019	A
		12/30/2019	A
T06S (Downgradient)	2	6/20/2019	A
		12/31/2019	A
T08S (Downgradient)	2	6/21/2019	A
		12/27/2019	A
T09S (Downgradient)	2	6/21/2019	A
		12/30/2019	A

Table 4. Appendix III Groundwater Analytical Results through 2018- Midwest Generation, LLC, Joliet Station #9, Joliet, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
G45S up-gradient	11/20/2015	0.81	120	180	0.35	7.20	360	810
	5/12/2016	0.68	110	140	0.34	7.37	230	860
	6/30/2016	0.48	87	110	0.34	7.50	170	670
	8/25/2016	0.47	94	100	0.35	7.28	170	790
	11/16/2016	0.41	91	90	0.33	7.34	170	620
	2/14/2017	0.43	97	97	0.32	7.36	160	620
	5/23/2017	0.36	85	110	0.35	7.30	150	660
	7/7/2017	0.42	94	120	< 0.1	7.21	150	600
	Pred. Limit*	**1.031**	**133.2**	**206.7**	**0.35**	**7.61-7.03**	**360**	**1,007**
	9/26/2017	0.43	110	130	0.3	7.21	160	790
	11/21/2017	0.34	96	130	0.33	7.29	180	700
	3/9/2018	0.38	97	110	0.32	7.18	180	710
	5/21/2018	0.76	110	150	0.33	**7.00**	230	970
	12/7/2018	0.46	91	120	0.33	**7.02**	100	740
	6/28/2019	0.39	96	130	0.33	7.51	120	720
	11/14/2019	0.48	110	170	0.33	7.33	170	830
T03S up-gradient	11/19/2015	0.5	110	75	0.22	7.07	250	710
	5/5/2016	0.84	100	100	0.21	7.16	190	820
	6/28/2016	0.98	100	94	0.19	7.30	180	910
	8/25/2016	1.1	110	99	0.20	7.32	180	880
	11/17/2016	1.3	120	100	0.19	7.14	150	860
	2/15/2017	1.0	98	110	0.19	7.36	230	810
	5/22/2017	1.4	110	78	0.23	7.25	160	740
	7/7/2017	1.1	100	F1 71	< 0.1	7.32	180	710
	Pred. Limit*	**1.85**	**129**	**134**	**0.26**	**7.55-6.93**	**292**	**1,030**
	9/26/2017	1.3	110	80	0.21	7.19	240	790
	11/20/2017	1.7	98	90	0.24	7.13	230	770
	3/7/2018	1.5	110	110	0.23	7.34	250	900
	5/17/2018	1.8	100	82	0.24	7.07	210	890
	12/11/2018	1.8	100	**140**	0.23	6.96	160	890
	6/24/2019	**2.7**	100	89	**0.27**	7.17	260	830
	10/28/2019	1.5	100	73	0.25	7.19	< 500	780
R08S down-gradient	11/23/2015	6.9	130	77	0.19	7.80	520	740
	5/6/2016	6.1	120	80	0.19	7.70	380	820
	6/28/2016	6.8	130	89	0.18	7.49	320	960
	8/25/2016	6.3	120	84	0.19	7.54	350	890
	11/21/2016	6.4	120	86	0.17	7.53	280	790
	2/14/2017	5.4	150	220	0.17	7.60	280	1,000
	5/25/2017	12	250	90	0.17	7.56	340	830
	7/6/2017	6.3	140	87	0.17	7.62	350	830
	Pred. Limit	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
	9/25/2017	7.3	**140**	81	0.15	**7.57**	**390**	840
	11/21/2017	7.3	**130**	89	0.15	**8.05**	**380**	800
	3/8/2018	7.4	**150**	83	0.14	**8.62**	**420**	850
	5/18/2018	7.7	**140**	82	0.14	**8.25**	320	920
	12/13/2018	7.7	**140**	79	0.15	**8.11**	240	800
	6/19/2019	8.5	**140**	83	0.14	**8.10**	360	820
	11/11/2019	6.4	**140**	84	0.15	**7.91**	360	730
G20S down-gradient	11/19/2015	1.2	59	12	0.82	7.73	110	410
	5/11/2016	1.2	53	12	0.81	7.52	77	410
	6/29/2016	1.2	54	12	0.82	7.38	69	460
	8/23/2016	1.3	56	13	0.81	7.41	67	420
	11/17/2016	1.3	59	11	0.74	7.44	55	420
	2/13/2017	1.2	54	13	0.69	7.30	93	400
	5/24/2017	1.3	55	12	0.81	7.45	66	430
	7/5/2017	1.3	61	12	0.76	7.37	70	400
	Pred. Limit	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
	9/25/2017	**1.3**	60	12	**0.78**	7.30	76	440
	11/20/2017	**1.3**	59	13	**0.78**	7.06	85	390
	3/6/2018	**1.4**	63	12	**0.76**	7.32	88	460
	5/16/2018	**1.2**	61	12	**0.75**	7.06	87	410
	12/07/18	**1.2**	58	12	**0.76**	7.41	65	480
	6/18/2019	**1.3**	62	13	**0.75**	7.18	65	440
	11/5/2019	**1.2**	58	13	**0.74**	**7.88**	71	410
G30S down-gradient	11/20/2015	5.80	63	190	1.3	7.46	580	1,000
	5/10/2016	5.4	53	190	1.30	7.68	390	1,100
	6/30/2016	5.2	60	F1 180	1.30	7.73	410	990
	8/25/2016	5.7	59	F1 180	1.30	7.70	390	1,100
	11/18/2016	6.4	57	170	1.2	8.04	320	1,100
	2/14/2017	5.4	62	190	1.2	7.70	450	1,000
	5/25/2017	11	110	180	1.4	7.67	430	1,100
	7/7/2017	6.6	54	190	1.3	7.48	410	1,100
	Pred. Limit	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
	9/26/2017	**6.7**	62	190	**1.3**	**8.07**	**460**	**1,100**
	11/20/2017	**6.1**	52	**210**	**1.3**	**7.77**	**440**	**1,100**
	3/7/2018	**5.1**	56	200	**1.3**	**7.97**	**470**	**1,100**
	5/17/2018	**5.7**	55	**210**	**1.2**	**7.77**	**540**	**1,100**
	12/15/2018	**5.8**	57	200	**1.2**	**7.99**	200	**1,100**
	6/26/2019	**5.4**	57	**220**	**1.1**	**7.98**	350	**1,100**
	11/6/2019	**4.5**	58	**210**	**1.1**	**7.99**	350	**1,100**
R32S down-gradient	11/19/2015	1.3	99	88	0.28	7.32	210	640
	5/5/2016	1.9	100	140	0.32	7.38	210	810
	6/29/2016	2.5	110	110	0.35	7.53	280	860
	8/26/2016	3.0	120	100	0.4	7.30	330	850
	11/18/2016	3.3	120	99	0.34	7.38	270	830
	2/16/2017	F1 4.0	120	99	0.34	7.39	340	830
	5/25/2017	8.3	240	88	0.42	7.54	320	850
	7/7/2017	6.2	120	96	0.42	7.61	360	830
	Pred. Limit	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
	9/28/2017	**4.8**	**140**	78	**0.36**	7.29	290	870
	11/21/2017	**5.7**	120	97	**0.38**	7.50	**390**	900
	3/7/2018	**5.8**	**130**	86	0.32	**7.57**	350	880
	5/21/2018	**4.4**	120	77	0.29	7.13	310	**1,000**
	12/13/2018	**3.5**	120	F1 72	0.26	7.43	280	880
	6/27/2019	**6.3**	**140**	74	0.27	7.33	**380**	880
	11/6/2019	**4.8**	**150**	69	0.27	7.45	360	820

Notes:

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

** - Based on pooled background from G45S/T03S. All others based on G45S as background.

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

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

Bold - Potential statistically significant increase.

Pred. Limit - Prediction Limit

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

Table 4. Appendix III Groundwater Analytical Results through 2018- Midwest Generation, LLC, Joliet Station #9, Joliet, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
G44S down-gradient	11/20/2015	1.0	120	43	0.21	7.11	220	640
	5/9/2016	0.91	110	37	0.18	7.39	120	690
	6/30/2016	0.69	100	32	0.18	7.59	99	620
	8/26/2016	0.9	120	36	0.19	7.12	110	710
	11/16/2016	0.82	120	26	0.17	7.15	88	530
	2/16/2017	0.86	120	30	0.15	7.38	120	620
	5/24/2017	0.83	120	31	0.19	7.08	95	600
	7/10/2017	0.83	110	30	< 0.1	7.00	110	700
	Pred. Limit	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
	9/28/2017	0.99	**130**	30	0.19	7.13	100	730
	11/21/2017	0.79	110	35	0.18	7.06	120	640
	3/7/2018	0.91	120	36	0.18	7.19	110	670
	5/17/2018	0.98	120	35	0.18	**7.02**	96	780
	12/10/2018	**1.1**	120	43	0.19	7.41	78	630
	6/19/2019	**1.3**	**130**	59	0.19	**7.02**	140	720
	11/12/2019	**1.3**	**140**	53	0.21	7.22	160	670
G46S down-gradient	11/23/2015	6.0	110	80	0.27	7.32	430	780
	5/9/2016	7.7	100	100	0.28	7.77	360	940
	6/30/2016	7.9	100	99	0.29	8.26	290	880
	8/26/2016	7.2	100	120	0.35	7.48	350	1,000
	11/18/2016	6.5	110	120	0.39	7.56	330	1,000
	2/16/2017	6.1	100	150	0.41	7.94	410	1,000
	5/22/2017	6.8	100	130	0.44	7.37	350	970
	7/6/2017	4.9	100	150	0.41	7.33	290	880
	Pred. Limit	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
	9/27/2017	**4.9**	88	160	**0.4**	7.28	270	890
	11/21/2017	**5.3**	78	170	**0.43**	**7.73**	270	800
	3/8/2018	**5.9**	110	140	**0.41**	**7.75**	350	940
	5/18/2018	**5.9**	110	120	**0.4**	**7.66**	260	**1,100**
	12/11/2018	**7.60**	120	110	**0.38**	**7.66**	270	**1,100**
	6/19/2019	**13**	89	69	0.33	**7.64**	**440**	**1,000**
	11/13/2019	**10**	120	68	0.37	**0.31**	**470**	**1,000**
G47S down-gradient	11/23/2015	4.6	11	160	0.45	9.22	480	700
	5/6/2016	5.0	7.8	140	0.72	9.86	410	910
	7/1/2016	6.4	8.4	150	0.68	9.32	340	860
	8/24/2016	9.3	9.2	140	0.67	9.19	300	830
	11/16/2016	15	1.3	F1 150	1.8	10.08	620	1,700
	2/15/2017	7.6	4.4	160	1.1	9.26	540	1,200
	5/23/2017	18	0.93	160	2.2	10.03	720	1,800
	7/10/2017	18	1.2	150	2.1	10.06	780	1,800
	Pred. Limit	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
	9/27/2017	**18**	1.1	150	**2.0**	**10.15**	**750**	**1,900**
	11/22/2017	**21**	1.1	150	**2.1**	**10.56**	**710**	**1,800**
	3/8/2018	**18**	1.1	170	**2.1**	**10.67**	**780**	**1,900**
	5/18/2018	**3.7**	1.1	160	**1.7**	**7.79**	**570**	**1,800**
	12/11/2018	**13**	2.8	140	**1.1**	**10.14**	**440**	**1,300**
	6/28/2019	**13**	2.9	130	**1.3**	**9.95**	**450**	**1,400**
	11/7/2019	**4.3**	15	140	**0.55**	**8.39**	**410**	**1,100**
G48S down-gradient	11/20/2015	11.00	6.9	120	1.5	9.08	760	1,100
	5/5/2016	9.30	5.9	120	1.5	9.53	560	1,200
	7/1/2016	9.50	4.2	120	1.4	9.60	480	1,100
	8/24/2016	10.00	5.5	120	1.4	9.31	420	1,100
	11/16/2016	9.80	10	110	1.4	9.61	340	1,100
	2/15/2017	8.40	8.3	120	1.2	9.63	490	1,100
	5/23/2017	9.20	8.1	120	1.3	9.49	470	1,100
	7/10/2017	7.80	11	110	1.2	8.77	460	1,000
	Pred. Limit	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
	9/27/2017	**7.60**	18	100	**1.1**	**8.94**	**480**	**1,100**
	11/22/2017	**8.60**	12	120	**1.2**	**9.42**	**450**	**1,000**
	3/8/2018	**5.30**	62	100	**0.85**	**8.13**	**450**	**1,000**
	5/18/2018	**5.90**	53	100	**0.92**	**7.79**	**370**	**1,100**
	12/11/2018	**7.30**	23	110	**1.1**	**8.42**	310	**1,000**
	6/25/2019	**7.10**	28	110	**1.0**	**8.07**	**390**	**1,000**
	11/7/2019	**5.80**	18	100	**0.89**	**7.83**	**380**	**1,000**

Notes:

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

** - Based on pooled background from G45S/T03S. All others based on G45S as background.

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

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

Bold - Potential statistically significant increase.

Pred. Limit - Prediction Limit

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

Table 5. Appendix IV Groundwater Analytical Results through 2018 - Midwest Generation, LLC, Joliet Station #9, Joliet, IL

Well	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228 Combined	Selenium	Thallium
G45S up-gradient	11/20/2015	< 0.003	0.0081	0.044	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.35	< 0.0005	0.036	< 0.0002	0.0120	1.76	< 0.0025	< 0.002
	5/12/2016	< 0.003	0.0076	0.041	< 0.001	< 0.0005	< 0.005	< 0.001	0.34	< 0.0005	0.036	< 0.0002	0.0100	3.01	< 0.0025	< 0.002
	6/30/2016	< 0.003	0.0075	0.031	< 0.001	< 0.0005	< 0.005	< 0.001	0.34	< 0.0005	0.034	< 0.0002	0.008	2.05	< 0.0025	< 0.002
	8/25/2016	< 0.003	0.0076	0.036	< 0.001	< 0.0005	< 0.005	< 0.001	0.35	< 0.0005	0.031	< 0.0002	0.0086	1.91	< 0.0025	< 0.002
	11/16/2016	< 0.003	0.0079	0.033	< 0.001	< 0.0005	< 0.005	< 0.001	0.33	< 0.0005	0.028	< 0.0002	0.0094	2.04	< 0.0025	< 0.002
	2/14/2017	< 0.003	0.0093	0.037	< 0.001	< 0.0005	< 0.005	< 0.001	0.32	< 0.0005	0.029	< 0.0002	0.0083	1.85	< 0.0025	< 0.002
	5/23/2017	< 0.003	0.0082	0.033	< 0.001	< 0.0005	< 0.005	< 0.001	0.35	< 0.0005	0.027	< 0.0002	0.0093	1.40	< 0.0025	< 0.002
	7/7/2017	< 0.003	0.0086	0.035	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.1	< 0.0005	0.030	< 0.0002	0.007	1.88	< 0.0025	< 0.002
	9/26/2017	< 0.003	0.0096	0.04	< 0.001	< 0.0005	< 0.005	< 0.001	0.3	< 0.0005	0.029	< 0.0002	0.0079	2.14	< 0.0025	< 0.002
	11/21/2017	< 0.003	0.0094	0.038	< 0.001	< 0.0005	< 0.005	< 0.001	0.33	< 0.0005	0.028	< 0.0002	0.0072	8.45	< 0.0025	< 0.002
	3/9/2018	< 0.003	0.0093	0.036	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.32	< 0.0005	0.028	^ < 0.0002	0.008	1.89	< 0.0025	< 0.002
	GWPS	**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.10**	**5**	**0.05**	**NC**
	5/21/2018	NA	0.0072	0.047	NA	NA	NA	< 0.001	0.33	< 0.0005	0.033	NA	0.013	2.37	< 0.0025	NA
	12/7/2018	NA	0.0090	0.034	NA	NA	NA	< 0.001	0.330	< 0.0005	0.031	NA	0.0100	1.910	< 0.0025	NA
	6/29/2019	NA	0.0100	0.039	NA	NA	NA	< 0.001	0.33	< 0.0005	0.032	NA	0.0087	1.99	< 0.0025	NA
	11/14/2019	NA	< 0.0100	0.042	NA	NA	NA	< 0.001	0.33	< 0.0005	0.034	NA	0.0100	YTBA	< 0.010	NA
T03S up-gradient	11/19/2015	< 0.003	0.0019	0.063	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.22	< 0.0005	0.019	< 0.0002	0.0260	1.101	< 0.0025	< 0.002
	5/5/2016	< 0.003	0.0013	0.081	< 0.001	< 0.0005	< 0.005	< 0.001	0.21	< 0.0005	0.018	< 0.0002	0.03	1.43	< 0.0025	< 0.002
	6/28/2016	< 0.003	0.0011	0.086	< 0.001	< 0.0005	< 0.005	0.0011	0.19	< 0.0005	0.017	< 0.0002	0.037	1.18	< 0.0025	< 0.002
	8/25/2016	< 0.003	< 0.001	0.086	< 0.001	< 0.0005	< 0.005	< 0.001	0.2	< 0.0005	0.016	< 0.0002	0.043	1.54	< 0.0025	< 0.002
	11/17/2016	< 0.003	0.0012	0.096	< 0.001	< 0.0005	< 0.005	0.0012	0.19	< 0.0005	0.022	< 0.0002	0.14	1.61	< 0.0025	< 0.002
	2/15/2017	< 0.003	0.0011	0.086	< 0.001	< 0.0005	< 0.005	0.0013	0.19	< 0.0005	< 0.05	< 0.0002	0.12	0.938	< 0.0025	< 0.002
	5/22/2017	< 0.003	0.0017	B 0.088	^ < 0.001	< 0.0005	< 0.005	0.0015	0.23	0.0023	0.019	< 0.0002	0.13	1.21	< 0.0025	< 0.002
	7/7/2017	< 0.003	< 0.001	0.078	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.1	< 0.0005	0.019	< 0.0002	0.099	1.11	< 0.0025	< 0.002
	9/26/2017	< 0.003	0.0011	0.086	< 0.001	< 0.0005	< 0.005	0.0013	0.21	< 0.0005	0.018	< 0.0002	0.14	1.33	< 0.0025	< 0.002
	11/20/2017	< 0.003	0.0014	0.087	< 0.001	< 0.0005	< 0.005	< 0.001	0.24	< 0.0005	0.02	< 0.0002	0.2	1.59	< 0.0025	< 0.002
	3/7/2018	< 0.003	0.0023	0.093	< 0.001	< 0.0005	< 0.005	0.0013	0.23	< 0.0005	0.022	< 0.0002	0.26	1.30	< 0.0025	< 0.002
	GWPS	**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.10**	**5**	**0.05**	**NC**
	5/17/2018	NA	0.001	0.087	NA	NA	NA	0.0013	0.24	< 0.0005	0.021	NA	**0.240**	1.25	< 0.0025	NA
	12/11/2018	NA	0.0014	0.095	NA	NA	NA	0.0012	0.230	< 0.0005	0.021	NA	**0.270**	1.31	< 0.0025	NA
	6/24/2019	NA	0.0020	0.090	NA	NA	NA	0.0010	0.270	< 0.0005	0.027	NA	**0.370**	1.33	< 0.0025	NA
	10/28/2019	NA	< 0.0100	0.088	NA	NA	NA	0.0011	0.25	< 0.0050	0.026	NA	**0.210**	YTBA	< 0.0100	NA
R08S down-gradient	11/23/2015	< 0.003	0.0019	0.052	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.19	< 0.0005	0.14	< 0.0002	0.410	1.608	0.0061	< 0.002
	5/6/2016	< 0.003	0.0013	0.052	< 0.001	< 0.0005	< 0.005	< 0.001	0.19	< 0.0005	0.14	< 0.0002	0.390	1.08	0.0079	< 0.002
	6/28/2016	< 0.003	0.0019	0.056	< 0.001	< 0.0005	< 0.005	< 0.001	0.18	< 0.0005	0.14	< 0.0002	0.37	1.87	F1 0.0074	< 0.002
	8/25/2016	< 0.003	0.0015	0.053	< 0.001	< 0.0005	< 0.005	< 0.001	0.19	< 0.0005	0.13	< 0.0002	0.33	1.50	0.0032	< 0.002
	11/21/2016	< 0.003	0.0016	0.052	< 0.001	< 0.0005	< 0.005	< 0.001	0.17	< 0.0005	0.140	< 0.0002	0.36	2.13	0.0037	< 0.002
	2/14/2017	< 0.003	0.002	0.081	< 0.001	< 0.0005	< 0.005	< 0.001	0.17	< 0.0005	0.120	< 0.0002	0.3	2.71	0.0029	< 0.002
	5/25/2017	< 0.006	0.0028	0.092	^ < 0.002	< 0.001	< 0.01	< 0.002	0.17	< 0.001	0.250	< 0.0002	0.64	0.821	0.021	< 0.004
	7/6/2017	< 0.003	0.002	0.052	< 0.001	< 0.0005	< 0.005	< 0.001	0.17	^ < 0.0005	0.140	< 0.0002	0.35	1.15	0.0054	^ < 0.002
	9/25/2017	< 0.003	0.002	0.048	< 0.001	< 0.0005	< 0.005	< 0.001	0.15	0.00067	0.130	< 0.0002	0.38	1.27	0.0079	< 0.002
	11/21/2017	< 0.003	0.0017	0.046	< 0.001	< 0.0005	< 0.005	< 0.001	0.15	< 0.0005	0.140	< 0.0002	0.34	1.09	0.015	< 0.002
	3/8/2018	< 0.003	0.0016	0.05	< 0.001	< 0.0005	< 0.005	< 0.001	0.14	< 0.0005	0.150	< 0.0002	0.37	1.55	0.012	< 0.002
	GWPS	**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.10**	**5**	**0.05**	**NC**
	5/18/2018	NA	0.0013	0.046	NA	NA	NA	< 0.001	0.14	< 0.0005	**0.150**	NA	**0.35**	1.22	0.017	NA
	12/13/2018	NA	0.0012	0.046	NA	NA	NA	< 0.001	0.150	< 0.0005	**0.150**	NA	**0.370**	1.450	0.0170	NA
	6/19/2019	NA	0.0013	0.044	NA	NA	NA	< 0.001	0.140	< 0.0005	**0.160**	NA	**0.370**	1.5	0.0150	NA
	11/19/2019	NA	< 0.010	0.044	NA	NA	NA	< 0.001	0.150	< 0.0005	**0.15**	NA	**0.340**	YTBA	0.0130	NA
G20S down-gradient	11/19/2015	< 0.003	< 0.001	0.049	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.82	< 0.0005	0.036	< 0.0002	0.0068	2.078	< 0.0025	< 0.002
	5/11/2016	< 0.003	< 0.001	0.049	< 0.001	< 0.0005	< 0.005	< 0.001	0.81	< 0.0005	0.037	0.00027	0.011	2.52	< 0.0025	< 0.002
	6/29/2016	< 0.003	< 0.001	0.051	< 0.001	< 0.0005	< 0.005	0.0011	0.82	< 0.0005	0.04	< 0.0002	0.014	2.79	< 0.0025	< 0.002
	8/23/2016	< 0.003	< 0.001	0.047	< 0.001	< 0.0005	< 0.005	< 0.001	0.81	< 0.0005	0.039	< 0.0002	0.017	3.67	< 0.0025	< 0.002
	11/17/2016	< 0.003	< 0.001	0.056	< 0.001	< 0.0005	< 0.005	0.00018	0.74	< 0.0005	0.042	< 0.0002	0.019	1.98	< 0.0025	< 0.002
	2/13/2017	< 0.003	< 0.001	0.046	< 0.001	< 0.0005	< 0.005	< 0.0010	0.69	< 0.0005	0.04	< 0.0002	0.018	2.44	< 0.0025	< 0.002
	5/24/2017	< 0.003	< 0.001	0.046	^ < 0.001	< 0.0005	< 0.005	< 0.0010	0.81	< 0.0005	0.038	< 0.0002	0.017	2.15	< 0.0025	< 0.002
	7/5/2017	< 0.003	< 0.001	0.054	< 0.001	< 0.0005	< 0.005	0.0021	0.76	^ < 0.0005	0.04	< 0.0002	0.019	1.83	< 0.0025	^ < 0.002
	9/25/2017	< 0.003	< 0.001	0.051	< 0.001	< 0.0005	< 0.005	0.0015	0.78	< 0.0005	0.036	< 0.0002	0.022	2.19	< 0.0025	< 0.002
	11/20/2017	< 0.003	< 0.001	0.051	< 0.001	< 0.0005	< 0.005	0.0022	0.78	< 0.0005	0.041	< 0.0002	0.021	2.50	< 0.0025	< 0.002
	3/6/2018	< 0.003	< 0.001	0.049	^ < 0.001	< 0.0005	< 0.005	< 0.0010	0.76	< 0.0005	0.042	< 0.0002	0.021	2.83	< 0.0025	< 0.002
	GWPS	**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.10**	**5**	**0.05**	**NC**
	5/16/2018	NA	< 0.001	0.049	NA	NA	NA	0.0024	0.75	^ < 0.0005	0.04	NA	0.019	2.12	< 0.0025	NA
	12/7/2018	NA	< 0.001	0.048	NA	NA	NA	0.0010	0.760	0.0048	**0.042**	NA	0.0230	2.26	< 0.0025	NA
	6/18/2019	NA	< 0.001	0.051	NA	NA	NA	0.0018	0.750	< 0.0005	0.041	NA	0.017	2.11	< 0.0025	NA
	11/5/2019	NA	< 0.010	0.050	NA	NA	NA	0.0023	0.740	< 0.0005	**0.044**	NA	0.021	YTBA	< 0.0100	NA
G30S down-gradient	11/20/2015	< 0.003	0.014	0.041	^ < 0.001	< 0.0005	< 0.005	< 0.001	1.3	< 0.0005	0.022	< 0.0002	0.33	1.484	< 0.0025	< 0.002
	5/10/2016	< 0.003	0.017	0.039	< 0.001	< 0.0005	< 0.005	< 0.001	1.3	< 0.0005	0.021	< 0.0002	0.3	1.41	< 0.0025	< 0.002
	6/30/2016	< 0.003	0.013	0.04	< 0.001	< 0.0005	< 0.005	< 0.001	1.3	< 0.0005	0.023	< 0.0002	0.3	1.17	< 0.0025	< 0.002
	8/25/2016	< 0.003	0.015	0.039	< 0.001	< 0.0005	< 0.005	< 0.001	1.3	< 0.0005	0.02	< 0.0002	0.31	1.87	< 0.0025	< 0.002
	11/18/2016	< 0.003	0.016	0.043	< 0.001	< 0.0005	< 0.005	< 0.001	1.2	< 0.0005	0.023	< 0.0002	0.33	2.36	< 0.0025	< 0.002
	2/14/2017	< 0.003	0.011	0.042	< 0.001	< 0.0005	< 0.005	< 0.001	1.2	< 0.0005	0.021	< 0.0002	0.24	1.84	< 0.0025	< 0.002
	5/25/2017	< 0.006	0.019	0.078	^ < 0.002	< 0.001	< 0.01	< 0.002	1.4	< 0.001	0.04	< 0.0002	0.45	1.76	< 0.005	< 0.004
	7/7/2017	< 0.003	0.011	0.039	< 0.001	< 0.0005	< 0.005	< 0.001	1.3	< 0.0005	0.021	< 0.0002	0.26	1.59	< 0.0025	< 0.002
	9/26/2017	< 0.003	0.011	0.041	< 0.001	< 0.0005	< 0.005	< 0.001	1.3	< 0.0005	0.021	< 0.0002	0.2	1.41	< 0.0025	< 0.002
	11/20/2017	< 0.003	0.01	0.04	< 0.001	< 0.0005	< 0.005	< 0.001	1.3	< 0.0005	0.019	< 0.0002	0.19	1.73	< 0.0025	< 0.002
	3/7/2018	< 0.003	0.011	0.043	< 0.001	< 0.0005	< 0.005	< 0.001	1.3	< 0.0005	0.019	< 0.0002	0.14	1.94	< 0.0025	< 0.002
	GWPS	**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.10**	**5**	**0.05**	**NC**
	5/17/2018	NA	**0.011**	0.043	NA	NA	NA	< 0.001	1.2	< 0.0005	0.021	NA	**0.13**	1.57	F1 < 0.0025	NA
	12/14/2018	NA	0.0069	0.041	NA	NA	NA	< 0.001	1.2	< 0.0005	0.022	NA	0.065	2.04	< 0.0025	NA
	6/26/2019	NA	0.0074	0.041	NA	NA	NA	< 0.001	1.1	< 0.0005	0.018	NA	0.065	1.18	F1 < 0.0025	NA
	11/6/2019	NA	0.01	0.041	NA	NA	NA	< 0.001	1.1	< 0.0005	0.019	NA	0.013	YTBA	0.01	NA
R32S down-gradient	11/19/2015	< 0.003	0.0018	0.033	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.28	< 0.0005	0.04	< 0.0002	0.16	1.928	< 0.0025	< 0.002
	5/5/2016	< 0.003	0.0034	0.039	< 0.001	< 0.0005	< 0.005	< 0.001	0.32	0.0005	0.069	< 0.0002	0.29	2.26	< 0.0025	< 0.002
	6/29/2016	< 0.003	0.0021	0.042	< 0.001	< 0.0005	< 0.005	< 0.001	0.35	< 0.0005	0.065	< 0.0002	0.43	2.12	< 0.0025	< 0.002
	8/26/2016	< 0.003	0.0014	0.043	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.4	< 0.0005	0.056	< 0.0002	0.48	2.39	< 0.0025	< 0.002
	11/18/2016	< 0.003	0.0016	0.042	< 0.001	< 0.0005	< 0.005	< 0.001	0.34	< 0.0005	0.063	< 0.0002	0.55	3.17	< 0.0025	< 0.002
	2/16/2017	< 0.003	0.002	0.039	< 0.001	< 0.0005	< 0.005	< 0.001	0.34	< 0.0005	0.064	< 0.0002	0.57	1.76	F1 < 0.0025	< 0.002
	5/25/2017	< 0.006	0.0042	0.075	^ < 0.002	< 0.001	< 0.01	< 0.002	0.42	< 0.001	0.14	< 0.0002	1.4	1.82	< 0.005	< 0.004
	7/7/2017	< 0.003	0.0043	0.04	< 0.001	< 0.0005	< 0.005	< 0.001	0.42	< 0.0005	0.1	< 0.0002	0.87	2.08	< 0.0025	< 0.002
	9/28/2017	< 0.003	0.003	0.044	< 0.001	< 0.0005	< 0.005	< 0.001	0.36	< 0.0005	0.086	< 0.0002	0.57	1.79	< 0.0025	< 0.002
	11/21/2017	< 0.003	0.0037	0.041	< 0.001	< 0.0005	< 0.005	< 0.001	0.38	< 0.0005	0.11	< 0.0002	0.74	1.82	< 0.0025	< 0.002
	3/7/2018	< 0.003	0.0029	0.042	< 0.001	< 0.0005	< 0.005	< 0.001	0.32	< 0.0005	0.11	< 0.0002	0.67	2.56	< 0.0025	< 0.002
	GWPS	**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.10**	**5**	**0.05**	**NC**
	5/21/2018	NA	0.0024	0.04	NA	NA	NA	< 0.001	0.29	< 0.0005	**0.1**	NA	**0.64**	2.22	< 0.0025	NA
	12/13/2018	NA	0.0019	0.043	NA	NA	NA	< 0.001	0.260	0.0017	**0.080**	NA	**0.560**	2.23	< 0.0025	NA
	6/27/2019	NA	0.0027	0.041	NA	NA	NA	< 0.001	0.270	< 0.0005	**0.090**	NA	**0.810**	2.67	< 0.0025	NA
	11/6/2019	NA	< 0.01	0.039	NA	NA	NA	< 0.001	0.270	< 0.0005	**0.13**	NA	**0.580**	YTBA	< 0.0100	NA

Notes:
All units are in mg/l except Radium is in pCi/L as noted.
NC - Not calculated since not detected compound in first round of assessment monitoring.
NYR- Data not yet received.
F1 - MS and/or MSD Recovery outside of limits.
B - Compound was found in the blank and sample.
NA- Not Analyzed; non-detect in previous monitoring
^ - Denotes instrument related QC exceeds the control limits
GWPS - Groundwater Protection Standard.
BOLD - Above GWPS.
YTBA - Yes to be analyzed.

Table 5. Appendix IV Groundwater Analytical Results through 2018 - Midwest Generation, LLC, Joliet Station #9, Joliet, IL

Well	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228 Combined	Selenium	Thallium
G44S down-gradient	11/20/2015	< 0.003	0.0012	0.053	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.21	< 0.0005	0.017	< 0.0002	0.1000	1.161	< 0.0025	< 0.002
	5/9/2016	< 0.003	< 0.001	0.049	< 0.001	< 0.0005	< 0.005	< 0.001	0.18	< 0.0005	0.015	< 0.0002	0.046	< 0.415	< 0.0025	< 0.002
	6/30/2016	< 0.003	< 0.001	0.044	< 0.001	< 0.0005	< 0.005	< 0.001	0.18	< 0.0005	0.014	< 0.0002	0.025	0.879	< 0.0025	< 0.002
	8/26/2016	< 0.003	< 0.001	0.053	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.19	< 0.0005	0.014	< 0.0002	0.047	0.816	< 0.0025	< 0.002
	11/16/2016	< 0.003	< 0.001	0.048	< 0.001	< 0.0005	< 0.005	< 0.001	0.17	< 0.0005	0.011	< 0.0002	0.041	0.475	< 0.0025	< 0.002
	2/16/2017	< 0.003	< 0.001	0.051	< 0.001	< 0.0005	< 0.005	< 0.001	0.15	< 0.0005	0.014	< 0.0002	0.044	0.729	< 0.0025	< 0.002
	5/24/2017	< 0.003	< 0.001	0.048	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.19	< 0.0005	0.011	< 0.0002	0.031	1.02	< 0.0025	< 0.002
	7/10/2017	< 0.003	< 0.001	0.049	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.1	< 0.0005	0.012	< 0.0002	0.061	0.667	< 0.0025	< 0.002
	9/28/2017	< 0.003	< 0.001	0.048	< 0.001	< 0.0005	< 0.005	< 0.001	0.19	< 0.0005	0.014	< 0.0002	0.081	0.614	< 0.0025	< 0.002
	11/21/2017	< 0.003	< 0.001	0.051	< 0.001	< 0.0005	< 0.005	< 0.001	0.18	< 0.0005	0.016	< 0.0002	0.055	0.913	< 0.0025	< 0.002
	3/7/2018	< 0.003	0.0014	0.053	< 0.001	< 0.0005	< 0.005	< 0.001	0.18	< 0.0005	0.017	< 0.0002	0.049	1.31	< 0.0025	< 0.002
	GWPS	**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.10**	**5**	**0.05**	**NC**
	5/17/2018	NA	< 0.001	0.054	NA	NA	NA	< 0.001	0.18	< 0.0005	0.016	NA	0.071	0.714	< 0.0025	NA
	12/10/2018	NA	< 0.001	0.057	NA	NA	NA	< 0.001	0.19	< 0.0005	0.019	NA	**0.14**	0.454	< 0.0025	NA
	6/19/2019	NA	< 0.001	0.062	NA	NA	NA	< 0.001	0.19	< 0.0005	0.023	NA	**0.13**	0.841	< 0.0025	NA
	11/12/2019	NA	< 0.01	0.065	NA	NA	NA	< 0.001	0.21	< 0.0005	0.026	NA	**0.20**	YTBA	< 0.01	NA
G46S down-gradient	11/23/2015	< 0.003	0.0033	0.064	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.27	< 0.0005	0.073	< 0.0002	0.5	1.468	< 0.0025	< 0.002
	5/9/2016	< 0.003	0.0018	0.099	< 0.001	< 0.0005	< 0.005	< 0.001	0.28	0.0005	0.11	< 0.0002	0.7	1.85	< 0.0025	< 0.002
	6/30/2016	< 0.003	0.0014	0.098	< 0.001	< 0.0005	< 0.005	< 0.001	0.29	< 0.0005	0.13	< 0.0002	0.71	1.94	< 0.0025	< 0.002
	8/26/2016	< 0.003	0.0027	0.054	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.35	< 0.0005	0.12	< 0.0002	1.2	1.17	< 0.0025	< 0.002
	11/18/2016	< 0.003	0.0025	0.051	< 0.001	< 0.0005	< 0.005	< 0.0010	0.39	< 0.0005	0.13	< 0.0002	1.8	< 0.601	< 0.0025	< 0.002
	2/16/2017	< 0.003	0.0024	0.053	< 0.001	< 0.0005	< 0.005	< 0.0010	0.41	< 0.0005	0.091	< 0.0002	1.4	1.07	< 0.0025	< 0.002
	5/22/2017	< 0.003	0.0033	B 0.046	^ < 0.001	< 0.0005	< 0.005	< 0.0010	0.44	< 0.0005	0.11	< 0.0002	1.4	0.683	< 0.0025	< 0.002
	7/6/2017	< 0.003	0.0034	0.044	< 0.001	< 0.0005	< 0.005	0.0010	0.41	^ < 0.0005	0.076	< 0.0002	0.92	0.709	< 0.0025	^ < 0.002
	9/27/2017	< 0.003	0.0043	0.031	< 0.001	< 0.0005	< 0.005	< 0.0010	0.4	< 0.0005	0.091	< 0.0002	0.63	0.754	< 0.0025	< 0.002
	11/21/2017	< 0.003	0.0055	0.032	< 0.001	< 0.0005	< 0.005	< 0.0010	0.43	< 0.0005	0.11	< 0.0002	0.68	0.776	< 0.0025	< 0.002
	3/8/2018	< 0.003	0.0039	0.049	< 0.001	< 0.0005	< 0.005	< 0.0010	0.41	0.00053	0.093	< 0.0002	0.82	1.29	< 0.0025	< 0.002
	GWPS	**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.10**	**5**	**0.05**	**NC**
	5/18/2018	NA	0.0028	0.048	NA	NA	NA	< 0.0010	0.4	< 0.0005	**0.073**	NA	**0.84**	1.07	< 0.0025	NA
	12/11/2018	NA	0.0023	0.055	NA	NA	NA	< 0.001	0.380	< 0.0005	**0.096**	NA	**1.20**	1.22	< 0.0025	NA
	6/19/2019	NA	**0.014**	0.040	NA	NA	NA	< 0.001	0.330	< 0.0005	**0.22**	NA	**1.80**	1.37	< 0.0025	NA
	11/13/2019	NA	< 0.050	0.041	NA	NA	NA	< 0.001	0.310	< 0.0050	**0.11**	NA	**1.60**	YTBA	< 0.0100	NA
G47S down-gradient	11/23/2015	< 0.003	0.018	0.018	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.45	< 0.0005	0.036	< 0.0002	0.32	0.898	0.003	< 0.002
	5/6/2016	< 0.003	0.034	0.017	< 0.001	< 0.0005	< 0.005	< 0.001	0.72	< 0.0005	0.033	< 0.0002	0.41	0.736	0.0033	< 0.002
	7/1/2016	< 0.003	0.022	0.019	< 0.001	^ < 0.0005	< 0.005	< 0.001	0.68	< 0.0005	0.038	< 0.0002	0.53	1.01	< 0.0025	< 0.002
	8/24/2016	< 0.003	0.017	0.023	< 0.001	< 0.0005	< 0.005	< 0.001	0.67	< 0.0005	0.028	< 0.0002	0.41	1.06	< 0.0025	< 0.002
	11/16/2016	< 0.003	0.14	0.0091	< 0.001	< 0.0005	< 0.005	< 0.001	1.8	< 0.0005	0.015	< 0.0002	1.4	< 1.38	0.0038	< 0.002
	2/15/2017	< 0.003	0.059	0.016	< 0.001	< 0.0005	< 0.005	< 0.001	1.1	< 0.0005	< 0.05	< 0.0002	0.57	0.716	0.0035	< 0.002
	5/23/2017	< 0.003	0.18	0.0081	^ < 0.001	< 0.0005	< 0.005	< 0.001	2.2	< 0.0005	0.013	< 0.0002	1.3	< 0.361	0.0025	< 0.002
	7/10/2017	< 0.003	0.17	0.0085	< 0.001	< 0.0005	< 0.005	< 0.001	2.1	< 0.0005	0.013	< 0.0002	1.2	0.733	< 0.0025	< 0.002
	9/27/2017	< 0.003	0.21	0.0085	< 0.001	< 0.0005	< 0.005	< 0.001	2	< 0.0005	0.014	< 0.0002	1.3	0.836	0.0027	< 0.002
	11/22/2017	< 0.003	0.23	0.009	< 0.001	< 0.0005	< 0.005	< 0.001	2.1	< 0.0005	0.012	< 0.0002	1.5	0.692	0.0044	< 0.002
	3/8/2018	< 0.003	0.25	0.009	< 0.001	< 0.0005	< 0.005	< 0.001	2.1	< 0.0005	0.014	< 0.0002	1.4	0.790	0.0042	< 0.002
	GWPS	**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.10**	**5**	**0.05**	**NC**
	5/18/2018	NA	**0.23**	0.0087	NA	NA	NA	< 0.001	1.7	< 0.0005	0.015	NA	**1.5**	1.01	0.0039	NA
	12/11/2018	NA	**0.140**	0.0110	NA	NA	NA	< 0.001	1.10	< 0.0005	0.023	NA	**1.10**	0.597	0.0031	NA
	6/28/2019	NA	**0.13**	0.0120	NA	NA	NA	< 0.001	1.30	< 0.0005	0.028	NA	**1.00**	0.566	< 0.0025	NA
	11/7/2019	NA	**0.029**	0.0170	NA	NA	NA	< 0.001	0.55	< 0.0050	**0.053**	NA	**0.38**	YTBA	< 0.0100	NA
G48S down-gradient	11/20/2015	< 0.003	0.03	0.015	^ < 0.001	< 0.0005	< 0.005	< 0.001	1.5	< 0.0005	0.015	< 0.0002	1.4	0.8512	< 0.0025	< 0.002
	5/5/2016	< 0.003	0.046	0.014	< 0.001	< 0.0005	< 0.005	< 0.001	1.5	< 0.0005	0.016	< 0.0002	1.2	0.800	< 0.0025	< 0.002
	7/1/2016	< 0.003	0.038	0.011	< 0.001	^ < 0.0005	< 0.005	< 0.001	1.4	< 0.0005	0.013	< 0.0002	1.2	1.01	< 0.0025	< 0.002
	8/24/2016	< 0.003	0.032	0.014	< 0.001	< 0.0005	< 0.005	< 0.001	1.4	< 0.0005	0.012	< 0.0002	1.1	1.16	< 0.0025	< 0.002
	11/16/2016	< 0.003	0.03	0.018	< 0.001	< 0.0005	< 0.005	< 0.001	1.4	< 0.0005	0.016	< 0.0002	1.1	1.65	< 0.0025	< 0.002
	2/15/2017	< 0.003	0.038	0.015	< 0.001	< 0.0005	< 0.005	< 0.001	1.2	< 0.0005	0.014	< 0.0002	0.79	0.824	< 0.0025	< 0.002
	5/23/2017	< 0.003	0.03	0.014	^ < 0.001	< 0.0005	< 0.005	< 0.001	1.3	< 0.0005	0.016	< 0.0002	0.95	0.661	< 0.0025	< 0.002
	7/10/2017	< 0.003	0.022	0.017	< 0.001	< 0.0005	< 0.005	< 0.001	1.2	< 0.0005	0.016	< 0.0002	0.84	1.39	< 0.0025	< 0.002
	9/27/2017	< 0.003	0.024	0.019	< 0.001	< 0.0005	< 0.005	< 0.001	1.1	< 0.0005	0.019	< 0.0002	0.72	1.32	< 0.0025	< 0.002
	11/22/2017	< 0.003	0.027	0.015	< 0.001	< 0.0005	< 0.005	< 0.001	1.2	< 0.0005	0.016	< 0.0002	0.77	1.27	< 0.0025	< 0.002
	3/8/2018	< 0.003	0.017	0.031	< 0.001	< 0.0005	< 0.005	< 0.001	0.85	< 0.0005	0.023	< 0.0002	0.51	2.30	< 0.0025	< 0.002
	GWPS	**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.10**	**5**	**0.05**	**NC**
	5/18/2018	NA	**0.022**	0.023	NA	NA	NA	< 0.001	0.92	< 0.0005	0.023	NA	**0.49**	0.962	< 0.0025	NA
	12/11/2018	NA	**0.023**	0.016	NA	NA	NA	< 0.001	1.1	0.0049	0.019	NA	**0.79**	0.921	< 0.0025	NA
	6/25/2019	NA	**0.022**	0.018	NA	NA	NA	< 0.001	0.95	< 0.0005	0.022	NA	**0.73**	1.33	< 0.0025	NA
	11/7/2019	NA	**0.012**	0.027	NA	NA	NA	< 0.001	0.89	< 0.005	0.019	NA	**0.59**	YTBA	< 0.01	NA

Notes:
All units are in mg/l except Radium is in pCi/L as noted.
NC - Not calculated since not detected compound in first round of assessment monitoring.
F1 - MS and/or MSD Recovery outside of limits.
B - Compound was found in the blank and sample.
NA- Not Analyzed; non-detect in previous monitoring
^ - Denotes instrument related QC exceeds the control limits
GWPS - Groundwater Protection Standard.
BOLD - Above GWPS.
YTBA - Yet to be analyzed.

Table 6. Appendix III Expanded Network Groundwater Analytical Results through 2019

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
	Prediction Limit	1.006	126*	203.2	0.35	7.52-7.04*	360*	955
G31S down-gradient	12/10/2018	**4.4**	**130**	170	0.26	7.17	290	**1,000**
	6/24/2019	**5.9**	**160**	190	0.27	7.16	**370**	**1,100**
	12/18/2019	**5.1**	**140**	190 F1	0.28	7.48	**380**	**1,100**
G33S down-gradient	12/10/2018	0.6	36	6.3	**0.98**	7.41	50	410
	6/24/2019	**1.4**	45	4.8	**1.1**	7.37	61	420
	12/13/2019	**1.6**	44	4.8	**1.4**	**7.59**	66	440
T01S down-gradient	12/13/2018	**3.3**	56	110	**1.1**	7.37	240	900
	6/26/2019	**4.3**	58	110	**1.1**	7.43	450	930
	12/26/2019	**4.4**	57	100	**1.2**	7.86	340	940
T02S down-gradient	12/14/2018	**4.90**	53	110	**0.47**	**7.55**	210	870
	6/25/2019	**3.5**	57 V	110	**0.4**	7.4	230	750
	12/27/2019	**5.2**	76	96	**0.67**	**8.03**	340	**1,000**
T04S down-gradient	12/19/2018	0.24	93	8.7	0.24	**7.89**	67	510
	6/27/2019	0.24	100	24	0.27	7.05	140	590
	12/26/2019	0.28	110	30	0.32	**7.37**	120	680
T05S down-gradient	12/19/2018	**13.0**	1.4	150	**1.8**	**10.37**	**410**	**1,600**
	6/20/2019	**13 B**	2.2	140	**1.8**	**10.13**	**530**	**1,600**
	12/30/2019	**14**	1.7	140	**1.9**	**10.35**	**680**	**1,600**
T06S down-gradient	12/18/2018	0.7	88	18	**0.38**	7.36	66	530
	6/20/2019	0.77 B	90	9.2	**0.42**	7.05	89	460
	12/31/2019	0.77	95	15	**0.47**	5.01	76	540
T08S down-gradient	12/12/2018	**7.5**	33	120	**0.89**	**8.21**	260	950
	6/21/2019	**8.8**	34	110	**0.77**	**8.15**	**380**	940
	12/27/2019	**5.8**	43	100	**0.65**	**8.01**	280	830
T09S down-gradient	12/18/2018	**6.6**	120	120	0.35	**7.54**	270	**1,000**
	6/21/2019	**4.1**	110	120	0.34	7.29	280	870
	12/30/2019	**5.1**	120	120	**0.39**	**7.68**	350	940

Notes:

All Statistics use the detection limit for non-detect results.

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

Bold - Potential statistically significant increase.

V - Serial Dilution exceeds the control limits.

* - Based on pooled background from G45S/T03S. All others based on G45S as background.

F1- MS and/or MSD Recovery is outside acceptance limits.

B - Compound was found in the blank and sample.

Table 7. Appendix IV Expanded Network Groundwater Analytical Results through 2019

Well	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228 Combined	Selenium	Thallium
GWPS		**NC**	**0.01**	**2.0**	**NC**	**NC**	**NC**	**0.006**	**4.0**	**0.015**	**0.041**	**NC**	**0.1**	**5 pCi/L**	**0.05**	**NC**
G31S down-gradient	12/10/2018	NA	0.0051	0.051	NA	NA	NA	< 0.001	0.26	0.0012	**0.11**	NA	**0.72**	3.53	< 0.0025	NA
	6/24/2019	NA	0.0056	0.059	NA	NA	NA	< 0.001	0.27	< 0.0005	**0.12**	NA	**0.89**	3.71	< 0.0025	NA
	12/18/2019	NA	0.0049	0.049	NA	NA	NA	< 0.001	0.28	0.0005	**0.11**	NA	**0.75**	YTBA	< 0.0025	NA
G33S down-gradient	12/10/2018	NA	0.0029	0.45	NA	NA	NA	< 0.001	0.98	**0.016**	0.038	NA	< 0.005	2.28	< 0.0025	NA
	6/24/2019	NA	0.0011	0.07	NA	NA	NA	< 0.001	1.1	0.0011	0.043	NA	< 0.005	1.39	< 0.0025	NA
	12/13/2019	NA	0.001	0.057	NA	NA	NA	< 0.001	1.4	0.0006	0.041	NA	< 0.005	YTBA	< 0.0025	NA
T01S down-gradient	12/13/2018	NA	**0.016**	0.084	NA	NA	NA	0.0037	1.1	0.0053	0.018	NA	**0.3**	1.12	< 0.0025	NA
	6/26/2019	NA	**0.022**	0.069	NA	NA	NA	0.003	1.1	0.0037	0.011	NA	**0.3**	1.02	< 0.0025	NA
	12/26/2019	NA	**0.012**	0.052	NA	NA	NA	0.0019	1.2	0.0018	0.012	NA	**0.32**	YTBA	< 0.0025	NA
T02S down-gradient	12/14/2018	NA	0.0086	0.063	NA	NA	NA	0.0016	0.47	0.007	0.027	NA	**0.5**	1.2	< 0.0025	NA
	6/26/2019	NA	0.006	0.091 V	NA	NA	NA	0.0021	0.4	0.0024	0.034	NA	**0.25 V**	1.45	< 0.0025	NA
	12/27/2019	NA	**0.019**	0.083	NA	NA	NA	**0.012**	0.67	0.0044	0.038	NA	**0.42**	YTBA	< 0.0025	NA
T04S down-gradient	12/19/2018	NA	< 0.001	0.056	NA	NA	NA	< 0.001	0.24	0.0018	0.027	NA	0.012	0.768	< 0.0025	NA
	6/27/2019	NA	0.0024	0.087	NA	NA	NA	0.0033	0.27	0.0038	0.038	NA	0.014	1.14	< 0.0025	NA
	12/26/2019	NA	0.0022	0.078	NA	NA	NA	0.0044	0.32	0.0049	0.041	NA	0.013	YTBA	< 0.0025	NA
T05S down-gradient	12/19/2018	NA	**0.14**	0.01	NA	NA	NA	< 0.001	1.8	< 0.0005	0.015	NA	**1.0**	0.928	0.0026	NA
	6/20/2019	NA	**0.14**	0.0099	NA	NA	NA	< 0.001	1.8	< 0.0005	0.018	NA	**1.1**	0.606	0.0056	NA
	12/30/2019	NA	**0.14**	0.011	NA	NA	NA	< 0.001	1.9	< 0.0005	0.02	NA	**1.0**	YTBA	0.0049	NA
T06S down-gradient	12/18/2018	NA	< 0.001	0.035	NA	NA	NA	< 0.001	0.38	< 0.0005	0.028	NA	0.0085	2.18	< 0.0025	NA
	6/20/2019	NA	< 0.001	0.036	NA	NA	NA	< 0.001	0.42	< 0.0005	0.027	NA	0.0085	1.75	< 0.0025	NA
	12/31/2019	NA	< 0.001	0.035	NA	NA	NA	< 0.001	0.47	< 0.0005	0.029	NA	0.011	YTBA	< 0.0025	NA
T08S down-gradient	12/12/2018	NA	**0.015**	0.041	NA	NA	NA	< 0.001	0.89	0.0005	0.026	NA	**0.88**	0.674	< 0.0025	NA
	6/21/2019	NA	**0.019**	0.042	NA	NA	NA	< 0.001	0.77	< 0.0005	0.029	NA	**0.82**	0.544	< 0.0025	NA
	12/27/2019	NA	**0.012**	0.047	NA	NA	NA	< 0.001	0.65	< 0.0005	0.031	NA	**0.56**	YTBA	< 0.0025	NA
T09S down-gradient	12/18/2018	NA	0.0027	0.093	NA	NA	NA	0.0011	0.35	0.0017	**0.097**	NA	**1.0**	3.31	< 0.0025	NA
	6/21/2019	NA	0.0035	0.093	NA	NA	NA	< 0.001	0.34	0.0008	**0.075**	NA	**0.67**	3.08	< 0.0025	NA
	12/30/2019	NA	0.0026	0.084	NA	NA	NA	< 0.001	0.39	0.0006	**0.082**	NA	**0.75**	YTBA	< 0.0025	NA

Notes:

NS - No Standard

All units are in mg/l except Radium is in pCi/L as noted.

State Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I: Potable Resource Groundwater.

Federal Maximum Contaminant Levels (MCLs) obtained from Code of Federal Regulations (CFR) Title 40, Chapter I, Subchapter D, Part 141.

Not calculated since not detected compound in first round of detection monitoring.

V - Serial Dilution exceeds the control limits.

NA- Not Analyzed; non-detect in previous monitoring.

^ - Denotes instrument related QC exceeds the control limits.

Bold - Above GWPS.

YTBA - Yet to be analyzed.

GWPS - Groundwater Protection Standard

APPENDIX A
Analytical Data Packages

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 500-165270-1
Client Project/Site: Joliet #9 CCR

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

Attn: Richard Gnat

Authorized for release by:
7/15/2019 1:51:04 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Job ID: 500-165270-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-165270-1

Comments
No additional comments.

Receipt
The samples were received on 6/18/2019 2:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 9 coolers at receipt time were 1.8º C, 2.1º C, 2.3º C, 2.5º C, 2.6º C, 3.3º C, 3.3º C, 3.7º C and 3.8º C.

Metals
Method(s) 6020A: The internal standard Terbium (Tb) was used to report the elements Lead and Thallium in batch 500-492594. This was due to the LCS being spiked with the trace digestion spike which contains Bismuth. (LCS 500-492189/2-A) and (LCS 500-492252/2-A)

Method(s) 6020A: The continuing calibration verification (CCV) at line 53, recovered above the upper control limit for Cobalt bracketing the method blank (MB) and laboratory control sample (LCS). The MB and LCS were within the method control limits. The associated samples were bracketed by CCV that were within control limits. Therefore, the data have been reported. (CCV 500-493500/53)

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

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

Method Summary

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CHI
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
Field Sampling	Field Sampling	EPA	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

TAL CHI = 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: Joliet #9 CCR

Job ID: 500-165270-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-165270-1	G20S	Water	06/18/19 10:45	06/18/19 14:55	
500-165270-2	G44S	Water	06/19/19 10:54	06/19/19 14:48	
500-165270-3	G46S	Water	06/19/19 12:00	06/19/19 14:48	
500-165270-4	R08S	Water	06/19/19 13:05	06/19/19 14:48	
500-165270-5	T06S	Water	06/20/19 10:40	06/20/19 15:50	
500-165270-6	T05S	Water	06/20/19 13:32	06/20/19 15:50	
500-165270-7	T09S	Water	06/21/19 09:48	06/21/19 15:05	
500-165270-8	T08S	Water	06/21/19 12:47	06/21/19 15:05	
500-165270-9	G31S	Water	06/24/19 10:00	06/24/19 15:25	
500-165270-10	DUP	Water	06/24/19 10:00	06/24/19 15:25	
500-165270-11	G33S	Water	06/24/19 12:37	06/24/19 15:25	
500-165270-12	T03S	Water	06/24/19 13:58	06/24/19 15:25	
500-165270-13	T02S	Water	06/25/19 09:34	06/25/19 15:29	
500-165270-14	G48S	Water	06/25/19 13:36	06/25/19 15:29	
500-165270-15	T01S	Water	06/26/19 09:27	06/26/19 15:28	
500-165270-16	G30S	Water	06/26/19 13:18	06/26/19 15:28	
500-165270-17	R32S	Water	06/27/19 11:59	06/27/19 15:33	
500-165270-18	T04S	Water	06/27/19 13:15	06/27/19 15:33	
500-165270-19	G47S	Water	06/28/19 09:10	06/28/19 12:07	
500-165270-20	G45S	Water	06/28/19 10:31	06/28/19 12:07	

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G20S

Date Collected: 06/18/19 10:45
Date Received: 06/18/19 14:55

Lab Sample ID: 500-165270-1

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.041**		0.010		mg/L		06/19/19 07:40	06/19/19 16:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/19/19 07:40	06/19/19 18:03	1
Barium	**0.051**		0.0025		mg/L		06/19/19 07:40	06/19/19 18:03	1
Boron	**1.3**		0.050		mg/L		06/19/19 07:40	06/19/19 18:03	1
Calcium	**62**		0.20		mg/L		06/19/19 07:40	06/19/19 18:03	1
Cobalt	**0.0018**		0.0010		mg/L		06/19/19 07:40	06/19/19 18:03	1
Lead	<0.00050		0.00050		mg/L		06/19/19 07:40	06/19/19 18:03	1
Molybdenum	**0.017**		0.0050		mg/L		06/19/19 07:40	06/19/19 18:03	1
Selenium	<0.0025		0.0025		mg/L		06/19/19 07:40	06/19/19 18:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**440**		10		mg/L			06/19/19 23:35	1
Chloride	**13**		2.0		mg/L			06/25/19 16:15	1
Fluoride	**0.75**		0.10		mg/L			06/22/19 14:21	1
Sulfate	**65**		25		mg/L			06/28/19 13:43	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**36.25**				ft			06/18/19 10:45	1
Depth to Water (ft from MP)	**39.03**				ft			06/18/19 10:45	1
Elevation of well (ft from MP)	**580.33**				ft			06/18/19 10:45	1
Field pH	**7.18**				SU			06/18/19 10:45	1
Field Temperature	**70.7**				Degrees F			06/18/19 10:45	1
Ground Water Elevation	**541.30**				ft			06/18/19 10:45	1
Specific Conductance	**599**				umhos/cm			06/18/19 10:45	1
Well bottom elevation	**442.28**				ft			06/18/19 10:45	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G44S

Date Collected: 06/19/19 10:54
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-2

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.023**		0.010		mg/L		06/20/19 07:47	06/20/19 13:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/20/19 07:47	06/20/19 16:17	1
Barium	**0.062**		0.0025		mg/L		06/20/19 07:47	06/20/19 16:17	1
Boron	**1.3**		0.25		mg/L		06/20/19 07:47	06/21/19 11:18	5
Calcium	**130**		0.20		mg/L		06/20/19 07:47	06/20/19 16:17	1
Cobalt	<0.0010		0.0010		mg/L		06/20/19 07:47	06/20/19 16:17	1
Lead	<0.00050		0.00050		mg/L		06/20/19 07:47	06/20/19 16:17	1
Molybdenum	**0.13**		0.0050		mg/L		06/20/19 07:47	06/20/19 16:17	1
Selenium	<0.0025		0.0025		mg/L		06/20/19 07:47	06/20/19 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**720**		10		mg/L			06/19/19 23:38	1
Chloride	**59**		2.0		mg/L			06/25/19 16:15	1
Fluoride	**0.19**		0.10		mg/L			06/22/19 14:28	1
Sulfate	**140**		100		mg/L			06/28/19 13:46	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**77.87**				ft			06/19/19 10:54	1
Depth to Water (ft from MP)	**80.05**				ft			06/19/19 10:54	1
Elevation of well (ft from MP)	**586.69**				ft			06/19/19 10:54	1
Field pH	**7.02**				SU			06/19/19 10:54	1
Field Temperature	**60.8**				Degrees F			06/19/19 10:54	1
Ground Water Elevation	**506.64**				ft			06/19/19 10:54	1
Specific Conductance	**969**				umhos/cm			06/19/19 10:54	1
Well bottom elevation	**455.11**				ft			06/19/19 10:54	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G46S

Date Collected: 06/19/19 12:00
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-3

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.22		0.010		mg/L		06/20/19 07:47	06/20/19 13:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.014		0.0010		mg/L		06/20/19 07:47	06/20/19 16:20	1
Barium	0.040		0.0025		mg/L		06/20/19 07:47	06/20/19 16:20	1
Boron	13		5.0		mg/L		06/20/19 07:47	06/21/19 11:22	100
Calcium	89		0.20		mg/L		06/20/19 07:47	06/20/19 16:20	1
Cobalt	<0.0010		0.0010		mg/L		06/20/19 07:47	06/20/19 16:20	1
Lead	<0.00050		0.00050		mg/L		06/20/19 07:47	06/20/19 16:20	1
Molybdenum	1.8		0.0050		mg/L		06/20/19 07:47	06/20/19 16:20	1
Selenium	<0.0025		0.0025		mg/L		06/20/19 07:47	06/20/19 16:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		10		mg/L			06/19/19 23:40	1
Chloride	69		2.0		mg/L			06/25/19 16:16	1
Fluoride	0.33		0.10		mg/L			06/22/19 14:31	1
Sulfate	440		150		mg/L			06/28/19 13:46	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	98.70				ft			06/19/19 12:00	1
Depth to Water (ft from MP)	101.40				ft			06/19/19 12:00	1
Elevation of well (ft from MP)	601.32				ft			06/19/19 12:00	1
Field pH	7.64				SU			06/19/19 12:00	1
Field Temperature	57.4				Degrees F			06/19/19 12:00	1
Ground Water Elevation	499.92				ft			06/19/19 12:00	1
Specific Conductance	1216				umhos/cm			06/19/19 12:00	1
Well bottom elevation	453.62				ft			06/19/19 12:00	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: R08S

Date Collected: 06/19/19 13:05
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-4

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.16		0.010		mg/L		06/20/19 07:47	06/20/19 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0013		0.0010		mg/L		06/20/19 07:47	06/20/19 16:24	1
Barium	0.044		0.0025		mg/L		06/20/19 07:47	06/20/19 16:24	1
Boron	8.5		1.0		mg/L		06/20/19 07:47	06/21/19 11:26	20
Calcium	140		0.20		mg/L		06/20/19 07:47	06/20/19 16:24	1
Cobalt	<0.0010		0.0010		mg/L		06/20/19 07:47	06/20/19 16:24	1
Lead	<0.00050		0.00050		mg/L		06/20/19 07:47	06/20/19 16:24	1
Molybdenum	0.37		0.0050		mg/L		06/20/19 07:47	06/20/19 16:24	1
Selenium	0.015		0.0025		mg/L		06/20/19 07:47	06/20/19 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	820		10		mg/L			06/19/19 23:43	1
Chloride	83		10		mg/L			06/25/19 18:36	5
Fluoride	0.14		0.10		mg/L			06/22/19 14:37	1
Sulfate	360		150		mg/L			06/28/19 13:46	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	64.69				ft			06/19/19 13:05	1
Depth to Water (ft from MP)	67.24				ft			06/19/19 13:05	1
Elevation of well (ft from MP)	578.62				ft			06/19/19 13:05	1
Field pH	8.10				SU			06/19/19 13:05	1
Field Temperature	57.4				Degrees F			06/19/19 13:05	1
Ground Water Elevation	511.38				ft			06/19/19 13:05	1
Specific Conductance	958				umhos/cm			06/19/19 13:05	1
Well bottom elevation	453.08				ft			06/19/19 13:05	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T06S

Date Collected: 06/20/19 10:40
Date Received: 06/20/19 15:50

Lab Sample ID: 500-165270-5

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.027**		0.010		mg/L		06/21/19 07:59	06/21/19 18:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/21/19 07:59	06/24/19 14:58	1
Barium	**0.036**		0.0025		mg/L		06/21/19 07:59	06/24/19 14:58	1
Boron	**0.77**	**B**	0.050		mg/L		06/21/19 07:59	06/24/19 14:58	1
Calcium	**90**		0.20		mg/L		06/21/19 07:59	06/24/19 14:58	1
Cobalt	<0.0010		0.0010		mg/L		06/21/19 07:59	06/24/19 14:58	1
Lead	<0.00050		0.00050		mg/L		06/21/19 07:59	06/24/19 14:58	1
Molybdenum	**0.0085**		0.0050		mg/L		06/21/19 07:59	06/24/19 14:58	1
Selenium	<0.0025		0.0025		mg/L		06/21/19 07:59	06/24/19 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**460**		10		mg/L			06/21/19 06:12	1
Chloride	**9.2**		2.0		mg/L			06/25/19 16:17	1
Fluoride	**0.42**		0.10		mg/L			06/22/19 14:57	1
Sulfate	**89**		25		mg/L			06/28/19 15:03	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**109.75**				ft			06/20/19 10:40	1
Depth to Water (ft from MP)	**112.05**				ft			06/20/19 10:40	1
Elevation of well (ft from MP)	**621.02**				ft			06/20/19 10:40	1
Field pH	**7.05**				SU			06/20/19 10:40	1
Field Temperature	**68.0**				Degrees F			06/20/19 10:40	1
Ground Water Elevation	**508.97**				ft			06/20/19 10:40	1
Specific Conductance	**695**				umhos/cm			06/20/19 10:40	1
Well bottom elevation	**447.94**				ft			06/20/19 10:40	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T05S

Date Collected: 06/20/19 13:32
Date Received: 06/20/19 15:50

Lab Sample ID: 500-165270-6

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.018		0.010		mg/L		06/21/19 07:59	06/21/19 18:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.14		0.0010		mg/L		06/21/19 07:59	06/24/19 15:02	1
Barium	0.0099		0.0025		mg/L		06/21/19 07:59	06/24/19 15:02	1
Boron	13	B	5.0		mg/L		06/21/19 07:59	06/25/19 11:42	100
Calcium	2.2		0.20		mg/L		06/21/19 07:59	06/24/19 15:02	1
Cobalt	<0.0010		0.0010		mg/L		06/21/19 07:59	06/24/19 15:02	1
Lead	<0.00050		0.00050		mg/L		06/21/19 07:59	06/24/19 15:02	1
Molybdenum	1.1		0.0050		mg/L		06/21/19 07:59	06/24/19 15:02	1
Selenium	0.0056		0.0025		mg/L		06/21/19 07:59	06/24/19 15:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1600		10		mg/L			06/21/19 06:18	1
Chloride	140		10		mg/L			06/25/19 19:14	5
Fluoride	1.8		0.10		mg/L			06/22/19 15:00	1
Sulfate	530		150		mg/L			06/28/19 15:03	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	114.42				ft			06/20/19 13:32	1
Depth to Water (ft from MP)	116.82				ft			06/20/19 13:32	1
Elevation of well (ft from MP)	623.45				ft			06/20/19 13:32	1
Field pH	10.13				SU			06/20/19 13:32	1
Field Temperature	61.5				Degrees F			06/20/19 13:32	1
Ground Water Elevation	506.63				ft			06/20/19 13:32	1
Specific Conductance	2110				umhos/cm			06/20/19 13:32	1
Well bottom elevation	448.35				ft			06/20/19 13:32	1

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T09S

Date Collected: 06/21/19 09:48
Date Received: 06/21/19 15:05

Lab Sample ID: 500-165270-7

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.075		0.010		mg/L		06/22/19 08:08	06/24/19 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0035		0.0010		mg/L		06/22/19 08:08	06/24/19 14:42	1
Barium	0.093		0.0025		mg/L		06/22/19 08:08	06/24/19 14:42	1
Boron	4.1		0.050		mg/L		06/22/19 08:08	06/24/19 14:42	1
Calcium	110		0.20		mg/L		06/22/19 08:08	06/24/19 14:42	1
Cobalt	<0.0010		0.0010		mg/L		06/22/19 08:08	06/24/19 14:42	1
Lead	0.00080		0.00050		mg/L		06/22/19 08:08	06/24/19 14:42	1
Molybdenum	0.67		0.0050		mg/L		06/22/19 08:08	06/24/19 14:42	1
Selenium	<0.0025		0.0025		mg/L		06/22/19 08:08	06/24/19 14:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	870		10		mg/L			06/24/19 02:20	1
Chloride	120		10		mg/L			06/25/19 19:15	5
Fluoride	0.34		0.10		mg/L			06/22/19 15:05	1
Sulfate	280		100		mg/L			06/28/19 15:07	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	99.79				ft			06/21/19 09:48	1
Depth to Water (ft from MP)	102.19				ft			06/21/19 09:48	1
Elevation of well (ft from MP)	603.74				ft			06/21/19 09:48	1
Field pH	7.29				SU			06/21/19 09:48	1
Field Temperature	68.5				Degrees F			06/21/19 09:48	1
Ground Water Elevation	501.55				ft			06/21/19 09:48	1
Specific Conductance	1127				umhos/cm			06/21/19 09:48	1
Well bottom elevation	444.80				ft			06/21/19 09:48	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T08S

Date Collected: 06/21/19 12:47
Date Received: 06/21/19 15:05

Lab Sample ID: 500-165270-8

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.029		0.010		mg/L		06/22/19 08:08	06/24/19 12:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.019		0.0010		mg/L		06/22/19 08:08	06/24/19 14:46	1
Barium	0.042		0.0025		mg/L		06/22/19 08:08	06/24/19 14:46	1
Boron	8.8		1.0		mg/L		06/22/19 08:08	06/25/19 11:46	20
Calcium	34		0.20		mg/L		06/22/19 08:08	06/24/19 14:46	1
Cobalt	<0.0010		0.0010		mg/L		06/22/19 08:08	06/24/19 14:46	1
Lead	<0.00050		0.00050		mg/L		06/22/19 08:08	06/24/19 14:46	1
Molybdenum	0.82		0.0050		mg/L		06/22/19 08:08	06/24/19 14:46	1
Selenium	<0.0025		0.0025		mg/L		06/22/19 08:08	06/24/19 14:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	940		10		mg/L			06/24/19 02:22	1
Chloride	110		10		mg/L			06/25/19 19:19	5
Fluoride	0.77		0.10		mg/L			06/22/19 15:09	1
Sulfate	380		150		mg/L			06/28/19 15:07	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	122.19				ft			06/21/19 12:47	1
Depth to Water (ft from MP)	124.57				ft			06/21/19 12:47	1
Elevation of well (ft from MP)	627.39				ft			06/21/19 12:47	1
Field pH	8.15				SU			06/21/19 12:47	1
Field Temperature	72.5				Degrees F			06/21/19 12:47	1
Ground Water Elevation	502.82				ft			06/21/19 12:47	1
Specific Conductance	1180				umhos/cm			06/21/19 12:47	1
Well bottom elevation	447.38				ft			06/21/19 12:47	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G31S

Date Collected: 06/24/19 10:00
Date Received: 06/24/19 15:25

Lab Sample ID: 500-165270-9

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.12		0.010		mg/L		06/25/19 15:30	06/26/19 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0056		0.0010		mg/L		06/25/19 15:30	06/26/19 17:15	1
Barium	0.059		0.0025		mg/L		06/25/19 15:30	06/26/19 17:15	1
Boron	5.9		1.0		mg/L		06/25/19 15:30	06/27/19 11:42	20
Calcium	160		0.20		mg/L		06/25/19 15:30	06/26/19 17:15	1
Cobalt	<0.0010		0.0010		mg/L		06/25/19 15:30	06/26/19 17:15	1
Lead	<0.00050		0.00050		mg/L		06/25/19 15:30	06/26/19 17:15	1
Molybdenum	0.89		0.0050		mg/L		06/25/19 15:30	06/26/19 17:15	1
Selenium	<0.0025		0.0025		mg/L		06/25/19 15:30	06/26/19 17:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L			06/26/19 07:59	1
Chloride	190		10		mg/L			06/25/19 19:21	5
Fluoride	0.27		0.10		mg/L			07/05/19 21:56	1
Sulfate	370		150		mg/L			06/28/19 15:07	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	23.29				ft			06/24/19 10:00	1
Depth to Water (ft from MP)	25.87				ft			06/24/19 10:00	1
Elevation of well (ft from MP)	535.78				ft			06/24/19 10:00	1
Field pH	7.16				SU			06/24/19 10:00	1
Field Temperature	59.7				Degrees F			06/24/19 10:00	1
Ground Water Elevation	509.91				ft			06/24/19 10:00	1
Specific Conductance	1424				umhos/cm			06/24/19 10:00	1
Well bottom elevation	453.36				ft			06/24/19 10:00	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: DUP

Date Collected: 06/24/19 10:00
Date Received: 06/24/19 15:25

Lab Sample ID: 500-165270-10

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.12		0.010		mg/L		06/25/19 15:30	06/26/19 11:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0057		0.0010		mg/L		06/25/19 15:30	06/26/19 17:33	1
Barium	0.059		0.0025		mg/L		06/25/19 15:30	06/26/19 17:33	1
Boron	5.4		1.0		mg/L		06/25/19 15:30	06/27/19 12:09	20
Calcium	160		0.20		mg/L		06/25/19 15:30	06/26/19 17:33	1
Cobalt	<0.0010		0.0010		mg/L		06/25/19 15:30	06/26/19 17:33	1
Lead	<0.00050		0.00050		mg/L		06/25/19 15:30	06/26/19 17:33	1
Molybdenum	0.89		0.0050		mg/L		06/25/19 15:30	06/26/19 17:33	1
Selenium	<0.0025		0.0025		mg/L		06/25/19 15:30	06/26/19 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		10		mg/L			06/26/19 08:02	1
Chloride	180		10		mg/L			06/25/19 19:21	5
Fluoride	0.24		0.10		mg/L			07/05/19 21:58	1
Sulfate	370		150		mg/L			06/28/19 15:07	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	23.29				ft			06/24/19 10:00	1
Depth to Water (ft from MP)	25.87				ft			06/24/19 10:00	1
Elevation of well (ft from MP)	535.78				ft			06/24/19 10:00	1
Field pH	7.16				SU			06/24/19 10:00	1
Field Temperature	59.7				Degrees F			06/24/19 10:00	1
Ground Water Elevation	509.91				ft			06/24/19 10:00	1
Specific Conductance	1424				umhos/cm			06/24/19 10:00	1
Well bottom elevation	453.36				ft			06/24/19 10:00	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G33S

Date Collected: 06/24/19 12:37
Date Received: 06/24/19 15:25

Lab Sample ID: 500-165270-11

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.043		0.010		mg/L		06/25/19 15:30	06/26/19 11:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0011		0.0010		mg/L		06/25/19 15:30	06/26/19 17:37	1
Barium	0.070		0.0025		mg/L		06/25/19 15:30	06/26/19 17:37	1
Boron	1.4		0.25		mg/L		06/25/19 15:30	06/27/19 12:12	5
Calcium	45		0.20		mg/L		06/25/19 15:30	06/26/19 17:37	1
Cobalt	<0.0010		0.0010		mg/L		06/25/19 15:30	06/26/19 17:37	1
Lead	0.0011		0.00050		mg/L		06/25/19 15:30	06/26/19 17:37	1
Molybdenum	<0.0050		0.0050		mg/L		06/25/19 15:30	06/26/19 17:37	1
Selenium	<0.0025		0.0025		mg/L		06/25/19 15:30	06/26/19 17:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	420		10		mg/L			06/26/19 08:04	1
Chloride	4.8		2.0		mg/L			06/25/19 18:46	1
Fluoride	1.1		0.10		mg/L			07/05/19 22:07	1
Sulfate	61		25		mg/L			06/28/19 15:12	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	24.09				ft			06/24/19 12:37	1
Depth to Water (ft from MP)	25.82				ft			06/24/19 12:37	1
Elevation of well (ft from MP)	535.66				ft			06/24/19 12:37	1
Field pH	7.37				SU			06/24/19 12:37	1
Field Temperature	60.6				Degrees F			06/24/19 12:37	1
Ground Water Elevation	509.84				ft			06/24/19 12:37	1
Specific Conductance	615				umhos/cm			06/24/19 12:37	1
Well bottom elevation	452.72				ft			06/24/19 12:37	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T03S

Date Collected: 06/24/19 13:58
Date Received: 06/24/19 15:25

Lab Sample ID: 500-165270-12

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.027		0.010		mg/L		06/25/19 15:30	06/26/19 11:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0020		0.0010		mg/L		06/25/19 15:30	06/26/19 17:41	1
Barium	0.090		0.0025		mg/L		06/25/19 15:30	06/26/19 17:41	1
Boron	2.7		0.50		mg/L		06/25/19 15:30	06/27/19 12:16	10
Calcium	100		0.20		mg/L		06/25/19 15:30	06/26/19 17:41	1
Cobalt	<0.0010		0.0010		mg/L		06/25/19 15:30	06/26/19 17:41	1
Lead	<0.00050		0.00050		mg/L		06/25/19 15:30	06/26/19 17:41	1
Molybdenum	0.37		0.0050		mg/L		06/25/19 15:30	06/26/19 17:41	1
Selenium	<0.0025		0.0025		mg/L		06/25/19 15:30	06/26/19 17:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	830		10		mg/L			06/26/19 08:07	1
Chloride	89		10		mg/L			06/25/19 19:22	5
Fluoride	0.27		0.10		mg/L			07/05/19 22:10	1
Sulfate	260		100		mg/L			06/28/19 15:12	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	122.71				ft			06/24/19 13:58	1
Depth to Water (ft from MP)	125.79				ft			06/24/19 13:58	1
Elevation of well (ft from MP)	629.89				ft			06/24/19 13:58	1
Field pH	7.17				SU			06/24/19 13:58	1
Field Temperature	57.9				Degrees F			06/24/19 13:58	1
Ground Water Elevation	504.10				ft			06/24/19 13:58	1
Specific Conductance	1073				umhos/cm			06/24/19 13:58	1
Well bottom elevation	456.70				ft			06/24/19 13:58	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T02S

Date Collected: 06/25/19 09:34
Date Received: 06/25/19 15:29

Lab Sample ID: 500-165270-13

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.034		0.010		mg/L		06/26/19 15:03	06/27/19 16:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0060		0.0010		mg/L		06/26/19 15:03	06/27/19 14:40	1
Barium	0.091	V	0.0025		mg/L		06/26/19 15:03	06/27/19 14:40	1
Boron	3.5		0.50		mg/L		06/26/19 15:03	06/28/19 13:49	10
Calcium	57	V	0.20		mg/L		06/26/19 15:03	06/27/19 14:40	1
Cobalt	0.0021		0.0010		mg/L		06/26/19 15:03	06/27/19 14:40	1
Lead	0.0024		0.00050		mg/L		06/26/19 15:03	06/27/19 14:40	1
Molybdenum	0.25	V	0.0050		mg/L		06/26/19 15:03	06/27/19 14:40	1
Selenium	<0.0025		0.0025		mg/L		06/26/19 15:03	06/27/19 14:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	750		10		mg/L			06/26/19 08:09	1
Chloride	110		10		mg/L			07/02/19 16:45	5
Fluoride	0.40		0.10		mg/L			07/05/19 22:12	1
Sulfate	230		100		mg/L			06/28/19 15:12	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	126.27				ft			06/25/19 09:34	1
Depth to Water (ft from MP)	128.60				ft			06/25/19 09:34	1
Elevation of well (ft from MP)	626.16				ft			06/25/19 09:34	1
Field pH	7.40				SU			06/25/19 09:34	1
Field Temperature	75.2				Degrees F			06/25/19 09:34	1
Ground Water Elevation	497.56				ft			06/25/19 09:34	1
Specific Conductance	1147				umhos/cm			06/25/19 09:34	1
Well bottom elevation	453.40				ft			06/25/19 09:34	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G48S

Date Collected: 06/25/19 13:36
Date Received: 06/25/19 15:29

Lab Sample ID: 500-165270-14

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.022		0.010		mg/L		06/26/19 15:03	06/27/19 17:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.022		0.0010		mg/L		06/26/19 15:03	06/27/19 15:06	1
Barium	0.018		0.0025		mg/L		06/26/19 15:03	06/27/19 15:06	1
Boron	7.1		1.0		mg/L		06/26/19 15:03	06/28/19 14:15	20
Calcium	28		0.20		mg/L		06/26/19 15:03	06/27/19 15:06	1
Cobalt	<0.0010		0.0010		mg/L		06/26/19 15:03	06/27/19 15:06	1
Lead	<0.00050		0.00050		mg/L		06/26/19 15:03	06/27/19 15:06	1
Molybdenum	0.73		0.0050		mg/L		06/26/19 15:03	06/27/19 15:06	1
Selenium	<0.0025		0.0025		mg/L		06/26/19 15:03	06/27/19 15:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		10		mg/L			06/26/19 08:12	1
Chloride	110		10		mg/L			07/02/19 16:50	5
Fluoride	0.95		0.10		mg/L			07/05/19 22:25	1
Sulfate	390		150		mg/L			06/28/19 15:12	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	95.73				ft			06/25/19 13:36	1
Depth to Water (ft from MP)	98.18				ft			06/25/19 13:36	1
Elevation of well (ft from MP)	620.78				ft			06/25/19 13:36	1
Field pH	8.07				SU			06/25/19 13:36	1
Field Temperature	62.8				Degrees F			06/25/19 13:36	1
Ground Water Elevation	522.60				ft			06/25/19 13:36	1
Specific Conductance	1391				umhos/cm			06/25/19 13:36	1
Well bottom elevation	468.32				ft			06/25/19 13:36	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T01S

Date Collected: 06/26/19 09:27
Date Received: 06/26/19 15:28

Lab Sample ID: 500-165270-15

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.011		0.010		mg/L		06/27/19 07:17	06/27/19 17:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.022		0.0010		mg/L		06/27/19 07:17	06/27/19 16:29	1
Barium	0.069		0.0025		mg/L		06/27/19 07:17	06/27/19 16:29	1
Boron	4.3		0.50		mg/L		06/27/19 07:17	06/28/19 14:34	10
Calcium	58		0.20		mg/L		06/27/19 07:17	06/27/19 16:29	1
Cobalt	0.0030		0.0010		mg/L		06/27/19 07:17	06/27/19 16:29	1
Lead	0.0037		0.00050		mg/L		06/27/19 07:17	06/27/19 16:29	1
Molybdenum	0.30		0.0050		mg/L		06/27/19 07:17	06/27/19 16:29	1
Selenium	<0.0025		0.0025		mg/L		06/27/19 07:17	06/27/19 16:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	930		10		mg/L			06/27/19 09:55	1
Chloride	110		10		mg/L			07/02/19 16:52	5
Fluoride	1.1		0.10		mg/L			07/05/19 22:27	1
Sulfate	450		150		mg/L			06/28/19 15:16	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	111.20				ft			06/26/19 09:27	1
Depth to Water (ft from MP)	113.68				ft			06/26/19 09:27	1
Elevation of well (ft from MP)	621.78				ft			06/26/19 09:27	1
Field pH	7.43				SU			06/26/19 09:27	1
Field Temperature	73.4				Degrees F			06/26/19 09:27	1
Ground Water Elevation	508.10				ft			06/26/19 09:27	1
Specific Conductance	1222				umhos/cm			06/26/19 09:27	1
Well bottom elevation	451.46				ft			06/26/19 09:27	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G30S

Date Collected: 06/26/19 13:18
Date Received: 06/26/19 15:28

Lab Sample ID: 500-165270-16

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.018**		0.010		mg/L		06/27/19 07:17	06/27/19 17:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0074**		0.0010		mg/L		06/27/19 07:17	06/27/19 16:33	1
Barium	**0.041**		0.0025		mg/L		06/27/19 07:17	06/27/19 16:33	1
Boron	**5.4**		1.0		mg/L		06/27/19 07:17	06/28/19 14:37	20
Calcium	**57**		0.20		mg/L		06/27/19 07:17	06/27/19 16:33	1
Cobalt	<0.0010		0.0010		mg/L		06/27/19 07:17	06/27/19 16:33	1
Lead	<0.00050		0.00050		mg/L		06/27/19 07:17	06/27/19 16:33	1
Molybdenum	**0.065**		0.0050		mg/L		06/27/19 07:17	06/27/19 16:33	1
Selenium	<0.0025	F1	0.0025		mg/L		06/27/19 07:17	06/27/19 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1100**		10		mg/L			06/27/19 09:57	1
Chloride	**220**		10		mg/L			07/09/19 13:22	5
Fluoride	**1.1**		0.10		mg/L			07/05/19 22:30	1
Sulfate	**350**		150		mg/L			06/28/19 15:16	30

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**-0.74**				ft			06/26/19 13:18	1
Depth to Water (ft from MP)	**1.57**				ft			06/26/19 13:18	1
Elevation of well (ft from MP)	**524.70**				ft			06/26/19 13:18	1
Field pH	**7.98**				SU			06/26/19 13:18	1
Field Temperature	**60.4**				Degrees F			06/26/19 13:18	1
Ground Water Elevation	**523.13**				ft			06/26/19 13:18	1
Specific Conductance	**1500**				umhos/cm			06/26/19 13:18	1
Well bottom elevation	**462.58**				ft			06/26/19 13:18	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: R32S

Date Collected: 06/27/19 11:59
Date Received: 06/27/19 15:33

Lab Sample ID: 500-165270-17

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.090**		0.010		mg/L		06/28/19 07:48	06/28/19 16:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0027**		0.0010		mg/L		06/28/19 07:48	06/28/19 18:14	1
Barium	**0.041**		0.0025		mg/L		06/28/19 07:48	06/28/19 18:14	1
Boron	**6.3**		1.0		mg/L		06/28/19 07:48	07/01/19 11:03	20
Calcium	**140**		0.20		mg/L		06/28/19 07:48	06/28/19 18:14	1
Cobalt	<0.0010		0.0010		mg/L		06/28/19 07:48	06/28/19 18:14	1
Lead	<0.00050		0.00050		mg/L		06/28/19 07:48	06/28/19 18:14	1
Molybdenum	**0.81**		0.0050		mg/L		06/28/19 07:48	06/28/19 18:14	1
Selenium	<0.0025		0.0025		mg/L		06/28/19 07:48	06/28/19 18:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**880**		10		mg/L			06/28/19 10:28	1
Chloride	**74**		2.0		mg/L			07/09/19 12:20	1
Fluoride	**0.27**		0.10		mg/L			07/05/19 22:32	1
Sulfate	**380**		100		mg/L			06/28/19 16:29	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**17.25**				ft			06/27/19 11:59	1
Depth to Water (ft from MP)	**19.28**				ft			06/27/19 11:59	1
Elevation of well (ft from MP)	**536.99**				ft			06/27/19 11:59	1
Field pH	**7.33**				SU			06/27/19 11:59	1
Field Temperature	**54.9**				Degrees F			06/27/19 11:59	1
Ground Water Elevation	**517.71**				ft			06/27/19 11:59	1
Specific Conductance	**991**				umhos/cm			06/27/19 11:59	1
Well bottom elevation	**457.84**				ft			06/27/19 11:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T04S

Date Collected: 06/27/19 13:15
Date Received: 06/27/19 15:33

Lab Sample ID: 500-165270-18

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.038		0.010		mg/L		06/28/19 07:48	06/28/19 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0024		0.0010		mg/L		06/28/19 07:48	06/28/19 18:17	1
Barium	0.087		0.0025		mg/L		06/28/19 07:48	06/28/19 18:17	1
Boron	0.24		0.050		mg/L		06/28/19 07:48	07/01/19 11:09	1
Calcium	100		0.20		mg/L		06/28/19 07:48	06/28/19 18:17	1
Cobalt	0.0033		0.0010		mg/L		06/28/19 07:48	06/28/19 18:17	1
Lead	0.0038		0.00050		mg/L		06/28/19 07:48	06/28/19 18:17	1
Molybdenum	0.014		0.0050		mg/L		06/28/19 07:48	06/28/19 18:17	1
Selenium	<0.0025		0.0025		mg/L		06/28/19 07:48	06/28/19 18:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	590		10		mg/L			06/28/19 10:30	1
Chloride	24		2.0		mg/L			07/09/19 12:21	1
Fluoride	0.27		0.10		mg/L			07/05/19 22:37	1
Sulfate	140		50		mg/L			06/28/19 15:19	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	150.89				ft			06/27/19 13:15	1
Depth to Water (ft from MP)	153.31				ft			06/27/19 13:15	1
Elevation of well (ft from MP)	631.35				ft			06/27/19 13:15	1
Field pH	7.05				SU			06/27/19 13:15	1
Field Temperature	76.3				Degrees F			06/27/19 13:15	1
Ground Water Elevation	478.04				ft			06/27/19 13:15	1
Specific Conductance	721				umhos/cm			06/27/19 13:15	1
Well bottom elevation	458.07				ft			06/27/19 13:15	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G47S

Date Collected: 06/28/19 09:10
Date Received: 06/28/19 12:07

Lab Sample ID: 500-165270-19

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.028		0.010		mg/L		06/28/19 15:43	07/01/19 12:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.13		0.0010		mg/L		06/28/19 15:43	07/03/19 15:06	1
Barium	0.012		0.0025		mg/L		06/28/19 15:43	07/03/19 15:06	1
Boron	13		5.0		mg/L		06/28/19 15:43	07/11/19 18:47	100
Calcium	2.9		0.20		mg/L		06/28/19 15:43	07/03/19 15:06	1
Cobalt	<0.0010		0.0010		mg/L		06/28/19 15:43	07/03/19 15:06	1
Lead	<0.00050		0.00050		mg/L		06/28/19 15:43	07/03/19 15:06	1
Molybdenum	1.0		0.0050		mg/L		06/28/19 15:43	07/03/19 15:06	1
Selenium	<0.0025		0.0025		mg/L		06/28/19 15:43	07/03/19 15:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1400		10		mg/L			06/30/19 23:28	1
Chloride	130		10		mg/L			07/09/19 13:23	5
Fluoride	1.3		0.10		mg/L			07/05/19 22:40	1
Sulfate	450		100		mg/L			07/11/19 13:30	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	89.28				ft			06/28/19 09:10	1
Depth to Water (ft from MP)	91.78				ft			06/28/19 09:10	1
Elevation of well (ft from MP)	612.10				ft			06/28/19 09:10	1
Field pH	9.95				SU			06/28/19 09:10	1
Field Temperature	60.3				Degrees F			06/28/19 09:10	1
Ground Water Elevation	520.32				ft			06/28/19 09:10	1
Specific Conductance	1800				umhos/cm			06/28/19 09:10	1
Well bottom elevation	459.84				ft			06/28/19 09:10	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G45S

Date Collected: 06/28/19 10:31
Date Received: 06/28/19 12:07

Lab Sample ID: 500-165270-20

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.032		0.010		mg/L		06/28/19 15:43	07/01/19 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.010		0.0010		mg/L		06/28/19 15:43	07/03/19 15:10	1
Barium	0.039		0.0025		mg/L		06/28/19 15:43	07/03/19 15:10	1
Boron	0.39		0.050		mg/L		06/28/19 15:43	07/11/19 18:51	1
Calcium	96		0.20		mg/L		06/28/19 15:43	07/03/19 15:10	1
Cobalt	<0.0010		0.0010		mg/L		06/28/19 15:43	07/03/19 15:10	1
Lead	<0.00050		0.00050		mg/L		06/28/19 15:43	07/03/19 15:10	1
Molybdenum	0.0087		0.0050		mg/L		06/28/19 15:43	07/03/19 15:10	1
Selenium	<0.0025		0.0025		mg/L		06/28/19 15:43	07/03/19 15:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	720		10		mg/L			06/30/19 23:33	1
Chloride	130		10		mg/L			07/09/19 13:25	5
Fluoride	0.33		0.10		mg/L			07/05/19 22:44	1
Sulfate	120		100		mg/L			07/11/19 13:30	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	59.75				ft			06/28/19 10:31	1
Depth to Water (ft from MP)	62.72				ft			06/28/19 10:31	1
Elevation of well (ft from MP)	603.31				ft			06/28/19 10:31	1
Field pH	7.51				SU			06/28/19 10:31	1
Field Temperature	59.9				Degrees F			06/28/19 10:31	1
Ground Water Elevation	540.59				ft			06/28/19 10:31	1
Specific Conductance	914				umhos/cm			06/28/19 10:31	1
Well bottom elevation	471.05				ft			06/28/19 10:31	1

Definitions/Glossary

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

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.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
V	Serial Dilution exceeds the control limits

General Chemistry

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

Glossary

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

Metals

Prep Batch: 490923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-1	G20S	Total Recoverable	Water	3005A	
MB 500-490923/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-490923/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 491090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-1	G20S	Total Recoverable	Water	6010C	490923
MB 500-490923/1-A	Method Blank	Total Recoverable	Water	6010C	490923
LCS 500-490923/2-A	Lab Control Sample	Total Recoverable	Water	6010C	490923

Prep Batch: 491100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-2	G44S	Total Recoverable	Water	3005A	
500-165270-3	G46S	Total Recoverable	Water	3005A	
500-165270-4	R08S	Total Recoverable	Water	3005A	
MB 500-491100/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-491100/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 491173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-1	G20S	Total Recoverable	Water	6020A	490923
MB 500-490923/1-A	Method Blank	Total Recoverable	Water	6020A	490923
LCS 500-490923/2-A	Lab Control Sample	Total Recoverable	Water	6020A	490923

Analysis Batch: 491285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-2	G44S	Total Recoverable	Water	6010C	491100
500-165270-3	G46S	Total Recoverable	Water	6010C	491100
500-165270-4	R08S	Total Recoverable	Water	6010C	491100
MB 500-491100/1-A	Method Blank	Total Recoverable	Water	6010C	491100
LCS 500-491100/2-A	Lab Control Sample	Total Recoverable	Water	6010C	491100

Prep Batch: 491302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-5	T06S	Total Recoverable	Water	3005A	
500-165270-6	T05S	Total Recoverable	Water	3005A	
MB 500-491302/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-491302/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 491367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-2	G44S	Total Recoverable	Water	6020A	491100
500-165270-3	G46S	Total Recoverable	Water	6020A	491100
500-165270-4	R08S	Total Recoverable	Water	6020A	491100
MB 500-491100/1-A	Method Blank	Total Recoverable	Water	6020A	491100
LCS 500-491100/2-A	Lab Control Sample	Total Recoverable	Water	6020A	491100

Analysis Batch: 491449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-2	G44S	Total Recoverable	Water	6020A	491100
500-165270-3	G46S	Total Recoverable	Water	6020A	491100

Metals (Continued)

Analysis Batch: 491449 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-4	R08S	Total Recoverable	Water	6020A	491100
MB 500-491100/1-A	Method Blank	Total Recoverable	Water	6020A	491100
LCS 500-491100/2-A	Lab Control Sample	Total Recoverable	Water	6020A	491100

Prep Batch: 491497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-7	T09S	Total Recoverable	Water	3005A	
500-165270-8	T08S	Total Recoverable	Water	3005A	
MB 500-491497/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-491497/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 491598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-5	T06S	Total Recoverable	Water	6010C	491302
500-165270-6	T05S	Total Recoverable	Water	6010C	491302
MB 500-491302/1-A	Method Blank	Total Recoverable	Water	6010C	491302
LCS 500-491302/2-A	Lab Control Sample	Total Recoverable	Water	6010C	491302

Analysis Batch: 491700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-7	T09S	Total Recoverable	Water	6010C	491497
500-165270-8	T08S	Total Recoverable	Water	6010C	491497
MB 500-491497/1-A	Method Blank	Total Recoverable	Water	6010C	491497
LCS 500-491497/2-A	Lab Control Sample	Total Recoverable	Water	6010C	491497

Analysis Batch: 491886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-5	T06S	Total Recoverable	Water	6020A	491302
500-165270-6	T05S	Total Recoverable	Water	6020A	491302
500-165270-7	T09S	Total Recoverable	Water	6020A	491497
500-165270-8	T08S	Total Recoverable	Water	6020A	491497
MB 500-491302/1-A	Method Blank	Total Recoverable	Water	6020A	491302
MB 500-491497/1-A	Method Blank	Total Recoverable	Water	6020A	491497
LCS 500-491302/2-A	Lab Control Sample	Total Recoverable	Water	6020A	491302
LCS 500-491497/2-A	Lab Control Sample	Total Recoverable	Water	6020A	491497

Prep Batch: 491981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-9	G31S	Total Recoverable	Water	3005A	
500-165270-10	DUP	Total Recoverable	Water	3005A	
500-165270-11	G33S	Total Recoverable	Water	3005A	
500-165270-12	T03S	Total Recoverable	Water	3005A	
MB 500-491981/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-491981/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-165270-9 MS	G31S	Total Recoverable	Water	3005A	
500-165270-9 MSD	G31S	Total Recoverable	Water	3005A	
500-165270-9 DU	G31S	Total Recoverable	Water	3005A	

Analysis Batch: 492086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-6	T05S	Total Recoverable	Water	6020A	491302

Metals (Continued)

Analysis Batch: 492086 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-8	T08S	Total Recoverable	Water	6020A	491497

Analysis Batch: 492159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-9	G31S	Total Recoverable	Water	6010C	491981
500-165270-10	DUP	Total Recoverable	Water	6010C	491981
500-165270-11	G33S	Total Recoverable	Water	6010C	491981
500-165270-12	T03S	Total Recoverable	Water	6010C	491981
MB 500-491981/1-A	Method Blank	Total Recoverable	Water	6010C	491981
LCS 500-491981/2-A	Lab Control Sample	Total Recoverable	Water	6010C	491981
500-165270-9 MS	G31S	Total Recoverable	Water	6010C	491981
500-165270-9 MSD	G31S	Total Recoverable	Water	6010C	491981
500-165270-9 DU	G31S	Total Recoverable	Water	6010C	491981

Prep Batch: 492189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-13	T02S	Total Recoverable	Water	3005A	
500-165270-14	G48S	Total Recoverable	Water	3005A	
MB 500-492189/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-492189/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-165270-13 MS	T02S	Total Recoverable	Water	3005A	
500-165270-13 MSD	T02S	Total Recoverable	Water	3005A	
500-165270-13 DU	T02S	Total Recoverable	Water	3005A	

Prep Batch: 492252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-15	T01S	Total Recoverable	Water	3005A	
500-165270-16	G30S	Total Recoverable	Water	3005A	
MB 500-492252/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-492252/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-165270-16 MS	G30S	Total Recoverable	Water	3005A	
500-165270-16 MSD	G30S	Total Recoverable	Water	3005A	
500-165270-16 DU	G30S	Total Recoverable	Water	3005A	

Analysis Batch: 492312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-9	G31S	Total Recoverable	Water	6020A	491981
500-165270-10	DUP	Total Recoverable	Water	6020A	491981
500-165270-11	G33S	Total Recoverable	Water	6020A	491981
500-165270-12	T03S	Total Recoverable	Water	6020A	491981
MB 500-491981/1-A	Method Blank	Total Recoverable	Water	6020A	491981
LCS 500-491981/2-A	Lab Control Sample	Total Recoverable	Water	6020A	491981
500-165270-9 MS	G31S	Total Recoverable	Water	6020A	491981
500-165270-9 MSD	G31S	Total Recoverable	Water	6020A	491981
500-165270-9 DU	G31S	Total Recoverable	Water	6020A	491981

Analysis Batch: 492479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-13	T02S	Total Recoverable	Water	6010C	492189
500-165270-14	G48S	Total Recoverable	Water	6010C	492189
500-165270-15	T01S	Total Recoverable	Water	6010C	492252

Metals (Continued)

Analysis Batch: 492479 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-16	G30S	Total Recoverable	Water	6010C	492252
MB 500-492189/1-A	Method Blank	Total Recoverable	Water	6010C	492189
MB 500-492252/1-A	Method Blank	Total Recoverable	Water	6010C	492252
LCS 500-492189/2-A	Lab Control Sample	Total Recoverable	Water	6010C	492189
LCS 500-492252/2-A	Lab Control Sample	Total Recoverable	Water	6010C	492252
500-165270-13 MS	T02S	Total Recoverable	Water	6010C	492189
500-165270-13 MSD	T02S	Total Recoverable	Water	6010C	492189
500-165270-16 MS	G30S	Total Recoverable	Water	6010C	492252
500-165270-16 MSD	G30S	Total Recoverable	Water	6010C	492252
500-165270-13 DU	T02S	Total Recoverable	Water	6010C	492189
500-165270-16 DU	G30S	Total Recoverable	Water	6010C	492252

Prep Batch: 492495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-17	R32S	Total Recoverable	Water	3005A	
500-165270-18	T04S	Total Recoverable	Water	3005A	
MB 500-492495/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-492495/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 492594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-9	G31S	Total Recoverable	Water	6020A	491981
500-165270-10	DUP	Total Recoverable	Water	6020A	491981
500-165270-11	G33S	Total Recoverable	Water	6020A	491981
500-165270-12	T03S	Total Recoverable	Water	6020A	491981
500-165270-13	T02S	Total Recoverable	Water	6020A	492189
500-165270-14	G48S	Total Recoverable	Water	6020A	492189
500-165270-15	T01S	Total Recoverable	Water	6020A	492252
500-165270-16	G30S	Total Recoverable	Water	6020A	492252
MB 500-491981/1-A	Method Blank	Total Recoverable	Water	6020A	491981
MB 500-492189/1-A	Method Blank	Total Recoverable	Water	6020A	492189
MB 500-492252/1-A	Method Blank	Total Recoverable	Water	6020A	492252
LCS 500-491981/2-A	Lab Control Sample	Total Recoverable	Water	6020A	491981
LCS 500-492189/2-A	Lab Control Sample	Total Recoverable	Water	6020A	492189
LCS 500-492252/2-A	Lab Control Sample	Total Recoverable	Water	6020A	492252
500-165270-9 MS	G31S	Total Recoverable	Water	6020A	491981
500-165270-9 MSD	G31S	Total Recoverable	Water	6020A	491981
500-165270-13 MS	T02S	Total Recoverable	Water	6020A	492189
500-165270-13 MSD	T02S	Total Recoverable	Water	6020A	492189
500-165270-16 MS	G30S	Total Recoverable	Water	6020A	492252
500-165270-16 MSD	G30S	Total Recoverable	Water	6020A	492252
500-165270-9 DU	G31S	Total Recoverable	Water	6020A	491981
500-165270-13 DU	T02S	Total Recoverable	Water	6020A	492189
500-165270-16 DU	G30S	Total Recoverable	Water	6020A	492252

Prep Batch: 492638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-19	G47S	Total Recoverable	Water	3005A	
500-165270-20	G45S	Total Recoverable	Water	3005A	
MB 500-492638/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-492638/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals

Analysis Batch: 492795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-17	R32S	Total Recoverable	Water	6010C	492495
500-165270-18	T04S	Total Recoverable	Water	6010C	492495
MB 500-492495/1-A	Method Blank	Total Recoverable	Water	6010C	492495
LCS 500-492495/2-A	Lab Control Sample	Total Recoverable	Water	6010C	492495

Analysis Batch: 492835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-13	T02S	Total Recoverable	Water	6020A	492189
500-165270-14	G48S	Total Recoverable	Water	6020A	492189
500-165270-15	T01S	Total Recoverable	Water	6020A	492252
500-165270-16	G30S	Total Recoverable	Water	6020A	492252
500-165270-17	R32S	Total Recoverable	Water	6020A	492495
500-165270-18	T04S	Total Recoverable	Water	6020A	492495
MB 500-492189/1-A	Method Blank	Total Recoverable	Water	6020A	492189
MB 500-492252/1-A	Method Blank	Total Recoverable	Water	6020A	492252
MB 500-492495/1-A	Method Blank	Total Recoverable	Water	6020A	492495
LCS 500-492189/2-A	Lab Control Sample	Total Recoverable	Water	6020A	492189
LCS 500-492252/2-A	Lab Control Sample	Total Recoverable	Water	6020A	492252
LCS 500-492495/2-A	Lab Control Sample	Total Recoverable	Water	6020A	492495
500-165270-13 MS	T02S	Total Recoverable	Water	6020A	492189
500-165270-13 MSD	T02S	Total Recoverable	Water	6020A	492189
500-165270-16 MS	G30S	Total Recoverable	Water	6020A	492252
500-165270-16 MSD	G30S	Total Recoverable	Water	6020A	492252
500-165270-13 DU	T02S	Total Recoverable	Water	6020A	492189
500-165270-16 DU	G30S	Total Recoverable	Water	6020A	492252

Analysis Batch: 492905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-19	G47S	Total Recoverable	Water	6010C	492638
500-165270-20	G45S	Total Recoverable	Water	6010C	492638
MB 500-492638/1-A	Method Blank	Total Recoverable	Water	6010C	492638
LCS 500-492638/2-A	Lab Control Sample	Total Recoverable	Water	6010C	492638

Analysis Batch: 492965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-17	R32S	Total Recoverable	Water	6020A	492495
500-165270-18	T04S	Total Recoverable	Water	6020A	492495
MB 500-492495/1-A	Method Blank	Total Recoverable	Water	6020A	492495
LCS 500-492495/2-A	Lab Control Sample	Total Recoverable	Water	6020A	492495

Analysis Batch: 493500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-19	G47S	Total Recoverable	Water	6020A	492638
500-165270-20	G45S	Total Recoverable	Water	6020A	492638
MB 500-492638/1-A	Method Blank	Total Recoverable	Water	6020A	492638
LCS 500-492638/2-A	Lab Control Sample	Total Recoverable	Water	6020A	492638

Analysis Batch: 494590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-19	G47S	Total Recoverable	Water	6020A	492638
500-165270-20	G45S	Total Recoverable	Water	6020A	492638

General Chemistry

Analysis Batch: 446113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-1	G20S	Total/NA	Water	SM 4500 SO4 E	
500-165270-2	G44S	Total/NA	Water	SM 4500 SO4 E	
500-165270-3	G46S	Total/NA	Water	SM 4500 SO4 E	
500-165270-4	R08S	Total/NA	Water	SM 4500 SO4 E	
MB 400-446113/18	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-446113/19	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-446113/15	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 446149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-5	T06S	Total/NA	Water	SM 4500 SO4 E	
500-165270-6	T05S	Total/NA	Water	SM 4500 SO4 E	
500-165270-7	T09S	Total/NA	Water	SM 4500 SO4 E	
500-165270-8	T08S	Total/NA	Water	SM 4500 SO4 E	
500-165270-9	G31S	Total/NA	Water	SM 4500 SO4 E	
500-165270-10	DUP	Total/NA	Water	SM 4500 SO4 E	
500-165270-11	G33S	Total/NA	Water	SM 4500 SO4 E	
500-165270-12	T03S	Total/NA	Water	SM 4500 SO4 E	
500-165270-13	T02S	Total/NA	Water	SM 4500 SO4 E	
500-165270-14	G48S	Total/NA	Water	SM 4500 SO4 E	
500-165270-15	T01S	Total/NA	Water	SM 4500 SO4 E	
500-165270-16	G30S	Total/NA	Water	SM 4500 SO4 E	
500-165270-17	R32S	Total/NA	Water	SM 4500 SO4 E	
500-165270-18	T04S	Total/NA	Water	SM 4500 SO4 E	
MB 400-446149/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-446149/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-446149/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-165270-5 MS	T06S	Total/NA	Water	SM 4500 SO4 E	
500-165270-5 MSD	T06S	Total/NA	Water	SM 4500 SO4 E	
500-165270-15 MS	T01S	Total/NA	Water	SM 4500 SO4 E	
500-165270-15 MSD	T01S	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 447593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-19	G47S	Total/NA	Water	SM 4500 SO4 E	
500-165270-20	G45S	Total/NA	Water	SM 4500 SO4 E	
MB 400-447593/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-447593/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-447593/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 491082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-1	G20S	Total/NA	Water	SM 2540C	
500-165270-2	G44S	Total/NA	Water	SM 2540C	
500-165270-3	G46S	Total/NA	Water	SM 2540C	
500-165270-4	R08S	Total/NA	Water	SM 2540C	
MB 500-491082/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-491082/2	Lab Control Sample	Total/NA	Water	SM 2540C	

General Chemistry

Analysis Batch: 491283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-5	T06S	Total/NA	Water	SM 2540C	
500-165270-6	T05S	Total/NA	Water	SM 2540C	
MB 500-491283/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-491283/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-165270-5 DU	T06S	Total/NA	Water	SM 2540C	

Analysis Batch: 491581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-7	T09S	Total/NA	Water	SM 2540C	
500-165270-8	T08S	Total/NA	Water	SM 2540C	
MB 500-491581/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-491581/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 491896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-1	G20S	Total/NA	Water	SM 4500 F C	
500-165270-2	G44S	Total/NA	Water	SM 4500 F C	
500-165270-3	G46S	Total/NA	Water	SM 4500 F C	
500-165270-4	R08S	Total/NA	Water	SM 4500 F C	
500-165270-5	T06S	Total/NA	Water	SM 4500 F C	
500-165270-6	T05S	Total/NA	Water	SM 4500 F C	
500-165270-7	T09S	Total/NA	Water	SM 4500 F C	
500-165270-8	T08S	Total/NA	Water	SM 4500 F C	
MB 500-491896/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-491896/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 492003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-1	G20S	Total/NA	Water	SM 4500 Cl- E	
500-165270-2	G44S	Total/NA	Water	SM 4500 Cl- E	
500-165270-3	G46S	Total/NA	Water	SM 4500 Cl- E	
500-165270-5	T06S	Total/NA	Water	SM 4500 Cl- E	
MB 500-492003/4	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-492003/5	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-165270-5 MS	T06S	Total/NA	Water	SM 4500 Cl- E	
500-165270-5 MSD	T06S	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 492063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-9	G31S	Total/NA	Water	SM 2540C	
500-165270-10	DUP	Total/NA	Water	SM 2540C	
500-165270-11	G33S	Total/NA	Water	SM 2540C	
500-165270-12	T03S	Total/NA	Water	SM 2540C	
500-165270-13	T02S	Total/NA	Water	SM 2540C	
500-165270-14	G48S	Total/NA	Water	SM 2540C	
MB 500-492063/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-492063/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 492303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-4	R08S	Total/NA	Water	SM 4500 Cl- E	

General Chemistry (Continued)

Analysis Batch: 492303 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-6	T05S	Total/NA	Water	SM 4500 Cl- E	
500-165270-7	T09S	Total/NA	Water	SM 4500 Cl- E	
500-165270-8	T08S	Total/NA	Water	SM 4500 Cl- E	
500-165270-9	G31S	Total/NA	Water	SM 4500 Cl- E	
500-165270-10	DUP	Total/NA	Water	SM 4500 Cl- E	
500-165270-11	G33S	Total/NA	Water	SM 4500 Cl- E	
500-165270-12	T03S	Total/NA	Water	SM 4500 Cl- E	
MB 500-492303/4	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-492303/5	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-165270-8 MS	T08S	Total/NA	Water	SM 4500 Cl- E	
500-165270-8 MSD	T08S	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 492315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-15	T01S	Total/NA	Water	SM 2540C	
500-165270-16	G30S	Total/NA	Water	SM 2540C	
MB 500-492315/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-492315/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 492545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-17	R32S	Total/NA	Water	SM 2540C	
500-165270-18	T04S	Total/NA	Water	SM 2540C	
MB 500-492545/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-492545/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 492785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-19	G47S	Total/NA	Water	SM 2540C	
500-165270-20	G45S	Total/NA	Water	SM 2540C	
MB 500-492785/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-492785/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-165270-19 DU	G47S	Total/NA	Water	SM 2540C	

Analysis Batch: 493145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-13	T02S	Total/NA	Water	SM 4500 Cl- E	
500-165270-14	G48S	Total/NA	Water	SM 4500 Cl- E	
500-165270-15	T01S	Total/NA	Water	SM 4500 Cl- E	
MB 500-493145/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-493145/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-165270-13 MS	T02S	Total/NA	Water	SM 4500 Cl- E	
500-165270-13 MSD	T02S	Total/NA	Water	SM 4500 Cl- E	
500-165270-14 MS	G48S	Total/NA	Water	SM 4500 Cl- E	
500-165270-14 MSD	G48S	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 493622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-9	G31S	Total/NA	Water	SM 4500 F C	
500-165270-10	DUP	Total/NA	Water	SM 4500 F C	
500-165270-11	G33S	Total/NA	Water	SM 4500 F C	

General Chemistry (Continued)

Analysis Batch: 493622 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-12	T03S	Total/NA	Water	SM 4500 F C	
500-165270-13	T02S	Total/NA	Water	SM 4500 F C	
500-165270-14	G48S	Total/NA	Water	SM 4500 F C	
500-165270-15	T01S	Total/NA	Water	SM 4500 F C	
500-165270-16	G30S	Total/NA	Water	SM 4500 F C	
500-165270-17	R32S	Total/NA	Water	SM 4500 F C	
500-165270-18	T04S	Total/NA	Water	SM 4500 F C	
500-165270-19	G47S	Total/NA	Water	SM 4500 F C	
500-165270-20	G45S	Total/NA	Water	SM 4500 F C	
MB 500-493622/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-493622/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-165270-10 MS	DUP	Total/NA	Water	SM 4500 F C	
500-165270-10 MSD	DUP	Total/NA	Water	SM 4500 F C	

Analysis Batch: 493994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-16	G30S	Total/NA	Water	SM 4500 Cl- E	
500-165270-17	R32S	Total/NA	Water	SM 4500 Cl- E	
500-165270-18	T04S	Total/NA	Water	SM 4500 Cl- E	
500-165270-19	G47S	Total/NA	Water	SM 4500 Cl- E	
500-165270-20	G45S	Total/NA	Water	SM 4500 Cl- E	
MB 500-493994/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-493994/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-165270-16 MS	G30S	Total/NA	Water	SM 4500 Cl- E	
500-165270-16 MSD	G30S	Total/NA	Water	SM 4500 Cl- E	

Field Service / Mobile Lab

Analysis Batch: 494883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-1	G20S	Total/NA	Water	Field Sampling	
500-165270-2	G44S	Total/NA	Water	Field Sampling	
500-165270-3	G46S	Total/NA	Water	Field Sampling	
500-165270-4	R08S	Total/NA	Water	Field Sampling	
500-165270-5	T06S	Total/NA	Water	Field Sampling	
500-165270-6	T05S	Total/NA	Water	Field Sampling	
500-165270-7	T09S	Total/NA	Water	Field Sampling	
500-165270-8	T08S	Total/NA	Water	Field Sampling	
500-165270-9	G31S	Total/NA	Water	Field Sampling	
500-165270-10	DUP	Total/NA	Water	Field Sampling	
500-165270-11	G33S	Total/NA	Water	Field Sampling	
500-165270-12	T03S	Total/NA	Water	Field Sampling	
500-165270-13	T02S	Total/NA	Water	Field Sampling	
500-165270-14	G48S	Total/NA	Water	Field Sampling	
500-165270-15	T01S	Total/NA	Water	Field Sampling	
500-165270-16	G30S	Total/NA	Water	Field Sampling	
500-165270-17	R32S	Total/NA	Water	Field Sampling	
500-165270-18	T04S	Total/NA	Water	Field Sampling	
500-165270-19	G47S	Total/NA	Water	Field Sampling	
500-165270-20	G45S	Total/NA	Water	Field Sampling	

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-490923/1-A
Matrix: Water
Analysis Batch: 491090

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 490923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/19/19 07:40	06/19/19 15:55	1

Lab Sample ID: LCS 500-490923/2-A
Matrix: Water
Analysis Batch: 491090

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 490923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.513		mg/L		103	80 - 120

Lab Sample ID: MB 500-491100/1-A
Matrix: Water
Analysis Batch: 491285

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 491100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/20/19 07:47	06/20/19 12:56	1

Lab Sample ID: LCS 500-491100/2-A
Matrix: Water
Analysis Batch: 491285

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 491100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.564		mg/L		113	80 - 120

Lab Sample ID: MB 500-491302/1-A
Matrix: Water
Analysis Batch: 491598

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 491302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/21/19 07:59	06/21/19 18:47	1

Lab Sample ID: LCS 500-491302/2-A
Matrix: Water
Analysis Batch: 491598

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 491302

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.523		mg/L		105	80 - 120

Lab Sample ID: MB 500-491497/1-A
Matrix: Water
Analysis Batch: 491700

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 491497

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/22/19 08:08	06/24/19 12:06	1

Lab Sample ID: LCS 500-491497/2-A
Matrix: Water
Analysis Batch: 491700

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 491497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.558		mg/L		112	80 - 120

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-491981/1-A
Matrix: Water
Analysis Batch: 492159

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/25/19 15:30	06/26/19 11:00	1

Lab Sample ID: LCS 500-491981/2-A
Matrix: Water
Analysis Batch: 492159

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.549		mg/L		110	80 - 120

Lab Sample ID: 500-165270-9 MS
Matrix: Water
Analysis Batch: 492159

Client Sample ID: G31S
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.12		0.500	0.690		mg/L		113	75 - 125

Lab Sample ID: 500-165270-9 MSD
Matrix: Water
Analysis Batch: 492159

Client Sample ID: G31S
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.12		0.500	0.677		mg/L		111	75 - 125	2	20

Lab Sample ID: 500-165270-9 DU
Matrix: Water
Analysis Batch: 492159

Client Sample ID: G31S
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lithium	0.12		0.124		mg/L		0.9	20

Lab Sample ID: MB 500-492189/1-A
Matrix: Water
Analysis Batch: 492479

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/26/19 15:03	06/27/19 16:31	1

Lab Sample ID: LCS 500-492189/2-A
Matrix: Water
Analysis Batch: 492479

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.509		mg/L		102	80 - 120

Lab Sample ID: 500-165270-13 MS
Matrix: Water
Analysis Batch: 492479

Client Sample ID: T02S
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.034		0.500	0.553		mg/L		104	75 - 125

Method: 6010C - Metals (ICP)

Lab Sample ID: 500-165270-13 MSD
Matrix: Water
Analysis Batch: 492479

Client Sample ID: T02S
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.034		0.500	0.542		mg/L		102	75 - 125	2	20

Lab Sample ID: 500-165270-13 DU
Matrix: Water
Analysis Batch: 492479

Client Sample ID: T02S
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lithium	0.034		0.0347		mg/L		2	20

Lab Sample ID: MB 500-492252/1-A
Matrix: Water
Analysis Batch: 492479

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/27/19 07:17	06/27/19 17:13	1

Lab Sample ID: LCS 500-492252/2-A
Matrix: Water
Analysis Batch: 492479

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.503		mg/L		101	80 - 120

Lab Sample ID: 500-165270-16 MS
Matrix: Water
Analysis Batch: 492479

Client Sample ID: G30S
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.018		0.500	0.545		mg/L		105	75 - 125

Lab Sample ID: 500-165270-16 MSD
Matrix: Water
Analysis Batch: 492479

Client Sample ID: G30S
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.018		0.500	0.557		mg/L		108	75 - 125	2	20

Lab Sample ID: 500-165270-16 DU
Matrix: Water
Analysis Batch: 492479

Client Sample ID: G30S
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lithium	0.018		0.0190		mg/L		6	20

Lab Sample ID: MB 500-492495/1-A
Matrix: Water
Analysis Batch: 492795

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492495

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/28/19 07:48	06/28/19 16:50	1

Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 500-492495/2-A
Matrix: Water
Analysis Batch: 492795

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492495

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.442		mg/L		88	80 - 120

Lab Sample ID: MB 500-492638/1-A
Matrix: Water
Analysis Batch: 492905

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492638

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/28/19 15:43	07/01/19 12:08	1

Lab Sample ID: LCS 500-492638/2-A
Matrix: Water
Analysis Batch: 492905

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.554		mg/L		111	80 - 120

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-490923/1-A
Matrix: Water
Analysis Batch: 491173

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 490923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/19/19 07:40	06/19/19 16:41	1
Barium	<0.0025		0.0025		mg/L		06/19/19 07:40	06/19/19 16:41	1
Boron	<0.050		0.050		mg/L		06/19/19 07:40	06/19/19 16:41	1
Calcium	<0.20		0.20		mg/L		06/19/19 07:40	06/19/19 16:41	1
Cobalt	<0.0010		0.0010		mg/L		06/19/19 07:40	06/19/19 16:41	1
Lead	<0.00050		0.00050		mg/L		06/19/19 07:40	06/19/19 16:41	1
Molybdenum	<0.0050		0.0050		mg/L		06/19/19 07:40	06/19/19 16:41	1
Selenium	<0.0025		0.0025		mg/L		06/19/19 07:40	06/19/19 16:41	1

Lab Sample ID: LCS 500-490923/2-A
Matrix: Water
Analysis Batch: 491173

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 490923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.105		mg/L		105	80 - 120
Barium	2.00	2.16		mg/L		108	80 - 120
Boron	1.00	1.03		mg/L		103	80 - 120
Calcium	10.0	9.60		mg/L		96	80 - 120
Cobalt	0.500	0.527		mg/L		105	80 - 120
Lead	0.100	0.109		mg/L		109	80 - 120
Molybdenum	1.00	1.03		mg/L		103	80 - 120
Selenium	0.100	0.105		mg/L		105	80 - 120

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

Lab Sample ID: MB 500-491100/1-A
Matrix: Water
Analysis Batch: 491367

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 491100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/20/19 07:47	06/20/19 15:43	1
Barium	<0.0025		0.0025		mg/L		06/20/19 07:47	06/20/19 15:43	1
Calcium	<0.20		0.20		mg/L		06/20/19 07:47	06/20/19 15:43	1
Cobalt	<0.0010		0.0010		mg/L		06/20/19 07:47	06/20/19 15:43	1
Lead	<0.00050		0.00050		mg/L		06/20/19 07:47	06/20/19 15:43	1
Molybdenum	<0.0050		0.0050		mg/L		06/20/19 07:47	06/20/19 15:43	1
Selenium	<0.0025		0.0025		mg/L		06/20/19 07:47	06/20/19 15:43	1

Lab Sample ID: MB 500-491100/1-A
Matrix: Water
Analysis Batch: 491449

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 491100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		06/20/19 07:47	06/21/19 11:11	1

Lab Sample ID: LCS 500-491100/2-A
Matrix: Water
Analysis Batch: 491367

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 491100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.105		mg/L		105	80 - 120
Barium	2.00	2.10		mg/L		105	80 - 120
Calcium	10.0	9.49		mg/L		95	80 - 120
Cobalt	0.500	0.527		mg/L		105	80 - 120
Lead	0.100	0.108		mg/L		108	80 - 120
Molybdenum	1.00	1.02		mg/L		102	80 - 120
Selenium	0.100	0.108		mg/L		108	80 - 120

Lab Sample ID: LCS 500-491100/2-A
Matrix: Water
Analysis Batch: 491449

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 491100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.01		mg/L		101	80 - 120

Lab Sample ID: MB 500-491302/1-A
Matrix: Water
Analysis Batch: 491886

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 491302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/21/19 07:59	06/24/19 14:50	1
Barium	<0.0025		0.0025		mg/L		06/21/19 07:59	06/24/19 14:50	1
Boron	0.0643		0.050		mg/L		06/21/19 07:59	06/24/19 14:50	1
Calcium	<0.20		0.20		mg/L		06/21/19 07:59	06/24/19 14:50	1
Cobalt	<0.0010		0.0010		mg/L		06/21/19 07:59	06/24/19 14:50	1
Lead	<0.00050		0.00050		mg/L		06/21/19 07:59	06/24/19 14:50	1
Molybdenum	<0.0050		0.0050		mg/L		06/21/19 07:59	06/24/19 14:50	1
Selenium	<0.0025		0.0025		mg/L		06/21/19 07:59	06/24/19 14:50	1

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

Lab Sample ID: LCS 500-491302/2-A
Matrix: Water
Analysis Batch: 491886

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 491302

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.106		mg/L		106	80 - 120
Barium	2.00	2.08		mg/L		104	80 - 120
Boron	1.00	1.00		mg/L		100	80 - 120
Calcium	10.0	9.25		mg/L		92	80 - 120
Cobalt	0.500	0.517		mg/L		103	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120
Molybdenum	1.00	1.01		mg/L		101	80 - 120
Selenium	0.100	0.105		mg/L		105	80 - 120

Lab Sample ID: MB 500-491497/1-A
Matrix: Water
Analysis Batch: 491886

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 491497

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/22/19 08:08	06/24/19 12:24	1
Barium	<0.0025		0.0025		mg/L		06/22/19 08:08	06/24/19 12:24	1
Boron	<0.050		0.050		mg/L		06/22/19 08:08	06/24/19 12:24	1
Calcium	<0.20		0.20		mg/L		06/22/19 08:08	06/24/19 12:24	1
Cobalt	<0.0010		0.0010		mg/L		06/22/19 08:08	06/24/19 12:24	1
Lead	<0.00050		0.00050		mg/L		06/22/19 08:08	06/24/19 12:24	1
Molybdenum	<0.0050		0.0050		mg/L		06/22/19 08:08	06/24/19 12:24	1
Selenium	<0.0025		0.0025		mg/L		06/22/19 08:08	06/24/19 12:24	1

Lab Sample ID: LCS 500-491497/2-A
Matrix: Water
Analysis Batch: 491886

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 491497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0997		mg/L		100	80 - 120
Barium	2.00	2.00		mg/L		100	80 - 120
Boron	1.00	0.984		mg/L		98	80 - 120
Calcium	10.0	8.91		mg/L		89	80 - 120
Cobalt	0.500	0.515		mg/L		103	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120
Molybdenum	1.00	0.980		mg/L		98	80 - 120
Selenium	0.100	0.100		mg/L		100	80 - 120

Lab Sample ID: MB 500-491981/1-A
Matrix: Water
Analysis Batch: 492312

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/25/19 15:30	06/26/19 17:00	1
Barium	<0.0025		0.0025		mg/L		06/25/19 15:30	06/26/19 17:00	1
Calcium	<0.20		0.20		mg/L		06/25/19 15:30	06/26/19 17:00	1
Cobalt	<0.0010		0.0010		mg/L		06/25/19 15:30	06/26/19 17:00	1
Lead	<0.00050		0.00050		mg/L		06/25/19 15:30	06/26/19 17:00	1
Molybdenum	<0.0050		0.0050		mg/L		06/25/19 15:30	06/26/19 17:00	1
Selenium	<0.0025		0.0025		mg/L		06/25/19 15:30	06/26/19 17:00	1

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

Lab Sample ID: MB 500-491981/1-A
Matrix: Water
Analysis Batch: 492594

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		06/25/19 15:30	06/27/19 11:35	1

Lab Sample ID: LCS 500-491981/2-A
Matrix: Water
Analysis Batch: 492312

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.107		mg/L		107	80 - 120
Barium	2.00	2.27		mg/L		114	80 - 120
Calcium	10.0	9.49		mg/L		95	80 - 120
Cobalt	0.500	0.544		mg/L		109	80 - 120
Lead	0.100	0.109		mg/L		109	80 - 120
Molybdenum	1.00	1.07		mg/L		107	80 - 120
Selenium	0.100	0.108		mg/L		108	80 - 120

Lab Sample ID: LCS 500-491981/2-A
Matrix: Water
Analysis Batch: 492594

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 491981

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

Lab Sample ID: 500-165270-9 MS
Matrix: Water
Analysis Batch: 492312

Client Sample ID: G31S
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0056		0.100	0.116		mg/L		110	75 - 125
Barium	0.059		2.00	2.31		mg/L		112	75 - 125
Calcium	160		10.0	161	4	mg/L		55	75 - 125
Cobalt	<0.0010		0.500	0.507		mg/L		101	75 - 125
Lead	<0.00050		0.100	0.104		mg/L		104	75 - 125
Molybdenum	0.89		1.00	1.95		mg/L		107	75 - 125
Selenium	<0.0025		0.100	0.113		mg/L		113	75 - 125

Lab Sample ID: 500-165270-9 MS
Matrix: Water
Analysis Batch: 492594

Client Sample ID: G31S
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5.9		1.00	6.89	4	mg/L		101	75 - 125

Lab Sample ID: 500-165270-9 MSD
Matrix: Water
Analysis Batch: 492312

Client Sample ID: G31S
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0056		0.100	0.113		mg/L		108	75 - 125	2	20
Barium	0.059		2.00	2.25		mg/L		110	75 - 125	2	20
Calcium	160		10.0	159	4	mg/L		33	75 - 125	1	20

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

Lab Sample ID: 500-165270-9 MSD
Matrix: Water
Analysis Batch: 492312

Client Sample ID: G31S
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	<0.0010		0.500	0.499		mg/L		100	75 - 125	2	20
Lead	<0.00050		0.100	0.101		mg/L		101	75 - 125	3	20
Molybdenum	0.89		1.00	1.91		mg/L		102	75 - 125	2	20
Selenium	<0.0025		0.100	0.111		mg/L		111	75 - 125	2	20

Lab Sample ID: 500-165270-9 MSD
Matrix: Water
Analysis Batch: 492594

Client Sample ID: G31S
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	5.9		1.00	7.14	4	mg/L		125	75 - 125	4	20

Lab Sample ID: 500-165270-9 DU
Matrix: Water
Analysis Batch: 492312

Client Sample ID: G31S
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.0056		0.00564		mg/L		0	20
Barium	0.059		0.0589		mg/L		0.9	20
Calcium	160		156		mg/L		0	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Molybdenum	0.89		0.888		mg/L		0	20
Selenium	<0.0025		<0.0025		mg/L		NC	20

Lab Sample ID: 500-165270-9 DU
Matrix: Water
Analysis Batch: 492594

Client Sample ID: G31S
Prep Type: Total Recoverable
Prep Batch: 491981

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	5.9		6.22		mg/L		6	20

Lab Sample ID: MB 500-492189/1-A
Matrix: Water
Analysis Batch: 492594

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/26/19 15:03	06/27/19 14:33	1
Barium	<0.0025		0.0025		mg/L		06/26/19 15:03	06/27/19 14:33	1
Calcium	<0.20		0.20		mg/L		06/26/19 15:03	06/27/19 14:33	1
Cobalt	<0.0010		0.0010		mg/L		06/26/19 15:03	06/27/19 14:33	1
Lead	<0.00050		0.00050		mg/L		06/26/19 15:03	06/27/19 14:33	1
Molybdenum	<0.0050		0.0050		mg/L		06/26/19 15:03	06/27/19 14:33	1
Selenium	<0.0025		0.0025		mg/L		06/26/19 15:03	06/27/19 14:33	1

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

Lab Sample ID: MB 500-492189/1-A
Matrix: Water
Analysis Batch: 492835

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		06/26/19 15:03	06/28/19 13:41	1

Lab Sample ID: LCS 500-492189/2-A
Matrix: Water
Analysis Batch: 492594

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.100		mg/L		100	80 - 120
Barium	2.00	2.06		mg/L		103	80 - 120
Calcium	10.0	9.37		mg/L		94	80 - 120
Cobalt	0.500	0.554		mg/L		111	80 - 120
Lead	0.100	0.110		mg/L		110	80 - 120
Molybdenum	1.00	1.03		mg/L		103	80 - 120
Selenium	0.100	0.102		mg/L		102	80 - 120

Lab Sample ID: LCS 500-492189/2-A
Matrix: Water
Analysis Batch: 492835

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492189

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

Lab Sample ID: 500-165270-13 MS
Matrix: Water
Analysis Batch: 492594

Client Sample ID: T02S
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0060		0.100	0.111		mg/L		105	75 - 125
Barium	0.091	V	2.00	2.10		mg/L		101	75 - 125
Calcium	57	V	10.0	65.3	4	mg/L		81	75 - 125
Cobalt	0.0021		0.500	0.513		mg/L		102	75 - 125
Lead	0.0024		0.100	0.107		mg/L		105	75 - 125
Molybdenum	0.25	V	1.00	1.33		mg/L		108	75 - 125
Selenium	<0.0025		0.100	0.107		mg/L		107	75 - 125

Lab Sample ID: 500-165270-13 MS
Matrix: Water
Analysis Batch: 492835

Client Sample ID: T02S
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	3.5		1.00	4.53		mg/L		104	75 - 125

Lab Sample ID: 500-165270-13 MSD
Matrix: Water
Analysis Batch: 492594

Client Sample ID: T02S
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0060		0.100	0.112		mg/L		106	75 - 125	1	20
Barium	0.091	V	2.00	2.09		mg/L		100	75 - 125	0	20
Calcium	57	V	10.0	66.5	4	mg/L		93	75 - 125	2	20

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

Lab Sample ID: 500-165270-13 MSD
Matrix: Water
Analysis Batch: 492594

Client Sample ID: T02S
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	0.0021		0.500	0.523		mg/L		104	75 - 125	2	20
Lead	0.0024		0.100	0.107		mg/L		105	75 - 125	0	20
Molybdenum	0.25	V	1.00	1.35		mg/L		109	75 - 125	1	20
Selenium	<0.0025		0.100	0.108		mg/L		108	75 - 125	1	20

Lab Sample ID: 500-165270-13 MSD
Matrix: Water
Analysis Batch: 492835

Client Sample ID: T02S
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	3.5		1.00	4.43		mg/L		94	75 - 125	2	20

Lab Sample ID: 500-165270-13 DU
Matrix: Water
Analysis Batch: 492594

Client Sample ID: T02S
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.0060		0.00604		mg/L		1	20
Barium	0.091	V	0.0933		mg/L		3	20
Calcium	57	V	58.3		mg/L		2	20
Cobalt	0.0021		0.00210		mg/L		2	20
Lead	0.0024		0.00240		mg/L		1	20
Molybdenum	0.25	V	0.260		mg/L		2	20
Selenium	<0.0025		<0.0025		mg/L		NC	20

Lab Sample ID: 500-165270-13 DU
Matrix: Water
Analysis Batch: 492835

Client Sample ID: T02S
Prep Type: Total Recoverable
Prep Batch: 492189

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	3.5		3.38		mg/L		3	20

Lab Sample ID: MB 500-492252/1-A
Matrix: Water
Analysis Batch: 492594

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/27/19 07:17	06/27/19 16:18	1
Barium	<0.0025		0.0025		mg/L		06/27/19 07:17	06/27/19 16:18	1
Calcium	<0.20		0.20		mg/L		06/27/19 07:17	06/27/19 16:18	1
Cobalt	<0.0010		0.0010		mg/L		06/27/19 07:17	06/27/19 16:18	1
Lead	<0.00050		0.00050		mg/L		06/27/19 07:17	06/27/19 16:18	1
Molybdenum	<0.0050		0.0050		mg/L		06/27/19 07:17	06/27/19 16:18	1
Selenium	<0.0025		0.0025		mg/L		06/27/19 07:17	06/27/19 16:18	1

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

Lab Sample ID: MB 500-492252/1-A
Matrix: Water
Analysis Batch: 492835

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		06/27/19 07:17	06/28/19 14:26	1

Lab Sample ID: LCS 500-492252/2-A
Matrix: Water
Analysis Batch: 492594

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.102		mg/L		102	80 - 120
Barium	2.00	2.12		mg/L		106	80 - 120
Calcium	10.0	9.45		mg/L		94	80 - 120
Cobalt	0.500	0.566		mg/L		113	80 - 120
Lead	0.100	0.113		mg/L		113	80 - 120
Molybdenum	1.00	1.05		mg/L		105	80 - 120
Selenium	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: LCS 500-492252/2-A
Matrix: Water
Analysis Batch: 492835

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.09		mg/L		109	80 - 120

Lab Sample ID: 500-165270-16 MS
Matrix: Water
Analysis Batch: 492594

Client Sample ID: G30S
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0074		0.100	0.115		mg/L		108	75 - 125
Barium	0.041		2.00	2.11		mg/L		104	75 - 125
Calcium	57		10.0	66.4	4	mg/L		96	75 - 125
Cobalt	<0.0010		0.500	0.541		mg/L		108	75 - 125
Lead	<0.00050		0.100	0.106		mg/L		106	75 - 125
Molybdenum	0.065		1.00	1.16		mg/L		110	75 - 125
Selenium	<0.0025	F1	0.100	0.0823		mg/L		82	75 - 125

Lab Sample ID: 500-165270-16 MS
Matrix: Water
Analysis Batch: 492835

Client Sample ID: G30S
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5.4		1.00	6.52	4	mg/L		108	75 - 125

Lab Sample ID: 500-165270-16 MSD
Matrix: Water
Analysis Batch: 492594

Client Sample ID: G30S
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0074		0.100	0.113		mg/L		106	75 - 125	1	20
Barium	0.041		2.00	2.14		mg/L		105	75 - 125	1	20
Calcium	57		10.0	67.3	4	mg/L		105	75 - 125	1	20

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

Lab Sample ID: 500-165270-16 MSD
Matrix: Water
Analysis Batch: 492594

Client Sample ID: G30S
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	<0.0010		0.500	0.541		mg/L		108	75 - 125	0	20
Lead	<0.00050		0.100	0.107		mg/L		107	75 - 125	0	20
Molybdenum	0.065		1.00	1.14		mg/L		108	75 - 125	2	20
Selenium	<0.0025	F1	0.100	0.0727	F1	mg/L		73	75 - 125	12	20

Lab Sample ID: 500-165270-16 MSD
Matrix: Water
Analysis Batch: 492835

Client Sample ID: G30S
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	5.4		1.00	6.79	4	mg/L		135	75 - 125	4	20

Lab Sample ID: 500-165270-16 DU
Matrix: Water
Analysis Batch: 492594

Client Sample ID: G30S
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.0074		0.00719		mg/L		2	20
Barium	0.041		0.0405		mg/L		0.6	20
Calcium	57		56.0		mg/L		1	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Molybdenum	0.065		0.0634		mg/L		2	20
Selenium	<0.0025	F1	<0.0025		mg/L		NC	20

Lab Sample ID: 500-165270-16 DU
Matrix: Water
Analysis Batch: 492835

Client Sample ID: G30S
Prep Type: Total Recoverable
Prep Batch: 492252

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	5.4		5.47		mg/L		0.5	20

Lab Sample ID: MB 500-492495/1-A
Matrix: Water
Analysis Batch: 492835

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492495

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/28/19 07:48	06/28/19 17:25	1
Barium	<0.0025		0.0025		mg/L		06/28/19 07:48	06/28/19 17:25	1
Calcium	<0.20		0.20		mg/L		06/28/19 07:48	06/28/19 17:25	1
Cobalt	<0.0010		0.0010		mg/L		06/28/19 07:48	06/28/19 17:25	1
Lead	<0.00050		0.00050		mg/L		06/28/19 07:48	06/28/19 17:25	1
Molybdenum	<0.0050		0.0050		mg/L		06/28/19 07:48	06/28/19 17:25	1
Selenium	<0.0025		0.0025		mg/L		06/28/19 07:48	06/28/19 17:25	1

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

Lab Sample ID: MB 500-492495/1-A
Matrix: Water
Analysis Batch: 492965

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492495

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		06/28/19 07:48	07/01/19 10:55	1

Lab Sample ID: LCS 500-492495/2-A
Matrix: Water
Analysis Batch: 492835

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492495

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.101		mg/L		101	80 - 120
Barium	2.00	2.10		mg/L		105	80 - 120
Calcium	10.0	9.26		mg/L		93	80 - 120
Cobalt	0.500	0.514		mg/L		103	80 - 120
Lead	0.100	0.109		mg/L		109	80 - 120
Molybdenum	1.00	0.984		mg/L		98	80 - 120
Selenium	0.100	0.101		mg/L		101	80 - 120

Lab Sample ID: LCS 500-492495/2-A
Matrix: Water
Analysis Batch: 492965

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492495

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

Lab Sample ID: MB 500-492638/1-A
Matrix: Water
Analysis Batch: 493500

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 492638

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/28/19 15:43	07/03/19 14:06	1
Barium	<0.0025		0.0025		mg/L		06/28/19 15:43	07/03/19 14:06	1
Boron	<0.050		0.050		mg/L		06/28/19 15:43	07/03/19 14:06	1
Calcium	<0.20		0.20		mg/L		06/28/19 15:43	07/03/19 14:06	1
Cobalt	<0.0010	^	0.0010		mg/L		06/28/19 15:43	07/03/19 14:06	1
Lead	<0.00050		0.00050		mg/L		06/28/19 15:43	07/03/19 14:06	1
Molybdenum	<0.0050		0.0050		mg/L		06/28/19 15:43	07/03/19 14:06	1
Selenium	<0.0025		0.0025		mg/L		06/28/19 15:43	07/03/19 14:06	1

Lab Sample ID: LCS 500-492638/2-A
Matrix: Water
Analysis Batch: 493500

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 492638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0994		mg/L		99	80 - 120
Barium	2.00	2.12		mg/L		106	80 - 120
Boron	1.00	0.973		mg/L		97	80 - 120
Calcium	10.0	9.45		mg/L		94	80 - 120
Cobalt	0.500	0.534	^	mg/L		107	80 - 120
Lead	0.100	0.108		mg/L		108	80 - 120
Molybdenum	1.00	0.989		mg/L		99	80 - 120
Selenium	0.100	0.0981		mg/L		98	80 - 120

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

Lab Sample ID: MB 500-491082/1
Matrix: Water
Analysis Batch: 491082

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			06/19/19 22:57	1

Lab Sample ID: LCS 500-491082/2
Matrix: Water
Analysis Batch: 491082

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	270		mg/L		108	80 - 120

Lab Sample ID: MB 500-491283/1
Matrix: Water
Analysis Batch: 491283

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			06/21/19 05:47	1

Lab Sample ID: LCS 500-491283/2
Matrix: Water
Analysis Batch: 491283

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	264		mg/L		106	80 - 120

Lab Sample ID: 500-165270-5 DU
Matrix: Water
Analysis Batch: 491283

Client Sample ID: T06S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	460		476		mg/L		3	5

Lab Sample ID: MB 500-491581/1
Matrix: Water
Analysis Batch: 491581

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			06/24/19 01:57	1

Lab Sample ID: LCS 500-491581/2
Matrix: Water
Analysis Batch: 491581

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	252		mg/L		101	80 - 120

Lab Sample ID: MB 500-492063/1
Matrix: Water
Analysis Batch: 492063

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			06/26/19 07:31	1

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

Lab Sample ID: LCS 500-492063/2
Matrix: Water
Analysis Batch: 492063

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	286		mg/L		114	80 - 120

Lab Sample ID: MB 500-492315/1
Matrix: Water
Analysis Batch: 492315

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			06/27/19 09:37	1

Lab Sample ID: LCS 500-492315/2
Matrix: Water
Analysis Batch: 492315

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	270		mg/L		108	80 - 120

Lab Sample ID: MB 500-492545/1
Matrix: Water
Analysis Batch: 492545

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			06/28/19 09:47	1

Lab Sample ID: LCS 500-492545/2
Matrix: Water
Analysis Batch: 492545

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	258		mg/L		103	80 - 120

Lab Sample ID: MB 500-492785/1
Matrix: Water
Analysis Batch: 492785

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			06/30/19 23:23	1

Lab Sample ID: LCS 500-492785/2
Matrix: Water
Analysis Batch: 492785

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	258		mg/L		103	80 - 120

Lab Sample ID: 500-165270-19 DU
Matrix: Water
Analysis Batch: 492785

Client Sample ID: G47S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1400		1380		mg/L		0.1	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-492003/4
Matrix: Water
Analysis Batch: 492003

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			06/25/19 15:55	1

Lab Sample ID: LCS 500-492003/5
Matrix: Water
Analysis Batch: 492003

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	51.8		mg/L		104	85 - 115

Lab Sample ID: 500-165270-5 MS
Matrix: Water
Analysis Batch: 492003

Client Sample ID: T06S
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	56.0		mg/L		94	75 - 125

Lab Sample ID: 500-165270-5 MSD
Matrix: Water
Analysis Batch: 492003

Client Sample ID: T06S
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	55.7		mg/L		93	75 - 125	1	20

Lab Sample ID: MB 500-492303/4
Matrix: Water
Analysis Batch: 492303

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			06/25/19 18:32	1

Lab Sample ID: LCS 500-492303/5
Matrix: Water
Analysis Batch: 492303

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	51.9		mg/L		104	85 - 115

Lab Sample ID: 500-165270-8 MS
Matrix: Water
Analysis Batch: 492303

Client Sample ID: T08S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	110		50.0	161		mg/L		95	75 - 125

Lab Sample ID: 500-165270-8 MSD
Matrix: Water
Analysis Batch: 492303

Client Sample ID: T08S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	110		50.0	163		mg/L		99	75 - 125	1	20

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-493145/12
Matrix: Water
Analysis Batch: 493145

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			07/02/19 15:59	1

Lab Sample ID: LCS 500-493145/13
Matrix: Water
Analysis Batch: 493145

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	51.1		mg/L		102	85 - 115

Lab Sample ID: 500-165270-13 MS
Matrix: Water
Analysis Batch: 493145

Client Sample ID: T02S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	110		50.0	151		mg/L		89	75 - 125

Lab Sample ID: 500-165270-13 MSD
Matrix: Water
Analysis Batch: 493145

Client Sample ID: T02S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	110		50.0	146		mg/L		80	75 - 125	3	20

Lab Sample ID: 500-165270-14 MS
Matrix: Water
Analysis Batch: 493145

Client Sample ID: G48S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	110		50.0	159		mg/L		102	75 - 125

Lab Sample ID: 500-165270-14 MSD
Matrix: Water
Analysis Batch: 493145

Client Sample ID: G48S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	110		50.0	156		mg/L		96	75 - 125	2	20

Lab Sample ID: MB 500-493994/12
Matrix: Water
Analysis Batch: 493994

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			07/09/19 12:05	1

Lab Sample ID: LCS 500-493994/13
Matrix: Water
Analysis Batch: 493994

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	50.8		mg/L		102	85 - 115

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: 500-165270-16 MS
Matrix: Water
Analysis Batch: 493994

Client Sample ID: G30S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	220		50.0	253	4	mg/L		69	75 - 125

Lab Sample ID: 500-165270-16 MSD
Matrix: Water
Analysis Batch: 493994

Client Sample ID: G30S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	220		50.0	256	4	mg/L		74	75 - 125	1	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-491896/3
Matrix: Water
Analysis Batch: 491896

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			06/22/19 13:46	1

Lab Sample ID: LCS 500-491896/4
Matrix: Water
Analysis Batch: 491896

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	10.6		mg/L		106	80 - 120

Lab Sample ID: MB 500-493622/3
Matrix: Water
Analysis Batch: 493622

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			07/05/19 21:46	1

Lab Sample ID: LCS 500-493622/4
Matrix: Water
Analysis Batch: 493622

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	10.0		mg/L		100	80 - 120

Lab Sample ID: 500-165270-10 MS
Matrix: Water
Analysis Batch: 493622

Client Sample ID: DUP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.24		5.00	5.18		mg/L		99	75 - 125

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 500-165270-10 MSD
Matrix: Water
Analysis Batch: 493622

Client Sample ID: DUP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.24		5.00	5.20		mg/L		99	75 - 125	0	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-446113/18
Matrix: Water
Analysis Batch: 446113

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			06/28/19 13:25	1

Lab Sample ID: LCS 400-446113/19
Matrix: Water
Analysis Batch: 446113

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	14.2		mg/L		94	90 - 110

Lab Sample ID: MRL 400-446113/15
Matrix: Water
Analysis Batch: 446113

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	5.08		mg/L		102	50 - 150

Lab Sample ID: MB 400-446149/6
Matrix: Water
Analysis Batch: 446149

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			06/28/19 14:19	1

Lab Sample ID: LCS 400-446149/7
Matrix: Water
Analysis Batch: 446149

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	14.2		mg/L		95	90 - 110

Lab Sample ID: MRL 400-446149/3
Matrix: Water
Analysis Batch: 446149

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		99	50 - 150

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

Lab Sample ID: 500-165270-5 MS
Matrix: Water
Analysis Batch: 446149

Client Sample ID: T06S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	89		10.0	95.6	4	mg/L		71	77 - 128		

Lab Sample ID: 500-165270-5 MSD
Matrix: Water
Analysis Batch: 446149

Client Sample ID: T06S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	89		10.0	95.1	4	mg/L		65	77 - 128	1	5

Lab Sample ID: 500-165270-15 MS
Matrix: Water
Analysis Batch: 446149

Client Sample ID: T01S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	450		9.90	350	4	mg/L		-965	77 - 128		

Lab Sample ID: 500-165270-15 MSD
Matrix: Water
Analysis Batch: 446149

Client Sample ID: T01S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	450		9.90	348	4	mg/L		-980	77 - 128	0	5

Lab Sample ID: MB 400-447593/6
Matrix: Water
Analysis Batch: 447593

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			07/11/19 12:40	1

Lab Sample ID: LCS 400-447593/7
Matrix: Water
Analysis Batch: 447593

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	14.5		mg/L		96	90 - 110		

Lab Sample ID: MRL 400-447593/3
Matrix: Water
Analysis Batch: 447593

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		89	50 - 150		

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Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page ____ of ____

48 hr.

Temperature °C of Cooler: 3.8

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2Q19 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Noe L., Rob P.
Lab PM: Eric Lang

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

500-165270 COC

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total Metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
1		G205	06/18/19	1045	5	W		1	1	1	1	1					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TAL	06/18/19	1455	Paula Dudley	TACH	6/18/19	1455
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: X
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

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500-165270 COC

Chain of Custody Record

Lab Job #: 500 - 165270

Chain of Custody Number:

Page ____ of ____

48 hr.

Temperature °C of Cooler: 2.3

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2019 GW
Project Location/State: University Park, IL.
Lab Project #:
Sampler: Noe G, Rob P.
Lab PM: Eric Lang

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	A					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
2		G445	06/19/19	1054	5	W		✓	✓	✓	✓	✓					
3		G465	06/19/19	1200	5	W		✓	✓	✓	✓	✓					
4		R085	06/19/19	1305	5	W		✓	✓	✓	✓	✓					

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TAL	06/19/19	1448	[signature]	TA	6-19-19	1448
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

7/15/2019

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Chain of Custody Record

Lab Job #: 500 - 165270
Chain of Custody Number:
Page _____ of _____
48 gf Temperature °C of Cooler: 2.6

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2019 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Noe Ly Rob P.
Lab PM: Eric Lang

500-165270 COC

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total Metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
5		T06S	06/20/19	1040	5	GW		✓	✓	✓	✓	✓					
6		T05S	06/20/19	1332	5	GW		✓	✓	✓	✓	✓					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TMI	06/20/19	1550	Paula Buckley	TACH	6/20/19	1550
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: X
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

7/15/2019

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Chain of Custody Record

Lab Job #: 500 - 165270

Chain of Custody Number:

Page _____ of _____

48 gt

Temperature °C of Cooler: 0.5 - 2.5

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2Q19 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Nick L., Rob P.
Lab PM: Eric Lang

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8				
							Parameter	Radium 226	Radium 228	Radium 226/228	Total metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4				
1		T09S	06/21/19	0948	5	W		✓	✓	✓	✓	✓				
8		T08S	06/21/19	1247	5	W		✓	✓	✓	✓	✓				

500-165270 COC

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Comments

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TA	06/21/19	1505	Pallen Buckley	TA CAL	6/21/19	1505
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
							6/21/19
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: X
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

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500-165270 COC

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Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page _____ of _____

Temperature °C of Cooler: 1.7-3.7

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2019 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Noe L.
Lab PM: Eric Lang

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total Metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
9		G31S	06/24/19	1000	5	W		✓	✓	✓	✓	✓					
10		DUP	06/24/19	1000	5	W		✓	✓	✓	✓	✓					DUP of G31S
11		G33S	06/24/19	1237	5	W		✓	✓	✓	✓	✓					
12		T03S	06/24/19	1358	5	W		✓	✓	✓	✓	✓					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[illegible]	TAL	06/24/19	1525	[illegible]	TA Cust	6/25/19	0750
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

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500-165270 COC

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Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page _____ of _____

Temperature °C of Cooler: 3.3

Client	Client Project #
Midwest Generation EME LLC	
Project Name	
Joliet #9 CCR - 2019 GW	
Project Location/State	Lab Project #
University Park, IL	
Sampler	Lab PM
Joe L., Rob P.	Eric Lang

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8				
							Parameter	Radium 226	Radium 228	Radium 226/228	Total metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4				
13		TO2S	06/25/19	0934	5	W		✓	✓	✓	✓	✓				
14		G48S	06/25/19	1336	5	W		✓	✓	✓	✓	✓				

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Comments

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TA	06/25/19	1529	[signature]	TA-CHI	6/25/19	1529
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

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Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page ____ of ____

48hr Temperature °C of Cooler: 0.1 +2.1

Client	Client Project #
Midwest Generation EME LLC	
Project Name: Joliet #9 CCR-2019 GW	
Project Location/State: University Park, IL	Lab Project #
Sampler: Nac L., Rob P.	Lab PM: Erik Lang

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					
							Parameter	Radium 226	Radium 228	Radium 226/228	Total metals As, B, Ba, Ca, Co, Fe, Li, Mo, S	TDS, Fl, Cl, SO4					
15		TOIS	06/26/19	0927	5	W		✓	✓	✓	✓	✓					
16		G30S	06/26/19	1318	5	W		✓	✓	✓	✓	✓					

500-165270 COC

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Comments

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TBL	06/26/19	1528	Dawn Buckley	TACHT	6/26/19	1528
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier X
Shipped
Hand Delivered

Matrix Key

WW – Wastewater	SE – Sediment
W – Water	SO – Soil
S – Soil	L – Leachate
SL – Sludge	WI – Wipe
MS – Miscellaneous	DW – Drinking Water
OL – Oil	O – Other
A – Air	

Client Comments

Lab Comments:

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500-165270 COC

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Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page _____ of _____

Temperature °C of Cooler: 3.3

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR-2019 GW
Project Location/State: University Park IL
Lab Project #:
Sampler: Noe L., Rob P.
Lab PM: Erik Lang

Preservative: 3 | 3 | 3 | 3 | 8

Parameter: Radium 226 | Radium 228 | Radium 226/228 | Total Metals As, B, Ba, Ca, Co, Pb, Li, Mo, S | TDS, Fl, Cl, SO4

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Comments
17		R32S	06/27/19	1159	5	W	
18		T04S	06/27/19	1315	5	W	

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TA	06/27/19	1533	[signature]	TA-CHI	6/28/19	0815 33
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments:

Lab Comments:

TAL-4124-500 (1209)

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 604
Phone: 708.534.5200 Fax: 708.534.

500-165270 COC

(optional)

Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)

Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page _____ of _____

30 gal. Temperature °C of Cooler: 0.3 → 1.8

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2019 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Nose L., Rob
Lab PM: Erik Lang

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
19		G47S	06/28/19	0910	5	W		1	1	1	1	1					
20		G45S	06/28/19	1031	5	W		1	1	1	1	1					

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[illegible]	TAL	06/28/19	1207	[illegible] Scott	TA-CHI	6/28/19	1207
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122460.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 7/5/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
		Preservation Code:							
G20S (500-165270-1)	6/18/19	10:45 Central		Water			X	1	
G44S (500-165270-2)	6/19/19	10:54 Central		Water			X	1	
G46S (500-165270-3)	6/19/19	12:00 Central		Water			X	1	
R08S (500-165270-4)	6/19/19	13:05 Central		Water			X	1	

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 6/19/19 1600	Company: TA	Received by: Megan Hamilton	Date/Time: 6-20-19 1001	Company: TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0°C IR7

Ver: 01/16/2019

7/15/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122582.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 7/5/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
T06S (500-165270-5)	6/20/19	10:40 Central		Water			X	1	
T05S (500-165270-6)	6/20/19	13:32 Central		Water			X	1	
T09S (500-165270-7)	6/21/19	09:48 Central		Water			X	1	
T08S (500-165270-8)	6/21/19	12:47 Central		Water			X	1	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	6-24-19 1000	TA	Megan Hardcastle	6-26-19 857	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0°C IR7

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122619.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 3355 McLemore Drive,	Due Date Requested: 7/5/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
		Preservation Code:							
G31S (500-165270-9)	6/24/19	10:00 Central		Water			X	1	
DUP (500-165270-10)	6/24/19	10:00 Central		Water			X	1	
G33S (500-165270-11)	6/24/19	12:37 Central		Water			X	1	
T03S (500-165270-12)	6/24/19	13:58 Central		Water			X	1	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	6/25/19 1315	TA-CHI			
2	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 6/26/19 857	Company TA
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.4°C IR7

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122644.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 7/5/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
T02S (500-165270-13)	6/25/19	09:34 Central		Water			X	1	
G48S (500-165270-14)	6/25/19	13:36 Central		Water			X	1	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	6/25/19 1600	TA			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 6/26/19 857	Company TA

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.4°C IR7

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122680.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 3355 McLemore Drive,	Due Date Requested: 7/5/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
T01S (500-165270-15)	6/26/19	09:27 Central		Water			X	1	
G30S (500-165270-16)	6/26/19	13:18 Central		Water			X	1	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/26/19 1555	TA-CHI			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:21 6/27/19	Company TA

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0°C IR7

Ver: 01/16/2019

7/15/2019

fins TestAmericа, Chicago
Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122723.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 7/5/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
R32S (500-165270-17)	6/27/19	11:59 Central		Water			X	1	
T04S (500-165270-18)	6/27/19	13:15 Central		Water			X	1	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	6/27/19 1550	TALCAL			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 8/29/19 8:30	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0°C IR7

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122746.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 3355 McLemore Drive,	Due Date Requested: 7/16/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
G47S (500-165270-19)	6/28/19	09:10 Central		Water			X	1	
G45S (500-165270-20)	6/28/19	10:31 Central		Water			X	1	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	6/28/19 1500	TAL	[signature]	6-29-19 919	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.7°C IR8

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-1

Login Number: 165270
List Number: 1
Creator: Buckley, Paula M

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8, 2.3, 2.6, 2.5,3.7,3.3, 2.1,3.3,1.8
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-1

Login Number: 165270
List Number: 4
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola
List Creation: 06/20/19 02:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	760135
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	0.0°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-1

Login Number: 165270
List Number: 7
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola
List Creation: 06/26/19 02:06 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	760320
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	2.4°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-1

Login Number: 165270
List Number: 8
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola
List Creation: 06/26/19 03:31 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	760270
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	0.0°C IR 7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-1

Login Number: 165270
List Number: 10
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola
List Creation: 06/27/19 04:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	760362
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	3.0°C IR 7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-1

Login Number: 165270
List Number: 12
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola
List Creation: 06/28/19 02:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	760386
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	3.0°C IR 7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-1

Login Number: 165270
List Number: 14
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola
List Creation: 06/29/19 12:18 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	760408
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 <6mm (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: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G20S
Date Collected: 06/18/19 10:45
Date Received: 06/18/19 14:55

Lab Sample ID: 500-165270-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			490923	06/19/19 07:40	SAH	TAL CHI
Total Recoverable	Analysis	6010C		1	491090	06/19/19 16:03	EEN	TAL CHI
Total Recoverable	Prep	3005A			490923	06/19/19 07:40	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	491173	06/19/19 18:03	ASF	TAL CHI
Total/NA	Analysis	SM 2540C		1	491082	06/19/19 23:35	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	492003	06/25/19 16:15	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	491896	06/22/19 14:21	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	446113	06/28/19 13:43	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/18/19 10:45	JVB	TAL CHI

Client Sample ID: G44S
Date Collected: 06/19/19 10:54
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491100	06/20/19 07:47	SAH	TAL CHI
Total Recoverable	Analysis	6010C		1	491285	06/20/19 13:37	JEF	TAL CHI
Total Recoverable	Prep	3005A			491100	06/20/19 07:47	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	491367	06/20/19 16:17	FXG	TAL CHI
Total Recoverable	Prep	3005A			491100	06/20/19 07:47	SAH	TAL CHI
Total Recoverable	Analysis	6020A		5	491449	06/21/19 11:18	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	491082	06/19/19 23:38	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	492003	06/25/19 16:15	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	491896	06/22/19 14:28	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	446113	06/28/19 13:46	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/19/19 10:54	JVB	TAL CHI

Client Sample ID: G46S
Date Collected: 06/19/19 12:00
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491100	06/20/19 07:47	SAH	TAL CHI
Total Recoverable	Analysis	6010C		1	491285	06/20/19 13:41	JEF	TAL CHI
Total Recoverable	Prep	3005A			491100	06/20/19 07:47	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	491367	06/20/19 16:20	FXG	TAL CHI
Total Recoverable	Prep	3005A			491100	06/20/19 07:47	SAH	TAL CHI
Total Recoverable	Analysis	6020A		100	491449	06/21/19 11:22	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	491082	06/19/19 23:40	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	492003	06/25/19 16:16	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	491896	06/22/19 14:31	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		30	446113	06/28/19 13:46	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/19/19 12:00	JVB	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: R08S

Lab Sample ID: 500-165270-4

Date Collected: 06/19/19 13:05

Matrix: Water

Date Received: 06/19/19 14:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491100	06/20/19 07:47	SAH	TAL CHI
Total Recoverable	Analysis	6010C		1	491285	06/20/19 13:45	JEF	TAL CHI
Total Recoverable	Prep	3005A			491100	06/20/19 07:47	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	491367	06/20/19 16:24	FXG	TAL CHI
Total Recoverable	Prep	3005A			491100	06/20/19 07:47	SAH	TAL CHI
Total Recoverable	Analysis	6020A		20	491449	06/21/19 11:26	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	491082	06/19/19 23:43	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	492303	06/25/19 18:36	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	491896	06/22/19 14:37	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		30	446113	06/28/19 13:46	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/19/19 13:05	JVB	TAL CHI

Client Sample ID: T06S

Lab Sample ID: 500-165270-5

Date Collected: 06/20/19 10:40

Matrix: Water

Date Received: 06/20/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491302	06/21/19 07:59	SAH	TAL CHI
Total Recoverable	Analysis	6010C		1	491598	06/21/19 18:55	EEN	TAL CHI
Total Recoverable	Prep	3005A			491302	06/21/19 07:59	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	491886	06/24/19 14:58	DAJ	TAL CHI
Total/NA	Analysis	SM 2540C		1	491283	06/21/19 06:12	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	492003	06/25/19 16:17	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	491896	06/22/19 14:57	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	446149	06/28/19 15:03	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/20/19 10:40	JVB	TAL CHI

Client Sample ID: T05S

Lab Sample ID: 500-165270-6

Date Collected: 06/20/19 13:32

Matrix: Water

Date Received: 06/20/19 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491302	06/21/19 07:59	SAH	TAL CHI
Total Recoverable	Analysis	6010C		1	491598	06/21/19 18:59	EEN	TAL CHI
Total Recoverable	Prep	3005A			491302	06/21/19 07:59	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	491886	06/24/19 15:02	DAJ	TAL CHI
Total Recoverable	Prep	3005A			491302	06/21/19 07:59	SAH	TAL CHI
Total Recoverable	Analysis	6020A		100	492086	06/25/19 11:42	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	491283	06/21/19 06:18	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	492303	06/25/19 19:14	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	491896	06/22/19 15:00	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		30	446149	06/28/19 15:03	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/20/19 13:32	JVB	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T09S

Lab Sample ID: 500-165270-7

Date Collected: 06/21/19 09:48

Matrix: Water

Date Received: 06/21/19 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491497	06/22/19 08:08	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	491700	06/24/19 12:14	JEF	TAL CHI
Total Recoverable	Prep	3005A			491497	06/22/19 08:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	491886	06/24/19 14:42	DAJ	TAL CHI
Total/NA	Analysis	SM 2540C		1	491581	06/24/19 02:20	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	492303	06/25/19 19:15	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	491896	06/22/19 15:05	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	446149	06/28/19 15:07	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/21/19 09:48	JVB	TAL CHI

Client Sample ID: T08S

Lab Sample ID: 500-165270-8

Date Collected: 06/21/19 12:47

Matrix: Water

Date Received: 06/21/19 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491497	06/22/19 08:08	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	491700	06/24/19 12:18	JEF	TAL CHI
Total Recoverable	Prep	3005A			491497	06/22/19 08:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	491886	06/24/19 14:46	DAJ	TAL CHI
Total Recoverable	Prep	3005A			491497	06/22/19 08:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	492086	06/25/19 11:46	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	491581	06/24/19 02:22	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	492303	06/25/19 19:19	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	491896	06/22/19 15:09	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		30	446149	06/28/19 15:07	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/21/19 12:47	JVB	TAL CHI

Client Sample ID: G31S

Lab Sample ID: 500-165270-9

Date Collected: 06/24/19 10:00

Matrix: Water

Date Received: 06/24/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	492159	06/26/19 11:08	JEF	TAL CHI
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	492312	06/26/19 17:15	FXG	TAL CHI
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	492594	06/27/19 11:42	ASF	TAL CHI
Total/NA	Analysis	SM 2540C		1	492063	06/26/19 07:59	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	492303	06/25/19 19:21	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 21:56	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		30	446149	06/28/19 15:07	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/24/19 10:00	JVB	TAL CHI

Client Sample ID: DUP

Lab Sample ID: 500-165270-10

Date Collected: 06/24/19 10:00

Matrix: Water

Date Received: 06/24/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	492159	06/26/19 11:28	JEF	TAL CHI
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	492312	06/26/19 17:33	FXG	TAL CHI
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	492594	06/27/19 12:09	ASF	TAL CHI
Total/NA	Analysis	SM 2540C		1	492063	06/26/19 08:02	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	492303	06/25/19 19:21	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 21:58	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		30	446149	06/28/19 15:07	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/24/19 10:00	JVB	TAL CHI

Client Sample ID: G33S

Lab Sample ID: 500-165270-11

Date Collected: 06/24/19 12:37

Matrix: Water

Date Received: 06/24/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	492159	06/26/19 11:32	JEF	TAL CHI
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	492312	06/26/19 17:37	FXG	TAL CHI
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6020A		5	492594	06/27/19 12:12	ASF	TAL CHI
Total/NA	Analysis	SM 2540C		1	492063	06/26/19 08:04	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	492303	06/25/19 18:46	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 22:07	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	446149	06/28/19 15:12	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/24/19 12:37	JVB	TAL CHI

Client Sample ID: T03S

Lab Sample ID: 500-165270-12

Date Collected: 06/24/19 13:58

Matrix: Water

Date Received: 06/24/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	492159	06/26/19 11:44	JEF	TAL CHI
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	492312	06/26/19 17:41	FXG	TAL CHI
Total Recoverable	Prep	3005A			491981	06/25/19 15:30	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	492594	06/27/19 12:16	ASF	TAL CHI
Total/NA	Analysis	SM 2540C		1	492063	06/26/19 08:07	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	492303	06/25/19 19:22	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 22:10	EAT	TAL CHI

Client Sample ID: T03S

Lab Sample ID: 500-165270-12

Date Collected: 06/24/19 13:58

Matrix: Water

Date Received: 06/24/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		20	446149	06/28/19 15:12	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/24/19 13:58	JVB	TAL CHI

Client Sample ID: T02S

Lab Sample ID: 500-165270-13

Date Collected: 06/25/19 09:34

Matrix: Water

Date Received: 06/25/19 15:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			492189	06/26/19 15:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	492479	06/27/19 16:39	EEN	TAL CHI
Total Recoverable	Prep	3005A			492189	06/26/19 15:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	492594	06/27/19 14:40	ASF	TAL CHI
Total Recoverable	Prep	3005A			492189	06/26/19 15:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	492835	06/28/19 13:49	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	492063	06/26/19 08:09	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	493145	07/02/19 16:45	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 22:12	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	446149	06/28/19 15:12	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/25/19 09:34	JVB	TAL CHI

Client Sample ID: G48S

Lab Sample ID: 500-165270-14

Date Collected: 06/25/19 13:36

Matrix: Water

Date Received: 06/25/19 15:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			492189	06/26/19 15:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	492479	06/27/19 17:09	EEN	TAL CHI
Total Recoverable	Prep	3005A			492189	06/26/19 15:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	492594	06/27/19 15:06	ASF	TAL CHI
Total Recoverable	Prep	3005A			492189	06/26/19 15:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	492835	06/28/19 14:15	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	492063	06/26/19 08:12	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	493145	07/02/19 16:50	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 22:25	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		30	446149	06/28/19 15:12	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/25/19 13:36	JVB	TAL CHI

Client Sample ID: T01S

Lab Sample ID: 500-165270-15

Date Collected: 06/26/19 09:27

Matrix: Water

Date Received: 06/26/19 15:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			492252	06/27/19 07:17	SAH	TAL CHI
Total Recoverable	Analysis	6010C		1	492479	06/27/19 17:21	EEN	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T01S
Date Collected: 06/26/19 09:27
Date Received: 06/26/19 15:28

Lab Sample ID: 500-165270-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			492252	06/27/19 07:17	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	492594	06/27/19 16:29	ASF	TAL CHI
Total Recoverable	Prep	3005A			492252	06/27/19 07:17	SAH	TAL CHI
Total Recoverable	Analysis	6020A		10	492835	06/28/19 14:34	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	492315	06/27/19 09:55	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	493145	07/02/19 16:52	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 22:27	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		30	446149	06/28/19 15:16	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/26/19 09:27	JVB	TAL CHI

Client Sample ID: G30S
Date Collected: 06/26/19 13:18
Date Received: 06/26/19 15:28

Lab Sample ID: 500-165270-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			492252	06/27/19 07:17	SAH	TAL CHI
Total Recoverable	Analysis	6010C		1	492479	06/27/19 17:25	EEN	TAL CHI
Total Recoverable	Prep	3005A			492252	06/27/19 07:17	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	492594	06/27/19 16:33	ASF	TAL CHI
Total Recoverable	Prep	3005A			492252	06/27/19 07:17	SAH	TAL CHI
Total Recoverable	Analysis	6020A		20	492835	06/28/19 14:37	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	492315	06/27/19 09:57	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	493994	07/09/19 13:22	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 22:30	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		30	446149	06/28/19 15:16	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/26/19 13:18	JVB	TAL CHI

Client Sample ID: R32S
Date Collected: 06/27/19 11:59
Date Received: 06/27/19 15:33

Lab Sample ID: 500-165270-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			492495	06/28/19 07:48	SAH	TAL CHI
Total Recoverable	Analysis	6010C		1	492795	06/28/19 16:59	JEF	TAL CHI
Total Recoverable	Prep	3005A			492495	06/28/19 07:48	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	492835	06/28/19 18:14	FXG	TAL CHI
Total Recoverable	Prep	3005A			492495	06/28/19 07:48	SAH	TAL CHI
Total Recoverable	Analysis	6020A		20	492965	07/01/19 11:03	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	492545	06/28/19 10:28	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	493994	07/09/19 12:20	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 22:32	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	446149	06/28/19 16:29	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/27/19 11:59	JVB	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: T04S

Lab Sample ID: 500-165270-18

Date Collected: 06/27/19 13:15
Date Received: 06/27/19 15:33

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			492495	06/28/19 07:48	SAH	TAL CHI
Total Recoverable	Analysis	6010C		1	492795	06/28/19 17:11	JEF	TAL CHI
Total Recoverable	Prep	3005A			492495	06/28/19 07:48	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	492835	06/28/19 18:17	FXG	TAL CHI
Total Recoverable	Prep	3005A			492495	06/28/19 07:48	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	492965	07/01/19 11:09	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	492545	06/28/19 10:30	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	493994	07/09/19 12:21	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 22:37	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	446149	06/28/19 15:19	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/27/19 13:15	JVB	TAL CHI

Client Sample ID: G47S

Lab Sample ID: 500-165270-19

Date Collected: 06/28/19 09:10
Date Received: 06/28/19 12:07

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			492638	06/28/19 15:43	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	492905	07/01/19 12:16	JEF	TAL CHI
Total Recoverable	Prep	3005A			492638	06/28/19 15:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	493500	07/03/19 15:06	FXG	TAL CHI
Total Recoverable	Prep	3005A			492638	06/28/19 15:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		100	494590	07/11/19 18:47	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	492785	06/30/19 23:28	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	493994	07/09/19 13:23	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 22:40	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	447593	07/11/19 13:30	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/28/19 09:10	JVB	TAL CHI

Client Sample ID: G45S

Lab Sample ID: 500-165270-20

Date Collected: 06/28/19 10:31
Date Received: 06/28/19 12:07

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			492638	06/28/19 15:43	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	492905	07/01/19 12:20	JEF	TAL CHI
Total Recoverable	Prep	3005A			492638	06/28/19 15:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	493500	07/03/19 15:10	FXG	TAL CHI
Total Recoverable	Prep	3005A			492638	06/28/19 15:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	494590	07/11/19 18:51	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	492785	06/30/19 23:33	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	493994	07/09/19 13:25	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	493622	07/05/19 22:44	EAT	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-1

Client Sample ID: G45S

Date Collected: 06/28/19 10:31
Date Received: 06/28/19 12:07

Lab Sample ID: 500-165270-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		20	447593	07/11/19 13:30	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	494883	06/28/19 10:31	JVB	TAL CHI

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

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G20S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-1

Type Sample: (circle one) Ground Water Surface Water Leachate Other:
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/18/19 Start Purge: 1025 (2400 Hr. Clock) End Purge: 1045

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.26

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.78 (ft)
Ref. Measuring Pt. TIC
Well Elevation *580.33 (ft./msl)
Water Level 39.03 (ft.)
Ground Water Elev. 541.30 (ft./msl)
Well Bottom Elevation *442.28 (ft./msl)

	1st	2nd	Final	
pH	7.20	7.18	7.18	(std.)
SC	596	599	599	(umhos/cm)
Temp.	21.45	21.48	21.48	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 65°F, Cloudy, E winds 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 39.03 - 2.78 = ~~32.6~~ 36.25 07/15/19 MB
Levels were taken on 06/18/19 @ 1015.

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G44S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-2

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/19/19 Start Purge: 1035 (2400 Hr. Clock) End Purge: 1054

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.61

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.18 (ft)
Ref. Measuring Pt. TIC
Well Elevation *586.69 (ft./msl)
Water Level 80.05 (ft.)
Ground Water Elev. 506.64 (ft./msl)
Well Bottom Elevation *455.11 (ft./msl)

	1st	2nd	Final	
pH	7.01	7.02	7.02	(std.)
SC	968	969	969	(umhos/cm)
Temp.	16.08	15.99	15.99	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 79°F, Sunny, NE winds 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 80.05 - 2.18 = 77.87 (ft.)
Levels were taken on 06/19/19 @ 1025.

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G46S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-3

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/19/19 Start Purge: 1140 (2400 Hr. Clock) End Purge: 1200

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.90

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.70 (ft)
Ref. Measuring Pt. TIC
Well Elevation *601.32 (ft./msl)
Water Level 101.40 (ft.)
Ground Water Elev. 499.92 (ft./msl)
Well Bottom Elevation *453.62 (ft./msl)

	1st	2nd	Final	
pH	7.65	7.64	7.64	(std.)
SC	1,205	1,216	1,216	(umhos/cm)
Temp.	14.11	14.14	14.14	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 79°F, Partly Cloudy, NE winds @ 0-5 mph
Other: *Reference Measurement
Depth To Water from L.S. = 101.40 - 2.70 = 98.70 (RL)
Levels were taken on 06/19/19 @ 1135.

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: R08S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-4

Type Sample: (circle one) (Ground Water) Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/19/19 Start Purge: 1250 (2400 Hr. Clock) End Purge: 1305

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.77

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.55 (ft)
Ref. Measuring Pt. TIC
Well Elevation *578.62 (ft./msl)
Water Level 67.24 (ft.)
Ground Water Elev. 511.38 (ft./msl)
Well Bottom Elevation *453.08 (ft./msl)

	1st	2nd	Final	
pH	8.10	8.10	8.10	(std.)
SC	954	958	958	(umhos/cm)
Temp.	14.03	14.08	14.08	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 77°F, Mostly Cloudy, E winds 5-10 mph

Other: *Reference Measurement (Well ID updated 11-25-15)
Depth To Water from L.S. = 67.24 - 2.55 = 64.69 (ft.)
Levels were taken on 06/19/19 @ 1245.

(Updated 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T06S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-5

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y)(N)
Sampling Bladder Pump Dedicated (Y)(N)

PURGING INFORMATION

Purge Date: 06/20/19 Start Purge: 1020 (2400 Hr. Clock) End Purge: 1040

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.39

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.30 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 621.02 (ft./msl)
Water Level 112.05 (ft.)
Ground Water Elev. 508.97 (ft./msl)
Well Bottom Elevation * 447.94 (ft./msl)

	1st	2nd	Final	
pH	7.04	7.05	7.05	(std.)
SC	692	695	695	(umhos/cm)
Temp.	19.96	19.98	19.98	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 63°F, Cloudy, N winds e 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 112.05 - 2.30 = 109.75 (ft)
Levels were taken on 06/20/19 @ 1005.
* Total Deth = 173.00

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T05S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-16

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/20/19 Start Purge: 1310 (2400 Hr. Clock) End Purge: 1332

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.71

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.40 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 623.45 (ft./msl)
Water Level 116.82 (ft.)
Ground Water Elev. 506.63 (ft./msl)
Well Bottom Elevation * 448.35 (ft./msl)

	1st	2nd	Final	
pH	10.12	10.13	10.13	(std.)
SC	2,110	2,110	2,110	(umhos/cm)
Temp.	16.37	16.35	16.35	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 63°F, Cloudy, N winds @ 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 116.82 - 2.40 = 114.42 (ft.)
Levels were taken on 06/20/19 @ 1255.
* Total Deth = 175.00

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T09S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-7

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/21/19 Start Purge: 0930 (2400 Hr. Clock) End Purge: 0948

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.58

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.40 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 603.74 (ft./msl)
Water Level 102.19 (ft.)
Ground Water Elev. 501.55 (ft./msl)
Well Bottom Elevation * 444.80 (ft./msl)

	1st	2nd	Final	
pH	7.30	7.29	7.29	(std.)
SC	1124	1127	1127	(umhos/cm)
Temp.	20.28	20.30	20.30	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 72°F, Sunny, E winds 5-10 mph

Other: *Reference Measurement (updated 02/19/14)
Depth To Water from L.S. = 102.19 - 2.40 = 99.79 (ft.)
Levels were taken on 06/21/19 @ 0915.
* Total Depth: 158.59

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T08S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-105270-8

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/21/19 Start Purge: 1225 (2400 Hr. Clock) End Purge: 1247

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.57

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.38 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 627.39 (ft./msl)
Water Level 124.57 (ft.)
Ground Water Elev. 502.82 (ft./msl)
Well Bottom Elevation * 447.38 (ft./msl)

	1st	2nd	Final	
pH	8.12	8.15	8.15	(std.)
SC	1,186	1,180	1,180	(umhos/cm)
Temp.	22.56	22.48	22.48	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Slight Turbidity, No Odor
Weather Conditions: 74°F, Sunny, E winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 124.57 - 2.38 = 122.19 (ft)
Levels were taken on 06/21/19 @ 1210.
* Total Deth = 180.00

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G31S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-9

Type Sample: (circle one) (Ground Water) Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/24/19 Start Purge: 0940 (2400 Hr. Clock) End Purge: 1000

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.90

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.58 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.78 (ft./msl)
Water Level 25.87 (ft.)
Ground Water Elev. 509.91 (ft./msl)
Well Bottom Elevation *453.36 (ft./msl)

	1st	2nd	Final	
pH	7.15	7.16	7.16	(std.)
SC	1,422	1,424	1,424	(umhos/cm)
Temp.	15.32	15.39	15.39	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 71°F, Cloudy, SW winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 25.87 - 2.58 = 23.29 (ft)
Levels were taken on 06/24/19 @ 0930.

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G31S Dup
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-116270-10

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: _____ Start Purge: _____ (2400 Hr. Clock) End Purge: _____

Water Volume in Casing (gallons): N/A Volume Purged (gallons): _____

MEASUREMENTS

Well Diameter 2.0 (inches) 1st 2nd *Final*

Stick Up 2.58 (ft) pH _____ _____ _____ _____ (std.)

Ref. Measuring Pt. TIC SC _____ _____ _____ _____ (umhos/cm)

Well Elevation *535.78 (ft./msl) Temp._____ _____ _____ _____ (°C)

Water Level _____ (ft.) Well Stabilization / Recharge Grid

Ground Water Elev. _____ (ft./msl)

Well Bottom Elevation *453.36 (ft./msl)

COMMENTS

Sample Appearance/Odor: _____

Weather Conditions: _____

Other: *Reference Measurement

Depth To Water from L.S. = _____

Levels were taken on _____ @ _____

(Updated: 06-24-2019)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G33S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-11

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/24/19 Start Purge: 1215 (2400 Hr. Clock) End Purge: 1237

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.57

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 1.73 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.66 (ft./msl)
Water Level 25.82 (ft.)
Ground Water Elev. 509.84 (ft./msl)
Well Bottom Elevation *452.72 (ft./msl)

	1st	2nd	Final	
pH	7.37	7.37	7.37	(std.)
SC	626	615	615	(umhos/cm)
Temp.	15.81	15.89	15.89	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Gray, Slight Turbidity, No Odor
Weather Conditions: 72°F, Rain, SW winds @ 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 25.82 - 1.73 = 24.09 (A.)
Levels were taken on 06/24/19 @ 1200.

Updated: (12-11-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T03S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-12

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/24/19 Start Purge: 1340 (2400 Hr. Clock) End Purge: 1358

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.46

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 3.08 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 629.89 (ft./msl)
Water Level 125.79 (ft.)
Ground Water Elev. 504.10 (ft./msl)
Well Bottom Elevation * 456.70 (ft./msl)

	1st	2nd	Final	
pH	7.16	7.17	7.17	(std.)
SC	1072	1073	1073	(umhos/cm)
Temp.	14.38	14.38	14.38	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 72°F, Cloudy, SW winds @ 10-15 mph

Other: *Reference Measurement
Depth To Water from L.S. = 125.79 - 3.08 = 122.71 (ft.)
Levels were taken on 06/24/19 @ 1335.
* Total Depth = 172.95

(Updated 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T02S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-13

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/25/19 Start Purge: 0915 (2400 Hr. Clock) End Purge: 0934

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.61

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.33 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 626.16 (ft./msl)

Water Level 128.60 (ft.)

Ground Water Elev. 497.56 (ft./msl)

Well Bottom Elevation * 453.40 (ft./msl)

	1st	2nd	Final	
pH	7.39	7.40	7.40	(std.)
SC	1141	1147	1147	(umhos/cm)
Temp.	24.02	24.04	24.04	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 76°F, Sunny, SW winds @ 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 128.60 - 2.33 = 126.27 (A)

Levels were taken on 06/25/19 @ 0855.

* Total Depth = 172.75

(Updated: 12-11-2018))

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G48S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-14

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/25/19 Start Purge: 1315 (2400 Hr. Clock) End Purge: 1336

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.81

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.45 (ft)
Ref. Measuring Pt. TIC
Well Elevation *620.78 (ft./msl)
Water Level 98.18 (ft.)
Ground Water Elev. 522.60 (ft./msl)
Well Bottom Elevation *468.32 (ft./msl)

	1st	2nd	Final	
pH	8.08	8.07	8.07	(std.)
SC	1396	1391	1391	(umhos/cm)
Temp.	17.29	17.11	17.11	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 84°F, Sunny, SW winds @ 15-20 mph

Other: *Reference Measurement
Depth To Water from L.S. = 98.18 - 2.45 = 95.73 (ft.)
Levels were taken on 06/25/19 @ 1305

(Updated 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T01S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-105270-15

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y)(N)

Sampling Bladder Pump Dedicated (Y)(N)

PURGING INFORMATION

Purge Date: 06/26/19 Start Purge: 0905 (2400 Hr. Clock) End Purge: 0927

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.28

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.48 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 621.78 (ft./msl)

Water Level 113.68 (ft.)

Ground Water Elev. 508.10 (ft./msl)

Well Bottom Elevation * 451.46 (ft./msl)

	1st	2nd	Final	
pH	7.42	7.43	7.43	(std.)
SC	1227	1722	1,222	(umhos/cm)
Temp.	22.97	22.98	22.98	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Tan, High Turbidity, Slight Odor

Weather Conditions: 78°F, Sunny, SW winds @ 0-5 mph

Other: *Reference Measurement

Depth To Water from L.S. = 113.68 - 2.48 = 111.20 (ft.)

Levels were taken on 06/26/19 @ 0845.

* Total Depth = 170.00

(Updated 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G30S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-105270-16

Type Sample: (circle one) Ground Water Surface Water Leachate Other:
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/26/19 Start Purge: 1300 (2400 Hr. Clock) End Purge: 1318

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.23

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.31 (ft)
Ref. Measuring Pt. TIC
Well Elevation *524.70 (ft./msl)
Water Level 1.57 (ft.)
Ground Water Elev. 523.13 (ft./msl)
Well Bottom Elevation *462.58 (ft./msl)

	1st	2nd	Final	
pH	7.99	7.98	7.98	(std.)
SC	1490	1,500	1500	(umhos/cm)
Temp.	15.83	15.82	15.82	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 86°F, Sunny, SW winds 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 1.57 - 2.31 = -0.74 (ft.)
Levels were taken on 06/26/19 @ 1255.

(Updated 10-102018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: R32S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-17

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/27/19 Start Purge: 1140 (2400 Hr. Clock) End Purge: 1159

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.98

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.03 (ft)
Ref. Measuring Pt. TIC
Well Elevation *536.99 (ft./msl)
Water Level 19.28 (ft.)
Ground Water Elev. 517.71 (ft./msl)
Well Bottom Elevation *457.84 (ft./msl)

	1st	2nd	Final	
pH	7.32	7.33	7.33	(std.)
SC	993	991	991	(umhos/cm)
Temp.	12.69	12.72	12.72	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 87°F, Partly Cloudy, SW wind 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 19.28 - 2.03 = 17.25 (ft.)
Levels were taken on 06/27/19 @ 1130

(Updated 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T04S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-105270-18

Type Sample: (circle one) Ground Water Surface Water Leachate Other:
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/27/19 Start Purge: 1255 (2400 Hr. Clock) End Purge: 1315

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.65

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.42 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 631.35 (ft./msl)
Water Level 153.31 (ft.)
Ground Water Elev. 478.04 (ft./msl)
Well Bottom Elevation * 458.07 (ft./msl)

	1st	2nd	Final	
pH	7.04	7.05	7.05	(std.)
SC	717	721	721	(umhos/cm)
Temp.	24.60	24.64	24.64	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 88°F, Partly Cloudy, S winds 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 153.31 - 2.42 = 150.89 (ft.)
Levels were taken on 06/27/19 @ 1245.
* Total Deth = 173.00

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G47S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-165270-19

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/28/19 Start Purge: 0855 (2400 Hr. Clock) End Purge: 0910

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.48

MEASUREMENTS

Well Diameter 4.0 (inches)

Stick Up 2.50 (ft)

Ref. Measuring Pt. TIC

Well Elevation *612.10 (ft./msl)

Water Level 91.78 (ft.)

Ground Water Elev. 520.32 (ft./msl)

Well Bottom Elevation *459.84 (ft./msl)

	1st	2nd	Final	
pH	9.95	9.95	9.95	(std.)
SC	1,790	1800	1800	(umhos/cm)
Temp.	15.82	15.74	15.74	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 81°F, Sunny, SW winds @ 0-5 mph

Other: *Reference Measurement

Depth To Water from L.S. = 91.78 - 2.50 = 89.28 (ft.)

Levels were taken on 06/28/19 @ 0850 .

(Updated 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G45S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-105270-20

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/28/19 Start Purge: 1015 (2400 Hr. Clock) End Purge: 1034

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 1.03

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.97 (ft)
Ref. Measuring Pt. TIC
Well Elevation *603.31 (ft./msl)
Water Level 62.72 (ft.)
Ground Water Elev. 540.59 (ft./msl)
Well Bottom Elevation *471.05 (ft./msl)

	1st	2nd	Final	
pH	7.53	7.51	7.51	(std.)
SC	920	914	914	(umhos/cm)
Temp.	15.44	15.46	15.46	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 84°F, Fair, S winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 62.72 - 2.97 = 59.75 (ft.)
Levels were taken on 06/28/19 @ 1010

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-165270-2
Client Project/Site: Joliet #9 CCR

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

Attn: Richard Gnat

Authorized for release by:
8/30/2019 12:42:28 PM

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

LINKS

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

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Case Narrative

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Job ID: 500-165270-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-165270-2

Comments
No additional comments.

Receipt
The samples were received on 6/18/2019 2:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 9 coolers at receipt time were 1.8º C, 2.1º C, 2.3º C, 2.5º C, 2.6º C, 3.3º C, 3.3º C, 3.7º C and 3.8º C.

RAD
Method(s) PrecSep_0: Radium 228 Prep Batch 160- 433143:
The following samples were prepared at a reduced aliquot due to yellow discoloration and heavy sediment levels: T02S (500-165270-13).

Method(s) PrecSep_0: Radium 228 Prep Batch 160-433597:
The following samples were prepared at a reduced aliquot due to yellow discoloration: T04S (500-165270-18).

Method(s) PrecSep_0: Radium 228 Prep Batch 160-440295:
Due to re- analysis, insufficient sample volume was available to perform a sample duplicate for the following sample: T09S (500-165270-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method(s) PrecSep-21: Radium 226 Prep Batch 160- 433127:
The following samples were prepared at a reduced aliquot due to yellow discoloration and heavy sediment levels: T02S (500-165270-13).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-433589:
The following samples were prepared at a reduced aliquot due to yellow discoloration: T04S (500-165270-18).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-440293:
Due to re- analysis, insufficient sample volume was available to perform a sample duplicate for the following sample: T09S (500-165270-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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

Method Summary

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	TAL SL
904.0	Radium-228 (GFPC)	EPA	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-165270-1	G20S	Water	06/18/19 10:45	06/18/19 14:55	
500-165270-2	G44S	Water	06/19/19 10:54	06/19/19 14:48	
500-165270-3	G46S	Water	06/19/19 12:00	06/19/19 14:48	
500-165270-4	R08S	Water	06/19/19 13:05	06/19/19 14:48	
500-165270-5	T06S	Water	06/20/19 10:40	06/20/19 15:50	
500-165270-6	T05S	Water	06/20/19 13:32	06/20/19 15:50	
500-165270-7	T09S	Water	06/21/19 09:48	06/21/19 15:05	
500-165270-8	T08S	Water	06/21/19 12:47	06/21/19 15:05	
500-165270-9	G31S	Water	06/24/19 10:00	06/24/19 15:25	
500-165270-10	DUP	Water	06/24/19 10:00	06/24/19 15:25	
500-165270-11	G33S	Water	06/24/19 12:37	06/24/19 15:25	
500-165270-12	T03S	Water	06/24/19 13:58	06/24/19 15:25	
500-165270-13	T02S	Water	06/25/19 09:34	06/25/19 15:29	
500-165270-14	G48S	Water	06/25/19 13:36	06/25/19 15:29	
500-165270-15	T01S	Water	06/26/19 09:27	06/26/19 15:28	
500-165270-16	G30S	Water	06/26/19 13:18	06/26/19 15:28	
500-165270-17	R32S	Water	06/27/19 11:59	06/27/19 15:33	
500-165270-18	T04S	Water	06/27/19 13:15	06/27/19 15:33	
500-165270-19	G47S	Water	06/28/19 09:10	06/28/19 12:07	
500-165270-20	G45S	Water	06/28/19 10:31	06/28/19 12:07	

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G20S
Date Collected: 06/18/19 10:45
Date Received: 06/18/19 14:55

Lab Sample ID: 500-165270-1
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.933		0.262	0.275	1.00	0.222	pCi/L	06/24/19 12:50	08/24/19 11:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.8*		*40 - 110*	*06/24/19 12:50*	*08/24/19 11:51*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.18		0.291	0.310	1.00	0.351	pCi/L	06/24/19 14:17	08/23/19 09:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.8*		*40 - 110*	*06/24/19 14:17*	*08/23/19 09:18*	*1*
Y Carrier	*95.3*		*40 - 110*	*06/24/19 14:17*	*08/23/19 09:18*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.11		0.392	0.414	5.00	0.351	pCi/L		08/28/19 07:50	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G44S
Date Collected: 06/19/19 10:54
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-2
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.246	U	0.192	0.194	1.00	0.290	pCi/L	06/24/19 12:50	08/24/19 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*06/24/19 12:50*	*08/24/19 13:39*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.595**		0.287	0.292	1.00	0.422	pCi/L	06/24/19 14:17	08/23/19 09:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*06/24/19 14:17*	*08/23/19 09:18*	*1*
Y Carrier	*88.2*		*40 - 110*	*06/24/19 14:17*	*08/23/19 09:18*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.841**		0.345	0.351	5.00	0.422	pCi/L		08/28/19 07:50	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G46S
Date Collected: 06/19/19 12:00
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-3
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.582		0.219	0.225	1.00	0.223	pCi/L	06/24/19 12:50	08/24/19 11:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*06/24/19 12:50*	*08/24/19 11:53*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.784		0.352	0.360	1.00	0.520	pCi/L	06/24/19 14:17	08/23/19 09:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*06/24/19 14:17*	*08/23/19 09:21*	*1*
Y Carrier	*81.5*		*40 - 110*	*06/24/19 14:17*	*08/23/19 09:21*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.37		0.415	0.425	5.00	0.520	pCi/L		08/28/19 07:50	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: R08S

Date Collected: 06/19/19 13:05
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-4

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.544		0.230	0.235	1.00	0.273	pCi/L	06/24/19 12:50	08/24/19 11:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.5*		*40 - 110*	*06/24/19 12:50*	*08/24/19 11:53*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.958		0.332	0.344	1.00	0.458	pCi/L	06/24/19 14:17	08/23/19 09:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.5*		*40 - 110*	*06/24/19 14:17*	*08/23/19 09:21*	*1*
Y Carrier	*83.4*		*40 - 110*	*06/24/19 14:17*	*08/23/19 09:21*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.50		0.404	0.417	5.00	0.458	pCi/L		08/28/19 07:50	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: T06S

Date Collected: 06/20/19 10:40
Date Received: 06/20/19 15:50

Lab Sample ID: 500-165270-5

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.21		0.340	0.357	1.00	0.286	pCi/L	06/28/19 09:25	08/22/19 07:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.3*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:29*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.545		0.316	0.320	1.00	0.482	pCi/L	06/28/19 10:38	08/21/19 14:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.3*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:01*	*1*
Y Carrier	*86.7*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:01*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.75		0.464	0.479	5.00	0.482	pCi/L		08/27/19 10:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: T05S

Date Collected: 06/20/19 13:32
Date Received: 06/20/19 15:50

Lab Sample ID: 500-165270-6

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.284**		0.204	0.206	1.00	0.283	pCi/L	06/28/19 09:25	08/22/19 07:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.7*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:29*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.248	U	0.363	0.364	1.00	0.606	pCi/L	06/28/19 10:38	08/21/19 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.7*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*
Y Carrier	*84.1*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.532	U	0.416	0.418	5.00	0.606	pCi/L		08/27/19 10:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: T09S
Date Collected: 06/21/19 09:48
Date Received: 06/21/19 15:05

Lab Sample ID: 500-165270-7
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.02		0.436	0.472	1.00	0.285	pCi/L	06/28/19 09:25	08/22/19 07:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:29*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.06		0.310	0.325	1.00	0.408	pCi/L	06/28/19 10:38	08/21/19 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*
Y Carrier	*102*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.08		0.535	0.573	5.00	0.408	pCi/L		08/27/19 10:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: T08S
Date Collected: 06/21/19 12:47
Date Received: 06/21/19 15:05

Lab Sample ID: 500-165270-8
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.315**		0.223	0.225	1.00	0.314	pCi/L	06/28/19 09:25	08/22/19 07:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:29*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.229	U	0.278	0.279	1.00	0.460	pCi/L	06/28/19 10:38	08/21/19 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*
Y Carrier	*89.3*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.544**		0.356	0.358	5.00	0.460	pCi/L		08/27/19 10:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G31S
Date Collected: 06/24/19 10:00
Date Received: 06/24/19 15:25

Lab Sample ID: 500-165270-9
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.28		0.427	0.474	1.00	0.193	pCi/L	06/28/19 09:25	08/22/19 07:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:39*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.44		0.363	0.386	1.00	0.444	pCi/L	06/28/19 10:38	08/21/19 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*
Y Carrier	*85.6*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.71		0.560	0.611	5.00	0.444	pCi/L		08/27/19 10:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: DUP

Date Collected: 06/24/19 10:00
Date Received: 06/24/19 15:25

Lab Sample ID: 500-165270-10

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.01		0.406	0.445	1.00	0.215	pCi/L	06/28/19 09:25	08/22/19 07:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.2*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:40*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.50		0.342	0.369	1.00	0.389	pCi/L	06/28/19 10:38	08/21/19 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.2*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*
Y Carrier	*89.3*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.51		0.531	0.578	5.00	0.389	pCi/L		08/27/19 10:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G33S

Date Collected: 06/24/19 12:37
Date Received: 06/24/19 15:25

Lab Sample ID: 500-165270-11

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.05**		0.310	0.324	1.00	0.219	pCi/L	06/28/19 09:25	08/22/19 07:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.1*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:40*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.340	U	0.290	0.292	1.00	0.464	pCi/L	06/28/19 10:38	08/21/19 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.1*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*
Y Carrier	*87.1*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.39**		0.424	0.436	5.00	0.464	pCi/L		08/27/19 10:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: T03S

Date Collected: 06/24/19 13:58
Date Received: 06/24/19 15:25

Lab Sample ID: 500-165270-12

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.916**		0.285	0.297	1.00	0.217	pCi/L	06/28/19 09:25	08/22/19 07:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.2*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:40*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.411	U	0.277	0.280	1.00	0.429	pCi/L	06/28/19 10:38	08/21/19 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.2*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*
Y Carrier	*88.6*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.33**		0.397	0.408	5.00	0.429	pCi/L		08/27/19 10:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: T02S

Date Collected: 06/25/19 09:34
Date Received: 06/25/19 15:29

Lab Sample ID: 500-165270-13

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.933**		0.448	0.455	1.00	0.480	pCi/L	06/28/19 09:25	08/22/19 07:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.1*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:40*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.515	U	0.549	0.551	1.00	0.897	pCi/L	06/28/19 10:38	08/21/19 14:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.1*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*
Y Carrier	*90.1*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.45**		0.709	0.715	5.00	0.897	pCi/L		08/27/19 10:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G48S
Date Collected: 06/25/19 13:36
Date Received: 06/25/19 15:29

Lab Sample ID: 500-165270-14
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.615		0.267	0.272	1.00	0.303	pCi/L	06/28/19 09:25	08/22/19 07:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.9*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:40*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.714		0.352	0.359	1.00	0.521	pCi/L	06/28/19 10:38	08/21/19 14:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.9*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:07*	*1*
Y Carrier	*81.5*		*40 - 110*	*06/28/19 10:38*	*08/21/19 14:07*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.33		0.442	0.450	5.00	0.521	pCi/L		08/27/19 10:59	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: T01S

Date Collected: 06/26/19 09:27
Date Received: 06/26/19 15:28

Lab Sample ID: 500-165270-15

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.532		0.284	0.288	1.00	0.352	pCi/L	07/02/19 16:38	08/22/19 16:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.6*		*40 - 110*	*07/02/19 16:38*	*08/22/19 16:29*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.493		0.314	0.317	1.00	0.483	pCi/L	07/02/19 17:39	08/22/19 09:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.6*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:18*	*1*
Y Carrier	*90.1*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:18*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.02		0.423	0.428	5.00	0.483	pCi/L		08/27/19 10:08	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G30S

Date Collected: 06/26/19 13:18
Date Received: 06/26/19 15:28

Lab Sample ID: 500-165270-16

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.538		0.340	0.344	1.00	0.489	pCi/L	07/02/19 16:38	08/22/19 16:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.5*		*40 - 110*	*07/02/19 16:38*	*08/22/19 16:29*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.638		0.303	0.309	1.00	0.439	pCi/L	07/02/19 17:39	08/22/19 09:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.5*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:19*	*1*
Y Carrier	*89.0*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.18		0.455	0.462	5.00	0.489	pCi/L		08/27/19 10:08	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: R32S
Date Collected: 06/27/19 11:59
Date Received: 06/27/19 15:33

Lab Sample ID: 500-165270-17
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.74		0.434	0.462	1.00	0.334	pCi/L	07/02/19 16:38	08/22/19 16:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.9*		*40 - 110*	*07/02/19 16:38*	*08/22/19 16:30*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.931		0.320	0.331	1.00	0.423	pCi/L	07/02/19 17:39	08/22/19 09:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.9*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:19*	*1*
Y Carrier	*92.0*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.67		0.539	0.568	5.00	0.423	pCi/L		08/27/19 10:08	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: T04S
Date Collected: 06/27/19 13:15
Date Received: 06/27/19 15:33

Lab Sample ID: 500-165270-18
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.567	U	0.567	0.569	1.00	0.899	pCi/L	07/02/19 16:38	08/22/19 16:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.9*		*40 - 110*	*07/02/19 16:38*	*08/22/19 16:30*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.574	U	0.609	0.611	1.00	0.994	pCi/L	07/02/19 17:39	08/22/19 09:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.9*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:19*	*1*
Y Carrier	*85.2*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.14**		0.832	0.835	5.00	0.994	pCi/L		08/27/19 10:08	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G47S
Date Collected: 06/28/19 09:10
Date Received: 06/28/19 12:07

Lab Sample ID: 500-165270-19
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.452**		0.262	0.265	1.00	0.330	pCi/L	07/02/19 16:38	08/22/19 16:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.6*		*40 - 110*	*07/02/19 16:38*	*08/22/19 16:30*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.114	U	0.328	0.328	1.00	0.564	pCi/L	07/02/19 17:39	08/22/19 09:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.6*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:22*	*1*
Y Carrier	*89.0*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.566**		0.420	0.422	5.00	0.564	pCi/L		08/27/19 10:08	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G45S
Date Collected: 06/28/19 10:31
Date Received: 06/28/19 12:07

Lab Sample ID: 500-165270-20
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.41		0.405	0.424	1.00	0.332	pCi/L	07/02/19 16:38	08/22/19 16:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.6*		*40 - 110*	*07/02/19 16:38*	*08/22/19 16:30*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.584		0.313	0.318	1.00	0.469	pCi/L	07/02/19 17:39	08/22/19 09:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.6*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:22*	*1*
Y Carrier	*89.3*		*40 - 110*	*07/02/19 17:39*	*08/22/19 09:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.99		0.512	0.530	5.00	0.469	pCi/L		08/27/19 10:08	1

Definitions/Glossary

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Rad

Prep Batch: 432651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-1	G20S	Total/NA	Water	PrecSep-21	
500-165270-2	G44S	Total/NA	Water	PrecSep-21	
500-165270-3	G46S	Total/NA	Water	PrecSep-21	
500-165270-4	R08S	Total/NA	Water	PrecSep-21	
MB 160-432651/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-432651/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 432660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-1	G20S	Total/NA	Water	PrecSep_0	
500-165270-2	G44S	Total/NA	Water	PrecSep_0	
500-165270-3	G46S	Total/NA	Water	PrecSep_0	
500-165270-4	R08S	Total/NA	Water	PrecSep_0	
MB 160-432660/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-432660/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 433127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-5	T06S	Total/NA	Water	PrecSep-21	
500-165270-6	T05S	Total/NA	Water	PrecSep-21	
500-165270-7	T09S	Total/NA	Water	PrecSep-21	
500-165270-8	T08S	Total/NA	Water	PrecSep-21	
500-165270-9	G31S	Total/NA	Water	PrecSep-21	
500-165270-10	DUP	Total/NA	Water	PrecSep-21	
500-165270-11	G33S	Total/NA	Water	PrecSep-21	
500-165270-12	T03S	Total/NA	Water	PrecSep-21	
500-165270-13	T02S	Total/NA	Water	PrecSep-21	
500-165270-14	G48S	Total/NA	Water	PrecSep-21	
MB 160-433127/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-433127/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-165270-5 DU	T06S	Total/NA	Water	PrecSep-21	

Prep Batch: 433143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-5	T06S	Total/NA	Water	PrecSep_0	
500-165270-6	T05S	Total/NA	Water	PrecSep_0	
500-165270-7	T09S	Total/NA	Water	PrecSep_0	
500-165270-8	T08S	Total/NA	Water	PrecSep_0	
500-165270-9	G31S	Total/NA	Water	PrecSep_0	
500-165270-10	DUP	Total/NA	Water	PrecSep_0	
500-165270-11	G33S	Total/NA	Water	PrecSep_0	
500-165270-12	T03S	Total/NA	Water	PrecSep_0	
500-165270-13	T02S	Total/NA	Water	PrecSep_0	
500-165270-14	G48S	Total/NA	Water	PrecSep_0	
MB 160-433143/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-433143/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-165270-5 DU	T06S	Total/NA	Water	PrecSep_0	

Prep Batch: 433589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-15	T01S	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 433589 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-16	G30S	Total/NA	Water	PrecSep-21	
500-165270-17	R32S	Total/NA	Water	PrecSep-21	
500-165270-18	T04S	Total/NA	Water	PrecSep-21	
500-165270-19	G47S	Total/NA	Water	PrecSep-21	
500-165270-20	G45S	Total/NA	Water	PrecSep-21	
MB 160-433589/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-433589/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 433597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165270-15	T01S	Total/NA	Water	PrecSep_0	
500-165270-16	G30S	Total/NA	Water	PrecSep_0	
500-165270-17	R32S	Total/NA	Water	PrecSep_0	
500-165270-18	T04S	Total/NA	Water	PrecSep_0	
500-165270-19	G47S	Total/NA	Water	PrecSep_0	
500-165270-20	G45S	Total/NA	Water	PrecSep_0	
MB 160-433597/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-433597/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-432651/24-A
Matrix: Water
Analysis Batch: 440859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 432651

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01232	U	0.0803	0.0803	1.00	0.158	pCi/L	06/24/19 12:50	08/27/19 05:58	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*40 - 110*	*06/24/19 12:50*	*08/27/19 05:58*	*1*

Lab Sample ID: LCS 160-432651/1-A
Matrix: Water
Analysis Batch: 440426

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 432651

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.4	11.18		1.41	1.00	0.315	pCi/L	98	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*94.1*		*40 - 110*

Lab Sample ID: MB 160-433127/23-A
Matrix: Water
Analysis Batch: 440199

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 433127

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.07978	U	0.136	0.137	1.00	0.242	pCi/L	06/28/19 09:25	08/22/19 07:44	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.8*		*40 - 110*	*06/28/19 09:25*	*08/22/19 07:44*	*1*

Lab Sample ID: LCS 160-433127/1-A
Matrix: Water
Analysis Batch: 440198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 433127

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.4	12.06		1.47	1.00	0.290	pCi/L	106	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*83.6*		*40 - 110*

Lab Sample ID: 500-165270-5 DU
Matrix: Water
Analysis Batch: 440198

Client Sample ID: T06S
Prep Type: Total/NA
Prep Batch: 433127

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	1.21			0.9748		0.354	1.00	0.372	pCi/L			0.33	1

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 500-165270-5 DU
Matrix: Water
Analysis Batch: 440198

Client Sample ID: T06S
Prep Type: Total/NA
Prep Batch: 433127

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	79.1		40 - 110

Lab Sample ID: MB 160-433589/24-A
Matrix: Water
Analysis Batch: 440198

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 433589

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1061	U	0.179	0.179	1.00	0.314	pCi/L	07/02/19 16:38	08/22/19 18:43	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	83.9		40 - 110	07/02/19 16:38	08/22/19 18:43	1

Lab Sample ID: LCS 160-433589/1-A
Matrix: Water
Analysis Batch: 440196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 433589

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.4	11.57		1.49	1.00	0.342	pCi/L	102	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.0		40 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-432660/24-A
Matrix: Water
Analysis Batch: 440423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 432660

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.07308	U	0.276	0.276	1.00	0.507	pCi/L	06/24/19 14:17	08/23/19 09:22	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		40 - 110	06/24/19 14:17	08/23/19 09:22	1
Y Carrier	78.9		40 - 110	06/24/19 14:17	08/23/19 09:22	1

Lab Sample ID: LCS 160-432660/1-A
Matrix: Water
Analysis Batch: 440367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 432660

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.91	9.432		1.10	1.00	0.409	pCi/L	106	75 - 125		

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-432660/1-A
Matrix: Water
Analysis Batch: 440367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 432660

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.1		40 - 110
Y Carrier	87.1		40 - 110

Lab Sample ID: MB 160-433143/23-A
Matrix: Water
Analysis Batch: 440186

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 433143

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5594		0.324	0.328	1.00	0.490	pCi/L	06/28/19 10:38	08/21/19 14:11	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		40 - 110	06/28/19 10:38	08/21/19 14:11	1
Y Carrier	82.2		40 - 110	06/28/19 10:38	08/21/19 14:11	1

Lab Sample ID: LCS 160-433143/1-A
Matrix: Water
Analysis Batch: 440167

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 433143

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.91	9.731		1.17	1.00	0.532	pCi/L	109	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	83.6		40 - 110
Y Carrier	84.5		40 - 110

Lab Sample ID: 500-165270-5 DU
Matrix: Water
Analysis Batch: 440167

Client Sample ID: T06S
Prep Type: Total/NA
Prep Batch: 433143

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.545			0.2690	U	0.310	1.00	0.508	pCi/L			0.44	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	79.1		40 - 110
Y Carrier	83.0		40 - 110

Lab Sample ID: MB 160-433597/24-A
Matrix: Water
Analysis Batch: 440195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 433597

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2883	U	0.259	0.260	1.00	0.415	pCi/L	07/02/19 17:39	08/22/19 09:28	1

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: MB 160-433597/24-A
Matrix: Water
Analysis Batch: 440195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 433597

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	83.9		40 - 110	07/02/19 17:39	08/22/19 09:28	1
Y Carrier	91.2		40 - 110	07/02/19 17:39	08/22/19 09:28	1

Lab Sample ID: LCS 160-433597/1-A
Matrix: Water
Analysis Batch: 440197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 433597

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.91	9.839		1.16	1.00	0.434	pCi/L	110	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.0		40 - 110
Y Carrier	90.1		40 - 110

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Company:
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Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page ____ of ____

48hr. Temperature °C of Cooler: 3.8

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2Q19 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Noe L., Rob P.
Lab PM: Eric Lang

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total Metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
1		G205	06/18/19	1045	5	W		1	1	1	1	1					

500-165270 COC

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TAL	06/18/19	1455	Paula Dudley	TACH	6/18/19	1455
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: X
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

8/30/2019

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Address:
Address:
Phone: 500-165270 COC
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500 - 165270

Chain of Custody Number:

Page ____ of ____

48 hr.

Temperature °C of Cooler: 2.3

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2019 GW
Project Location/State: University Park, IL.
Lab Project #:
Sampler: Noe G, Rob P.
Lab PM: Eric Lang

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	A					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
2		G445	06/19/19	1054	5	W		✓	✓	✓	✓	✓					
3		G465	06/19/19	1200	5	W		✓	✓	✓	✓	✓					
4		R085	06/19/19	1305	5	W		✓	✓	✓	✓	✓					

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TAL	06/19/19	1448	[signature]	TA	6-19-19	1448
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

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Chain of Custody Record

Lab Job #: 500 - 165270

Chain of Custody Number:

Page _____ of _____

48 gf Temperature °C of Cooler: 2.6

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2019 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Noe Ly Rob P.
Lab PM: Eric Lang

500-165270 COC

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total Metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
5		T06S	06/20/19	1040	5	GW		✓	✓	✓	✓	✓					
6		T05S	06/20/19	1332	5	GW		✓	✓	✓	✓	✓					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TMI	06/20/19	1550	Paula Buckley	TACHI	6/20/19	1550
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: X
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

8/30/2019

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Chain of Custody Record

Lab Job #: 500 - 165270

Chain of Custody Number:

Page _____ of _____

48 gt

Temperature °C of Cooler: 0.5 - 2.5

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2Q19 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Nick L., Rob P.
Lab PM: Erin Lang

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8				
							Parameter	Radium 226	Radium 228	Radium 226/228	Total metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4				
7		T09S	06/21/19	0948	5	W		✓	✓	✓	✓	✓				
8		T08S	06/21/19	1247	5	W		✓	✓	✓	✓	✓				

500-165270 COC

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Comments

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TA	06/21/19	1505	Pallen Buckley	TA CAL	6/21/19	1505
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
							6/21/19
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: X
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

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THE LEADER IN ENVIRONMENTAL

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500-165270 COC

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Contact:
Company:
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Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page _____ of _____

Temperature °C of Cooler: 17-737

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2019 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Noe L.
Lab PM: Eric Lang

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total Metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
9		G31S	06/24/19	1000	5	G		✓	✓	✓	✓	✓					
10		DUP	06/24/19	1000	5	G		✓	✓	✓	✓	✓					DUP of G31S
11		G33S	06/24/19	1237	5	G		✓	✓	✓	✓	✓					
12		T03S	06/24/19	1358	5	G		✓	✓	✓	✓	✓					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TAL	06/24/19	1525	[signature]	TA-CHI	6/25/19	0750
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL

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500-165270 COC

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page _____ of _____

48 hr, Temperature °C of Cooler: 3.3

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2019 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Ric L., Rob P.
Lab PM: Eric Lang

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
13		TO2S	06/25/19	0934	5	W		✓	✓	✓	✓	✓					
14		G48S	06/25/19	1336	5	W		✓	✓	✓	✓	✓					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TA	06/25/19	1529	[signature] Scott	TA-CHI	6/25/19	1529
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

8/30/2019

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page ____ of ____

48hr Temperature °C of Cooler: 0.1 +2.1

Client	Client Project #
Midwest Generation EME LLC	
Project Name	
Joliet #9 CCR-2019 GW	
Project Location/State	**Lab Project #**
University Park, IL	
Sampler	**Lab PM**
Nic L., Rob P.	Erik Lang

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					
							Parameter	Radium 226	Radium 228	Radium 226/228	Total metals As, B, Ba, Ca, Co, Fe, Li, Mo, Sr	TDS, Fl, Cl, SO4					
15		TOIS	06/26/19	0927	5	W		✓	✓	✓	✓	✓					
16		G30S	06/26/19	1318	5	W		✓	✓	✓	✓	✓					

500-165270 COC

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Comments

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TMC	06/26/19	1528	Dawn Buckley	TACHT	6/26/19	1528
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier X
Shipped
Hand Delivered

Matrix Key

WW – Wastewater	SE – Sediment
W – Water	SO – Soil
S – Soil	L – Leachate
SL – Sludge	WI – Wipe
MS – Miscellaneous	DW – Drinking Water
OL – Oil	O – Other
A – Air	

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.534.

500-165270 COC

(optional)

Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)

Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page _____ of _____

Temperature °C of Cooler: 3.3

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR-2019 GW
Project Location/State: University Park IL
Lab Project #:
Sampler: Noe L., Rob P.
Lab PM: Erik Lang

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total Metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
17		R32S	06/27/19	1159	5	W		✓	✓	✓	✓	✓					
18		T04S	06/27/19	1315	5	W		✓	✓	✓	✓	✓					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[illegible]	TA	06/27/19	1533	Ellie Roth	TA-CHI	6/28/19	1533
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments:

Lab Comments:

TAL-4124-509 (1209)

8/30/2019

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 604
Phone: 708.534.5200 Fax: 708.534.

500-165270 COC

(optional)

Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)

Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-165270

Chain of Custody Number:

Page _____ of _____

30 gal. Temperature °C of Cooler: 0.3 → 1.8

Client: Midwest Generation EME LLC
Client Project #:
Project Name: Joliet #9 CCR - 2019 GW
Project Location/State: University Park, IL
Lab Project #:
Sampler: Nose L., Rob
Lab PM: Erik Lang

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	3	3	8					Comments
							Parameter	Radium 226	Radium 228	Radium 226/228	Total metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4					
19		G47S	06/28/19	0910	5	W		1	1	1	1	1					
20		G45S	06/28/19	1031	5	W		1	1	1	1	1					

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

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

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TAL	06/28/19	1207	[signature]	TA-CHI	6/28/19	1207
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: TA
Shipped:
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122416.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/16/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
G20S (500-165270-1)	6/18/19	10:45 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

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

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:
Relinquished by: [signature] Date/Time: 6/18/19 1600 Company TA-CHI	Received by: [signature] Date/Time: 6/19/19 09:30 Company TA STL
Relinquished by: Date/Time: Company	Received by: Date/Time: Company
Relinquished by: Date/Time: Company	Received by: Date/Time: Company
Custody Seals Intact: Δ Yes Δ No Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122461.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 6/28/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
G44S (500-165270-2)	6/19/19	10:54 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G46S (500-165270-3)	6/19/19	12:00 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
R08S (500-165270-4)	6/19/19	13:05 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

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

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

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

Relinquished by:	Date/Time: 6/19/19 1600	Company TA	Received by:	Date/Time: 6/20/19 11:15	Company TA STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122580.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/16/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045	PO #:			
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	WO #:			
Email:	Project #: 50011504			
Project Name: Joliet #9 CCR	SSOW#:			
Site: NRG Midwest Generation LSQ Joliet #9 CCR				

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
T06S (500-165270-5)	6/20/19	10:40 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T05S (500-165270-6)	6/20/19	13:32 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T09S (500-165270-7)	6/21/19	09:48 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T08S (500-165270-8)	6/21/19	12:47 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

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

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

	Date/Time	Company		Date/Time	Company
Relinquished by:	6-24-19 1600	TA	Received by:	6/26/19 08:35	TA STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122580.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/16/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
T06S (500-165270-5)	6/20/19	10:40 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T05S (500-165270-6)	6/20/19	13:32 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T09S (500-165270-7)	6/21/19	09:48 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T08S (500-165270-8)	6/21/19	12:47 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		6-24-19 1600	TA		6/26/19 08:35	TA STL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122645.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 6/28/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
T02S (500-165270-13)	6/25/19	09:34 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G48S (500-165270-14)	6/25/19	13:36 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

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

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by: Date:	Time: Method of Shipment:

Relinquished by:	Date/Time: 6/25/19 1600	Company TA	Received by: Michael Hum	Date/Time: 6-26-19 09:45	Company TA STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

8/30/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122622.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 6/28/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
G31S (500-165270-9)	6/24/19	10:00 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
DUP (500-165270-10)	6/24/19	10:00 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G33S (500-165270-11)	6/24/19	12:37 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T03S (500-165270-12)	6/24/19	13:58 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: [signature]	Date/Time: 6/25/19 1315	Company: TA-CHI	Received by: [signature] Date/Time: 6-26-19 0945 Company: TASL
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

8/30/2019

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122681.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 6/28/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
T01S (500-165270-15)	6/26/19	09:27 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G30S (500-165270-16)	6/26/19	13:18 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

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

Possible Hazard Identification
Unconfirmed

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 6/26/19 1555	Company TA-CHI	Received by:		Date/Time: 6/27/19 09:20	Company TASTL	
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company	

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122724.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 6/28/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
R32S (500-165270-17)	6/27/19	11:59 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T04S (500-165270-18)	6/27/19	13:15 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Allen Leavell	Date/Time: 6/27/19 1550	Company: TAL CHI	Received by:	Date/Time: 6/28/19 09:00	Company: EASTL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-122751.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-165270-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/10/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
G47S (500-165270-19)	6/28/19	09:10 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G45S (500-165270-20)	6/28/19	10:31 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 6/28/19 1500	Company TA	Received by:	Date/Time: 6/29/19 08:00	Company TA STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-2

Login Number: 165270
List Number: 1
Creator: Buckley, Paula M

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8, 2.3, 2.6, 2.5,3.7,3.3, 2.1,3.3,1.8
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-2

Login Number: 165270
List Number: 2
Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/19/19 11:13 AM

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

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-2

Login Number: 165270
List Number: 3
Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/20/19 12:00 PM

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

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-2

Login Number: 165270
List Number: 5
Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/25/19 01:45 PM

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

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-2

Login Number: 165270
List Number: 6
Creator: Hellm, Michael

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/26/19 12:33 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	17.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-2

Login Number: 165270
List Number: 9
Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/27/19 02:28 PM

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

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-2

Login Number: 165270
List Number: 11
Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/28/19 12:14 PM

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

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-165270-2

Login Number: 165270
List Number: 13
Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/29/19 10:51 AM

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

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G20S
Date Collected: 06/18/19 10:45
Date Received: 06/18/19 14:55

Lab Sample ID: 500-165270-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			432651	06/24/19 12:50	KAW	TAL SL
Total/NA	Analysis	903.0		1	440777	08/24/19 11:51	CDR	TAL SL
Total/NA	Prep	PrecSep_0			432660	06/24/19 14:17	KAW	TAL SL
Total/NA	Analysis	904.0		1	440426	08/23/19 09:18	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	441027	08/28/19 07:50	SMP	TAL SL

Client Sample ID: G44S
Date Collected: 06/19/19 10:54
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			432651	06/24/19 12:50	KAW	TAL SL
Total/NA	Analysis	903.0		1	440777	08/24/19 13:39	CDR	TAL SL
Total/NA	Prep	PrecSep_0			432660	06/24/19 14:17	KAW	TAL SL
Total/NA	Analysis	904.0		1	440426	08/23/19 09:18	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	441027	08/28/19 07:50	SMP	TAL SL

Client Sample ID: G46S
Date Collected: 06/19/19 12:00
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			432651	06/24/19 12:50	KAW	TAL SL
Total/NA	Analysis	903.0		1	440777	08/24/19 11:53	CDR	TAL SL
Total/NA	Prep	PrecSep_0			432660	06/24/19 14:17	KAW	TAL SL
Total/NA	Analysis	904.0		1	440423	08/23/19 09:21	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	441027	08/28/19 07:50	SMP	TAL SL

Client Sample ID: R08S
Date Collected: 06/19/19 13:05
Date Received: 06/19/19 14:48

Lab Sample ID: 500-165270-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			432651	06/24/19 12:50	KAW	TAL SL
Total/NA	Analysis	903.0		1	440777	08/24/19 11:53	CDR	TAL SL
Total/NA	Prep	PrecSep_0			432660	06/24/19 14:17	KAW	TAL SL
Total/NA	Analysis	904.0		1	440423	08/23/19 09:21	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	441027	08/28/19 07:50	SMP	TAL SL

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: T06S
Date Collected: 06/20/19 10:40
Date Received: 06/20/19 15:50

Lab Sample ID: 500-165270-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433127	06/28/19 09:25	KAW	TAL SL
Total/NA	Analysis	903.0		1	440198	08/22/19 07:29	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433143	06/28/19 10:38	KAW	TAL SL
Total/NA	Analysis	904.0		1	440167	08/21/19 14:01	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440892	08/27/19 10:59	SMP	TAL SL

Client Sample ID: T05S
Date Collected: 06/20/19 13:32
Date Received: 06/20/19 15:50

Lab Sample ID: 500-165270-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433127	06/28/19 09:25	KAW	TAL SL
Total/NA	Analysis	903.0		1	440198	08/22/19 07:29	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433143	06/28/19 10:38	KAW	TAL SL
Total/NA	Analysis	904.0		1	440167	08/21/19 14:02	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440892	08/27/19 10:59	SMP	TAL SL

Client Sample ID: T09S
Date Collected: 06/21/19 09:48
Date Received: 06/21/19 15:05

Lab Sample ID: 500-165270-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433127	06/28/19 09:25	KAW	TAL SL
Total/NA	Analysis	903.0		1	440198	08/22/19 07:29	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433143	06/28/19 10:38	KAW	TAL SL
Total/NA	Analysis	904.0		1	440167	08/21/19 14:02	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440892	08/27/19 10:59	SMP	TAL SL

Client Sample ID: T08S
Date Collected: 06/21/19 12:47
Date Received: 06/21/19 15:05

Lab Sample ID: 500-165270-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433127	06/28/19 09:25	KAW	TAL SL
Total/NA	Analysis	903.0		1	440198	08/22/19 07:29	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433143	06/28/19 10:38	KAW	TAL SL
Total/NA	Analysis	904.0		1	440167	08/21/19 14:02	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440892	08/27/19 10:59	SMP	TAL SL

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: G31S

Lab Sample ID: 500-165270-9
Date Collected: 06/24/19 10:00
Matrix: Water
Date Received: 06/24/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433127	06/28/19 09:25	KAW	TAL SL
Total/NA	Analysis	903.0		1	440199	08/22/19 07:39	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433143	06/28/19 10:38	KAW	TAL SL
Total/NA	Analysis	904.0		1	440167	08/21/19 14:02	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440892	08/27/19 10:59	SMP	TAL SL

Client Sample ID: DUP

Lab Sample ID: 500-165270-10
Date Collected: 06/24/19 10:00
Matrix: Water
Date Received: 06/24/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433127	06/28/19 09:25	KAW	TAL SL
Total/NA	Analysis	903.0		1	440199	08/22/19 07:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433143	06/28/19 10:38	KAW	TAL SL
Total/NA	Analysis	904.0		1	440167	08/21/19 14:02	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440892	08/27/19 10:59	SMP	TAL SL

Client Sample ID: G33S

Lab Sample ID: 500-165270-11
Date Collected: 06/24/19 12:37
Matrix: Water
Date Received: 06/24/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433127	06/28/19 09:25	KAW	TAL SL
Total/NA	Analysis	903.0		1	440199	08/22/19 07:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433143	06/28/19 10:38	KAW	TAL SL
Total/NA	Analysis	904.0		1	440167	08/21/19 14:02	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440892	08/27/19 10:59	SMP	TAL SL

Client Sample ID: T03S

Lab Sample ID: 500-165270-12
Date Collected: 06/24/19 13:58
Matrix: Water
Date Received: 06/24/19 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433127	06/28/19 09:25	KAW	TAL SL
Total/NA	Analysis	903.0		1	440199	08/22/19 07:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433143	06/28/19 10:38	KAW	TAL SL
Total/NA	Analysis	904.0		1	440167	08/21/19 14:02	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440892	08/27/19 10:59	SMP	TAL SL

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: T02S
Date Collected: 06/25/19 09:34
Date Received: 06/25/19 15:29

Lab Sample ID: 500-165270-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433127	06/28/19 09:25	KAW	TAL SL
Total/NA	Analysis	903.0		1	440199	08/22/19 07:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433143	06/28/19 10:38	KAW	TAL SL
Total/NA	Analysis	904.0		1	440167	08/21/19 14:02	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440892	08/27/19 10:59	SMP	TAL SL

Client Sample ID: G48S
Date Collected: 06/25/19 13:36
Date Received: 06/25/19 15:29

Lab Sample ID: 500-165270-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433127	06/28/19 09:25	KAW	TAL SL
Total/NA	Analysis	903.0		1	440199	08/22/19 07:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433143	06/28/19 10:38	KAW	TAL SL
Total/NA	Analysis	904.0		1	440166	08/21/19 14:07	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440892	08/27/19 10:59	SMP	TAL SL

Client Sample ID: T01S
Date Collected: 06/26/19 09:27
Date Received: 06/26/19 15:28

Lab Sample ID: 500-165270-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433589	07/02/19 16:38	ORM	TAL SL
Total/NA	Analysis	903.0		1	440198	08/22/19 16:29	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433597	07/02/19 17:39	ORM	TAL SL
Total/NA	Analysis	904.0		1	440197	08/22/19 09:18	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440879	08/27/19 10:08	SMP	TAL SL

Client Sample ID: G30S
Date Collected: 06/26/19 13:18
Date Received: 06/26/19 15:28

Lab Sample ID: 500-165270-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433589	07/02/19 16:38	ORM	TAL SL
Total/NA	Analysis	903.0		1	440198	08/22/19 16:29	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433597	07/02/19 17:39	ORM	TAL SL
Total/NA	Analysis	904.0		1	440197	08/22/19 09:19	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440879	08/27/19 10:08	SMP	TAL SL

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Client Sample ID: R32S
Date Collected: 06/27/19 11:59
Date Received: 06/27/19 15:33

Lab Sample ID: 500-165270-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433589	07/02/19 16:38	ORM	TAL SL
Total/NA	Analysis	903.0		1	440198	08/22/19 16:30	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433597	07/02/19 17:39	ORM	TAL SL
Total/NA	Analysis	904.0		1	440197	08/22/19 09:19	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440879	08/27/19 10:08	SMP	TAL SL

Client Sample ID: T04S
Date Collected: 06/27/19 13:15
Date Received: 06/27/19 15:33

Lab Sample ID: 500-165270-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433589	07/02/19 16:38	ORM	TAL SL
Total/NA	Analysis	903.0		1	440198	08/22/19 16:30	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433597	07/02/19 17:39	ORM	TAL SL
Total/NA	Analysis	904.0		1	440197	08/22/19 09:19	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440879	08/27/19 10:08	SMP	TAL SL

Client Sample ID: G47S
Date Collected: 06/28/19 09:10
Date Received: 06/28/19 12:07

Lab Sample ID: 500-165270-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433589	07/02/19 16:38	ORM	TAL SL
Total/NA	Analysis	903.0		1	440198	08/22/19 16:30	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433597	07/02/19 17:39	ORM	TAL SL
Total/NA	Analysis	904.0		1	440198	08/22/19 09:22	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440879	08/27/19 10:08	SMP	TAL SL

Client Sample ID: G45S
Date Collected: 06/28/19 10:31
Date Received: 06/28/19 12:07

Lab Sample ID: 500-165270-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			433589	07/02/19 16:38	ORM	TAL SL
Total/NA	Analysis	903.0		1	440198	08/22/19 16:30	KLS	TAL SL
Total/NA	Prep	PrecSep_0			433597	07/02/19 17:39	ORM	TAL SL
Total/NA	Analysis	904.0		1	440198	08/22/19 09:22	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440879	08/27/19 10:08	SMP	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Tracer/Carrier Summary

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 CCR

Job ID: 500-165270-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits) Ba Carrier (40-110)
500-165270-1	G20S	95.8
500-165270-2	G44S	93.5
500-165270-3	G46S	93.5
500-165270-4	R08S	95.5
500-165270-5	T06S	83.3
500-165270-5 DU	T06S	79.1
500-165270-6	T05S	79.7
500-165270-7	T09S	84.7
500-165270-8	T08S	83.6
500-165270-9	G31S	84.7
500-165270-10	DUP	84.2
500-165270-11	G33S	79.1
500-165270-12	T03S	82.2
500-165270-13	T02S	79.1
500-165270-14	G48S	79.9
500-165270-15	T01S	76.6
500-165270-16	G30S	78.5
500-165270-17	R32S	79.9
500-165270-18	T04S	72.9
500-165270-19	G47S	76.6
500-165270-20	G45S	81.6
LCS 160-432651/1-A	Lab Control Sample	94.1
LCS 160-433127/1-A	Lab Control Sample	83.6
LCS 160-433589/1-A	Lab Control Sample	85.0
MB 160-432651/24-A	Method Blank	87.6
MB 160-433127/23-A	Method Blank	82.8
MB 160-433589/24-A	Method Blank	83.9

Tracer/Carrier Legend

Ba Carrier = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits) Ba Carrier (40-110)	Y Carrier (40-110)
500-165270-1	G20S	95.8	95.3
500-165270-2	G44S	93.5	88.2
500-165270-3	G46S	93.5	81.5
500-165270-4	R08S	95.5	83.4
500-165270-5	T06S	83.3	86.7
500-165270-5 DU	T06S	79.1	83.0
500-165270-6	T05S	79.7	84.1
500-165270-7	T09S	84.7	102
500-165270-8	T08S	83.6	89.3
500-165270-9	G31S	84.7	85.6
500-165270-10	DUP	84.2	89.3
500-165270-11	G33S	79.1	87.1
500-165270-12	T03S	82.2	88.6

Tracer/Carrier Summary

Client: KPRG and Associates, Inc.
Job ID: 500-165270-2
Project/Site: Joliet #9 CCR

Method: 904.0 - Radium-228 (GFPC) (Continued)

Matrix: Water
Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits) Ba Carrier (40-110)	Y Carrier (40-110)
500-165270-13	T02S	79.1	90.1
500-165270-14	G48S	79.9	81.5
500-165270-15	T01S	76.6	90.1
500-165270-16	G30S	78.5	89.0
500-165270-17	R32S	79.9	92.0
500-165270-18	T04S	72.9	85.2
500-165270-19	G47S	76.6	89.0
500-165270-20	G45S	81.6	89.3
LCS 160-432660/1-A	Lab Control Sample	94.1	87.1
LCS 160-433143/1-A	Lab Control Sample	83.6	84.5
LCS 160-433597/1-A	Lab Control Sample	85.0	90.1
MB 160-432660/24-A	Method Blank	87.6	78.9
MB 160-433143/23-A	Method Blank	82.8	82.2
MB 160-433597/24-A	Method Blank	83.9	91.2

Tracer/Carrier Legend

Ba Carrier = Ba Carrier
Y Carrier = Y Carrier

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 500-172766-1
Client Project/Site: Lincoln Stone Quarry - 4Q19 Routine

For:
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Attn: Peter O'Day

Authorized for release by:
12/2/2019 5:14:29 PM

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

LINKS

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

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

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Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Job ID: 500-172766-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-172766-1

Comments
No additional comments.

Receipt
The samples were received on 11/1/2019 3:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 11 coolers at receipt time were 2.9º C, 3.4º C, 3.6º C, 3.7º C, 4.2º C, 4.6º C, 4.7º C, 5.1º C, 5.3º C, 5.4º C and 5.9º C.

GC/MS Semi VOA
Method 8270D: Surrogate recovery for the following samples were outside the upper control limit: G42S (500-172766-4) and G42D (500-172766-5). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: The following samples contained one base surrogate outside acceptance limits: The laboratory's SOP allows one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified. G41S (500-172766-2) and G33D (500-172766-3)

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

Metals
Method 6010B: The continuing calibration blanks (CCB) contained Zinc above the reporting limit (RL). The sample G41S (500-172766-2) associated with this CCB did not contain the target compound; therefore, re-analysis of samples was not performed.

Method 6010B: The continuing calibration verification (CCV) associated with batch 500-517287 recovered above the upper control limit for iron. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 6010B: The continuing calibration verification (CCV) associated with batch 500-517287 recovered above the upper control limit for zinc. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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

General Chemistry
Method 9056A: The matrix spike and duplicate (MS/MSD) for Sulfate is routinely spiked at a level below the client's requested reporting limit (RL). The MS/MSD are reported as ND, but met recovery criteria.

(500-172766-J-4 MS) and (500-172766-J-4 MSD)

Method SM 4500 NO3 F: The CCV bracketing the following samples was slightly outside acceptance limits for Nitrogen, Nitrate Nitrite. The samples had been run multiple times with similar results. The samples have been reported. G47D (500-172766-15), R08D (500-172766-16), R08S (500-172766-17), G39S (500-172766-18), G44S (500-172766-19), G44D (500-172766-20), G46D (500-172766-21), G46S (500-172766-22) and G31D (500-172766-23)

Method SM 4500 NO3 F: The following sample was analyzed multiple times with a similar result. The bracketing CCV recovered outside acceptance limits for Nitrogen, Nitrate Nitrite at 89% Rec. The Samples were qualified and reported.
G45S (500-172766-27), G38D (500-172766-28) and G38S (500-172766-29)

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

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

Method Summary

Client: Midwest Generation EME LLC
Job ID: 500-172766-1
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Method	Method Description	Protocol	Laboratory
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
6010B	Dissolved Metals	SW846	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
2540 C	Total Dissolved Solids - SM 20th Ed.	SM20	TAL CHI
9056A	Anions, Ion Chromatography	SW846	TAL CHI
Nitrate by calc	Nitrogen, Nitrate-Nitrite	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 NH3 G	Ammonia	SM	TAL CHI
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	TAL CHI
Field Sampling	Field Sampling	EPA	TAL CHI
3010A	Preparation, Total Metals	SW846	TAL CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI
SM 4500 NH3 B	Distillation, Ammonia	SM	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

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

Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-172766-1	G41D	Water	11/01/19 10:26	11/01/19 15:20	
500-172766-2	G41S	Water	11/01/19 11:20	11/01/19 15:20	
500-172766-3	G33D	Water	11/01/19 14:10	11/01/19 15:20	
500-172766-4	G42S	Water	11/04/19 09:30	11/04/19 16:13	
500-172766-5	G42D	Water	11/04/19 11:29	11/04/19 16:13	
500-172766-6	G33S	Water	11/04/19 14:27	11/04/19 16:13	
500-172766-7	G20S	Water	11/05/19 09:34	11/05/19 15:20	
500-172766-8	R16D	Water	11/05/19 13:37	11/05/19 15:20	
500-172766-9	G30S	Water	11/06/19 10:18	11/06/19 15:27	
500-172766-10	G30D	Water	11/06/19 12:54	11/06/19 15:27	
500-172766-11	R32S	Water	11/06/19 14:19	11/06/19 15:27	
500-172766-12	G48D	Water	11/07/19 09:23	11/07/19 15:27	
500-172766-13	G48S	Water	11/07/19 10:41	11/07/19 15:27	
500-172766-14	G47S	Water	11/07/19 13:00	11/07/19 15:27	
500-172766-15	G47D	Water	11/07/19 14:00	11/07/19 15:27	
500-172766-16	R08D	Water	11/11/19 10:56	11/11/19 15:44	
500-172766-17	R08S	Water	11/11/19 12:30	11/11/19 15:44	
500-172766-18	G39S	Water	11/11/19 14:13	11/11/19 15:44	
500-172766-19	G44S	Water	11/12/19 13:30	11/12/19 15:25	
500-172766-20	G44D	Water	11/12/19 14:19	11/12/19 15:25	
500-172766-21	G46D	Water	11/13/19 10:20	11/13/19 15:22	
500-172766-22	G46S	Water	11/13/19 11:42	11/13/19 15:22	
500-172766-23	G31D	Water	11/13/19 13:11	11/13/19 15:22	
500-172766-24	G31S	Water	11/13/19 14:14	11/13/19 15:22	
500-172766-25	S501	Water	11/14/19 08:55	11/14/19 13:40	
500-172766-26	P40S	Water	11/14/19 09:10	11/14/19 13:40	
500-172766-27	G45S	Water	11/14/19 09:51	11/14/19 13:40	
500-172766-28	G38D	Water	11/14/19 11:26	11/14/19 13:40	
500-172766-29	G38S	Water	11/14/19 12:17	11/14/19 13:40	

Client Sample ID: G41D
Date Collected: 11/01/19 10:26
Date Received: 11/01/19 15:20

Lab Sample ID: 500-172766-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.19		ug/L		11/05/19 07:46	11/06/19 10:08	1
Fluoranthene	ND		0.94		ug/L		11/05/19 07:46	11/06/19 10:08	1
Pyrene	ND		0.94		ug/L		11/05/19 07:46	11/06/19 10:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*36*		*36 - 120*	*11/05/19 07:46*	*11/06/19 10:08*	*1*
2-Fluorobiphenyl (Surr)	*69*		*34 - 110*	*11/05/19 07:46*	*11/06/19 10:08*	*1*
Terphenyl-d14 (Surr)	*106*		*40 - 145*	*11/05/19 07:46*	*11/06/19 10:08*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 04:25	1
Barium	**31**		10		ug/L		11/13/19 16:55	11/15/19 04:25	1
Boron	**1800**		50		ug/L		11/13/19 16:55	11/15/19 04:25	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 04:25	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 04:25	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 04:25	1
Potassium	**10**		0.50		mg/L		11/13/19 16:55	11/15/19 04:25	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 04:25	1
Sodium	**190**		1.0		mg/L		11/13/19 16:55	11/15/19 04:25	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 04:25	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**31**		10		ug/L		11/13/19 16:53	11/15/19 03:00	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 03:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**540**		10		mg/L			11/06/19 05:59	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**33**		5.0		mg/L			11/14/19 19:55	10
Nitrogen, Nitrate	ND		0.10		mg/L			11/27/19 18:29	1
Chloride	**15**		2.0		mg/L			11/14/19 14:50	1
Fluoride	**3.1**		0.10		mg/L			11/05/19 12:09	1
Ammonia	**0.74**		0.20		mg/L		11/21/19 09:45	11/21/19 12:21	1
DOC Dup	ND		1.0		mg/L			11/12/19 17:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**23.38**				ft			11/01/19 10:26	1
Depth to Water (ft from MP)	**25.51**				ft			11/01/19 10:26	1
Elevation of well (ft from MP)	**535.76**				ft			11/01/19 10:26	1
Field pH	**7.86**				SU			11/01/19 10:26	1
Field Temperature	**55.9**				Degrees F			11/01/19 10:26	1
Ground Water Elevation	**510.25**				ft			11/01/19 10:26	1
Specific Conductance	**720**				umhos/cm			11/01/19 10:26	1
Well bottom elevation	**378.43**				ft			11/01/19 10:26	1

Client Sample ID: G41S
Date Collected: 11/01/19 11:20
Date Received: 11/01/19 15:20

Lab Sample ID: 500-172766-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/05/19 07:46	11/06/19 10:35	1
Fluoranthene	ND		0.82		ug/L		11/05/19 07:46	11/06/19 10:35	1
Pyrene	ND		0.82		ug/L		11/05/19 07:46	11/06/19 10:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*27*	*X*	*36 - 120*	*11/05/19 07:46*	*11/06/19 10:35*	*1*
2-Fluorobiphenyl (Surr)	*64*		*34 - 110*	*11/05/19 07:46*	*11/06/19 10:35*	*1*
Terphenyl-d14 (Surr)	*91*		*40 - 145*	*11/05/19 07:46*	*11/06/19 10:35*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 04:29	1
Barium	**40**		10		ug/L		11/13/19 16:55	11/15/19 04:29	1
Boron	**2200**		50		ug/L		11/13/19 16:55	11/15/19 04:29	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 04:29	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 04:29	1
Molybdenum	**48**		10		ug/L		11/13/19 16:55	11/15/19 04:29	1
Potassium	**13**		0.50		mg/L		11/13/19 16:55	11/15/19 04:29	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 04:29	1
Sodium	**53**		1.0		mg/L		11/13/19 16:55	11/15/19 04:29	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 04:29	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**40**		10		ug/L		11/13/19 16:53	11/15/19 03:21	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 03:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**740**		10		mg/L			11/06/19 06:06	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**200**		10		mg/L			11/14/19 20:07	50
Nitrogen, Nitrate	ND		0.10		mg/L			11/27/19 18:29	1
Chloride	**87**		10		mg/L			11/14/19 15:27	5
Fluoride	**0.46**		0.10		mg/L			11/05/19 12:18	1
Ammonia	**0.70**		0.20		mg/L		11/21/19 09:45	11/21/19 12:29	1
DOC Dup	**1.9**		1.0		mg/L			11/12/19 18:10	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**21.71**				ft			11/01/19 11:20	1
Depth to Water (ft from MP)	**24.00**				ft			11/01/19 11:20	1
Elevation of well (ft from MP)	**535.86**				ft			11/01/19 11:20	1
Field pH	**7.71**				SU			11/01/19 11:20	1
Field Temperature	**53.1**				Degrees F			11/01/19 11:20	1
Ground Water Elevation	**511.86**				ft			11/01/19 11:20	1
Specific Conductance	**884**				umhos/cm			11/01/19 11:20	1
Well bottom elevation	**453.96**				ft			11/01/19 11:20	1

Client Sample ID: G33D
Date Collected: 11/01/19 14:10
Date Received: 11/01/19 15:20

Lab Sample ID: 500-172766-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/05/19 07:46	11/06/19 11:02	1
Fluoranthene	ND		0.80		ug/L		11/05/19 07:46	11/06/19 11:02	1
Pyrene	ND		0.80		ug/L		11/05/19 07:46	11/06/19 11:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*19*	*X*	*36 - 120*	*11/05/19 07:46*	*11/06/19 11:02*	*1*
2-Fluorobiphenyl (Surr)	*55*		*34 - 110*	*11/05/19 07:46*	*11/06/19 11:02*	*1*
Terphenyl-d14 (Surr)	*86*		*40 - 145*	*11/05/19 07:46*	*11/06/19 11:02*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 04:33	1
Barium	**61**		10		ug/L		11/13/19 16:55	11/15/19 04:33	1
Boron	**1600**		50		ug/L		11/13/19 16:55	11/15/19 04:33	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 04:33	1
Manganese	**13**		10		ug/L		11/13/19 16:55	11/15/19 04:33	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 04:33	1
Potassium	**14**		0.50		mg/L		11/13/19 16:55	11/15/19 04:33	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 04:33	1
Sodium	**120**		1.0		mg/L		11/13/19 16:55	11/15/19 04:33	1
Zinc	**21**		20		ug/L		11/13/19 16:55	11/15/19 13:21	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**59**		10		ug/L		11/13/19 16:53	11/15/19 03:25	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 03:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**490**		10		mg/L			11/06/19 06:12	1
Nitrogen, Nitrate	**0.62**		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**62**		5.0		mg/L			11/14/19 20:20	20
Nitrogen, Nitrate	ND		0.10		mg/L			11/27/19 18:29	1
Chloride	**5.9**		2.0		mg/L			11/14/19 14:52	1
Fluoride	**1.6**		0.10		mg/L			11/05/19 12:21	1
Ammonia	**0.85**		0.20		mg/L		11/21/19 09:45	11/21/19 12:32	1
DOC Dup	ND		1.0		mg/L			11/12/19 18:26	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**22.00**				ft			11/01/19 14:10	1
Depth to Water (ft from MP)	**24.35**				ft			11/01/19 14:10	1
Elevation of well (ft from MP)	**536.20**				ft			11/01/19 14:10	1
Field pH	**7.65**				SU			11/01/19 14:10	1
Field Temperature	**55.4**				Degrees F			11/01/19 14:10	1
Ground Water Elevation	**511.85**				ft			11/01/19 14:10	1
Specific Conductance	**661**				umhos/cm			11/01/19 14:10	1
Well bottom elevation	**369.10**				ft			11/01/19 14:10	1

Client Sample ID: G42S
Date Collected: 11/04/19 09:30
Date Received: 11/04/19 16:13

Lab Sample ID: 500-172766-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/05/19 16:53	11/20/19 17:15	1
Fluoranthene	ND		0.79		ug/L		11/05/19 16:53	11/20/19 17:15	1
Pyrene	ND		0.79		ug/L		11/05/19 16:53	11/20/19 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*105*		*36 - 120*	*11/05/19 16:53*	*11/20/19 17:15*	*1*
2-Fluorobiphenyl (Surr)	*112*	*X*	*34 - 110*	*11/05/19 16:53*	*11/20/19 17:15*	*1*
Terphenyl-d14 (Surr)	*171*	*X*	*40 - 145*	*11/05/19 16:53*	*11/20/19 17:15*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 04:46	1
Barium	**16**		10		ug/L		11/13/19 16:55	11/15/19 04:46	1
Boron	**1900**		50		ug/L		11/13/19 16:55	11/15/19 04:46	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 04:46	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 04:46	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 04:46	1
Potassium	**9.9**		0.50		mg/L		11/13/19 16:55	11/15/19 04:46	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 04:46	1
Sodium	**240**		1.0		mg/L		11/13/19 16:55	11/15/19 04:46	1
Zinc	**45**		20		ug/L		11/13/19 16:55	11/15/19 04:46	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**17**		10		ug/L		11/13/19 16:53	11/15/19 03:29	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 03:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**630**		10		mg/L			11/06/19 06:14	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			11/14/19 20:32	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/27/19 18:29	1
Chloride	**17**		2.0		mg/L			11/14/19 14:53	1
Fluoride	**3.7**		0.10		mg/L			11/05/19 12:24	1
Ammonia	**0.68**		0.20		mg/L		11/21/19 09:45	11/21/19 12:35	1
DOC Dup	**1.1**		1.0		mg/L			11/12/19 18:43	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**8.12**				ft			11/04/19 09:30	1
Depth to Water (ft from MP)	**10.11**				ft			11/04/19 09:30	1
Elevation of well (ft from MP)	**528.56**				ft			11/04/19 09:30	1
Field pH	**7.66**				SU			11/04/19 09:30	1
Field Temperature	**55.8**				Degrees F			11/04/19 09:30	1
Ground Water Elevation	**518.45**				ft			11/04/19 09:30	1
Specific Conductance	**657**				umhos/cm			11/04/19 09:30	1
Well bottom elevation	**451.26**				ft			11/04/19 09:30	1

Client Sample ID: G42D
Date Collected: 11/04/19 11:29
Date Received: 11/04/19 16:13

Lab Sample ID: 500-172766-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/05/19 16:53	11/20/19 17:44	1
Fluoranthene	ND		0.78		ug/L		11/05/19 16:53	11/20/19 17:44	1
Pyrene	ND		0.78		ug/L		11/05/19 16:53	11/20/19 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*108*		*36 - 120*	*11/05/19 16:53*	*11/20/19 17:44*	*1*
2-Fluorobiphenyl (Surr)	*107*		*34 - 110*	*11/05/19 16:53*	*11/20/19 17:44*	*1*
Terphenyl-d14 (Surr)	*173*	*X*	*40 - 145*	*11/05/19 16:53*	*11/20/19 17:44*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 04:51	1
Barium	**23**		10		ug/L		11/13/19 16:55	11/15/19 04:51	1
Boron	**530**		50		ug/L		11/13/19 16:55	11/15/19 04:51	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 04:51	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 04:51	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 04:51	1
Potassium	**12**		0.50		mg/L		11/13/19 16:55	11/15/19 04:51	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 04:51	1
Sodium	**14**		1.0		mg/L		11/13/19 16:55	11/15/19 04:51	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 04:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**23**		10		ug/L		11/13/19 16:53	11/15/19 03:33	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 03:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**460**		10		mg/L			11/06/19 06:17	1
Nitrogen, Nitrate	**0.21**		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**76**		5.0		mg/L			11/14/19 21:09	20
Nitrogen, Nitrate	**0.31**		0.10		mg/L			11/29/19 19:27	1
Chloride	**31**		2.0		mg/L			11/14/19 14:54	1
Fluoride	**0.43**		0.10		mg/L			11/05/19 12:27	1
Ammonia	**0.23**		0.20		mg/L		11/21/19 09:45	11/21/19 12:37	1
DOC Dup	**1.4**		1.0		mg/L			11/12/19 18:59	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**11.90**				ft			11/04/19 11:29	1
Depth to Water (ft from MP)	**14.13**				ft			11/04/19 11:29	1
Elevation of well (ft from MP)	**528.83**				ft			11/04/19 11:29	1
Field pH	**7.91**				SU			11/04/19 11:29	1
Field Temperature	**57.0**				Degrees F			11/04/19 11:29	1
Ground Water Elevation	**514.70**				ft			11/04/19 11:29	1
Specific Conductance	**859**				umhos/cm			11/04/19 11:29	1
Well bottom elevation	**376.55**				ft			11/04/19 11:29	1

Client Sample ID: G33S

Date Collected: 11/04/19 14:27
Date Received: 11/04/19 16:13

Lab Sample ID: 500-172766-6

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/05/19 16:53	11/20/19 18:14	1
Fluoranthene	ND		0.78		ug/L		11/05/19 16:53	11/20/19 18:14	1
Pyrene	ND		0.78		ug/L		11/05/19 16:53	11/20/19 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*65*		*36 - 120*	*11/05/19 16:53*	*11/20/19 18:14*	*1*
2-Fluorobiphenyl (Surr)	*69*		*34 - 110*	*11/05/19 16:53*	*11/20/19 18:14*	*1*
Terphenyl-d14 (Surr)	*105*		*40 - 145*	*11/05/19 16:53*	*11/20/19 18:14*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 04:55	1
Barium	**48**		10		ug/L		11/13/19 16:55	11/15/19 04:55	1
Boron	**1400**		50		ug/L		11/13/19 16:55	11/15/19 04:55	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 04:55	1
Manganese	**22**		10		ug/L		11/13/19 16:55	11/15/19 04:55	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 04:55	1
Potassium	**15**		0.50		mg/L		11/13/19 16:55	11/15/19 04:55	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 04:55	1
Sodium	**84**		1.0		mg/L		11/13/19 16:55	11/15/19 04:55	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 04:55	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**79**		10		ug/L		11/13/19 16:53	11/15/19 03:50	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 03:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**470**		10		mg/L			11/06/19 06:19	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**60**		5.0		mg/L			11/14/19 21:21	10
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**4.8**		2.0		mg/L			11/14/19 14:55	1
Fluoride	**1.1**		0.10		mg/L			11/05/19 12:31	1
Ammonia	**0.61**		0.20		mg/L		11/21/19 09:45	11/21/19 12:40	1
DOC Dup	**1.8**		1.0		mg/L			11/12/19 19:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**22.36**				ft			11/04/19 14:27	1
Depth to Water (ft from MP)	**24.09**				ft			11/04/19 14:27	1
Elevation of well (ft from MP)	**535.66**				ft			11/04/19 14:27	1
Field pH	**7.59**				SU			11/04/19 14:27	1
Field Temperature	**55.6**				Degrees F			11/04/19 14:27	1
Ground Water Elevation	**511.57**				ft			11/04/19 14:27	1
Specific Conductance	**627**				umhos/cm			11/04/19 14:27	1
Well bottom elevation	**452.72**				ft			11/04/19 14:27	1

Client Sample ID: G20S
Lab Sample ID: 500-172766-7

Date Collected: 11/05/19 09:34
Matrix: Water

Date Received: 11/05/19 15:20

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/05/19 16:53	11/20/19 18:43	1
Fluoranthene	ND		0.81		ug/L		11/05/19 16:53	11/20/19 18:43	1
Pyrene	ND		0.81		ug/L		11/05/19 16:53	11/20/19 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*68*		*36 - 120*	*11/05/19 16:53*	*11/20/19 18:43*	*1*
2-Fluorobiphenyl (Surr)	*68*		*34 - 110*	*11/05/19 16:53*	*11/20/19 18:43*	*1*
Terphenyl-d14 (Surr)	*115*		*40 - 145*	*11/05/19 16:53*	*11/20/19 18:43*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 04:59	1
Barium	**50**		10		ug/L		11/13/19 16:55	11/15/19 04:59	1
Boron	**1200**		50		ug/L		11/13/19 16:55	11/15/19 04:59	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 04:59	1
Manganese	**140**		10		ug/L		11/13/19 16:55	11/15/19 04:59	1
Molybdenum	**21**		10		ug/L		11/13/19 16:55	11/15/19 04:59	1
Potassium	**13**		0.50		mg/L		11/13/19 16:55	11/15/19 04:59	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 04:59	1
Sodium	**42**		1.0		mg/L		11/13/19 16:55	11/15/19 04:59	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 04:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**48**		10		ug/L		11/13/19 16:53	11/15/19 03:54	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 03:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**410**		10		mg/L			11/06/19 06:22	1
Nitrogen, Nitrate	**0.29**		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**71**		5.0		mg/L			11/29/19 15:39	10
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**13**		2.0		mg/L			11/27/19 12:36	1
Fluoride	**0.74**		0.10		mg/L			11/22/19 21:57	1
Ammonia	**0.29**		0.20		mg/L		11/24/19 15:00	11/25/19 08:39	1
DOC Dup	**1.2**		1.0		mg/L			11/12/19 19:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**36.74**				ft			11/05/19 09:34	1
Depth to Water (ft from MP)	**39.52**				ft			11/05/19 09:34	1
Elevation of well (ft from MP)	**580.91**				ft			11/05/19 09:34	1
Field pH	**7.88**				SU			11/05/19 09:34	1
Field Temperature	**54.0**				Degrees F			11/05/19 09:34	1
Ground Water Elevation	**541.39**				ft			11/05/19 09:34	1
Specific Conductance	**568**				umhos/cm			11/05/19 09:34	1
Well bottom elevation	**442.28**				ft			11/05/19 09:34	1

Client Sample ID: R16D
Lab Sample ID: 500-172766-8

Date Collected: 11/05/19 13:37
Matrix: Water
Date Received: 11/05/19 15:20

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/05/19 16:53	11/20/19 19:13	1
Fluoranthene	ND		0.82		ug/L		11/05/19 16:53	11/20/19 19:13	1
Pyrene	ND		0.82		ug/L		11/05/19 16:53	11/20/19 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*77*		*36 - 120*	*11/05/19 16:53*	*11/20/19 19:13*	*1*
2-Fluorobiphenyl (Surr)	*77*		*34 - 110*	*11/05/19 16:53*	*11/20/19 19:13*	*1*
Terphenyl-d14 (Surr)	*121*		*40 - 145*	*11/05/19 16:53*	*11/20/19 19:13*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 05:04	1
Barium	**65**		10		ug/L		11/13/19 16:55	11/15/19 05:04	1
Boron	**910**		50		ug/L		11/13/19 16:55	11/15/19 05:04	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:04	1
Manganese	**12**		10		ug/L		11/13/19 16:55	11/15/19 05:04	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 05:04	1
Potassium	**17**		0.50		mg/L		11/13/19 16:55	11/15/19 05:04	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 05:04	1
Sodium	**200**		1.0		mg/L		11/13/19 16:55	11/15/19 05:04	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:04	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**65**		10		ug/L		11/13/19 16:53	11/15/19 03:58	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 03:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**820**		10		mg/L			11/06/19 06:25	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**130**		5.0		mg/L			11/14/19 22:22	25
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**110**		10		mg/L			11/14/19 15:27	5
Fluoride	**0.25**		0.10		mg/L			11/22/19 21:40	1
Ammonia	**0.96**		0.20		mg/L		11/24/19 15:00	11/25/19 08:47	1
DOC Dup	**1.5**		1.0		mg/L			11/12/19 19:49	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**51.98**				ft			11/05/19 13:37	1
Depth to Water (ft from MP)	**54.71**				ft			11/05/19 13:37	1
Elevation of well (ft from MP)	**581.09**				ft			11/05/19 13:37	1
Field pH	**7.49**				SU			11/05/19 13:37	1
Field Temperature	**55.4**				Degrees F			11/05/19 13:37	1
Ground Water Elevation	**526.38**				ft			11/05/19 13:37	1
Specific Conductance	**1106**				umhos/cm			11/05/19 13:37	1
Well bottom elevation	**385.45**				ft			11/05/19 13:37	1

Client Sample ID: G30S
Date Collected: 11/06/19 10:18
Date Received: 11/06/19 15:27

Lab Sample ID: 500-172766-9
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/07/19 15:45	11/23/19 13:29	1
Fluoranthene	ND		0.75		ug/L		11/07/19 15:45	11/23/19 13:29	1
Pyrene	ND		0.75		ug/L		11/07/19 15:45	11/23/19 13:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*61*		*36 - 120*	*11/07/19 15:45*	*11/23/19 13:29*	*1*
2-Fluorobiphenyl (Surr)	*64*		*34 - 110*	*11/07/19 15:45*	*11/23/19 13:29*	*1*
Terphenyl-d14 (Surr)	*101*		*40 - 145*	*11/07/19 15:45*	*11/23/19 13:29*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 05:08	1
Barium	**41**		10		ug/L		11/13/19 16:55	11/15/19 05:08	1
Boron	**4500**		50		ug/L		11/13/19 16:55	11/15/19 05:08	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:08	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 05:08	1
Molybdenum	**13**		10		ug/L		11/13/19 16:55	11/15/19 05:08	1
Potassium	**15**		0.50		mg/L		11/13/19 16:55	11/15/19 05:08	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 05:08	1
Sodium	**270**		1.0		mg/L		11/13/19 16:55	11/15/19 05:08	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:08	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**42**		10		ug/L		11/13/19 16:53	11/15/19 04:02	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1100**		10		mg/L			11/07/19 07:58	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**350**		20		mg/L			11/14/19 22:35	100
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**210**		10		mg/L			11/14/19 15:29	5
Fluoride	**1.1**		0.10		mg/L			11/22/19 22:14	1
Ammonia	**2.4**		0.20		mg/L		11/24/19 15:00	11/25/19 08:49	1
DOC Dup	**4.4**		1.0		mg/L			11/12/19 20:05	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**-0.97**				ft			11/06/19 10:18	1
Depth to Water (ft from MP)	**1.34**				ft			11/06/19 10:18	1
Elevation of well (ft from MP)	**524.70**				ft			11/06/19 10:18	1
Field pH	**7.99**				SU			11/06/19 10:18	1
Field Temperature	**49.1**				Degrees F			11/06/19 10:18	1
Ground Water Elevation	**523.36**				ft			11/06/19 10:18	1
Specific Conductance	**1476**				umhos/cm			11/06/19 10:18	1
Well bottom elevation	**462.58**				ft			11/06/19 10:18	1

Client Sample ID: G30D
Date Collected: 11/06/19 12:54
Date Received: 11/06/19 15:27

Lab Sample ID: 500-172766-10
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/07/19 15:45	11/23/19 13:53	1
Fluoranthene	ND		0.77		ug/L		11/07/19 15:45	11/23/19 13:53	1
Pyrene	ND		0.77		ug/L		11/07/19 15:45	11/23/19 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*53*		*36 - 120*	*11/07/19 15:45*	*11/23/19 13:53*	*1*
2-Fluorobiphenyl (Surr)	*58*		*34 - 110*	*11/07/19 15:45*	*11/23/19 13:53*	*1*
Terphenyl-d14 (Surr)	*96*		*40 - 145*	*11/07/19 15:45*	*11/23/19 13:53*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 05:13	1
Barium	**56**		10		ug/L		11/13/19 16:55	11/15/19 05:13	1
Boron	**1000**		50		ug/L		11/13/19 16:55	11/15/19 05:13	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:13	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 05:13	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 05:13	1
Potassium	**14**		0.50		mg/L		11/13/19 16:55	11/15/19 05:13	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 05:13	1
Sodium	**110**		1.0		mg/L		11/13/19 16:55	11/15/19 05:13	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**55**		10		ug/L		11/13/19 16:53	11/15/19 04:06	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**510**		10		mg/L			11/07/19 08:06	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**75**		5.0		mg/L			11/14/19 22:47	20
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**3.5**		2.0		mg/L			11/14/19 15:02	1
Fluoride	**0.75**		0.10		mg/L			11/22/19 22:17	1
Ammonia	**0.76**		0.20		mg/L		11/24/19 15:00	11/25/19 08:52	1
DOC Dup	**1.3**		1.0		mg/L			11/12/19 20:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**10.62**				ft			11/06/19 12:54	1
Depth to Water (ft from MP)	**13.04**				ft			11/06/19 12:54	1
Elevation of well (ft from MP)	**524.81**				ft			11/06/19 12:54	1
Field pH	**7.71**				SU			11/06/19 12:54	1
Field Temperature	**52.5**				Degrees F			11/06/19 12:54	1
Ground Water Elevation	**511.77**				ft			11/06/19 12:54	1
Specific Conductance	**691**				umhos/cm			11/06/19 12:54	1
Well bottom elevation	**389.30**				ft			11/06/19 12:54	1

Client Sample ID: R32S
Lab Sample ID: 500-172766-11

Date Collected: 11/06/19 14:19
Matrix: Water
Date Received: 11/06/19 15:27

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/07/19 15:45	11/23/19 15:11	1
Fluoranthene	ND		0.80		ug/L		11/07/19 15:45	11/23/19 15:11	1
Pyrene	ND		0.80		ug/L		11/07/19 15:45	11/23/19 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*60*		*36 - 120*	*11/07/19 15:45*	*11/23/19 15:11*	*1*
2-Fluorobiphenyl (Surr)	*68*		*34 - 110*	*11/07/19 15:45*	*11/23/19 15:11*	*1*
Terphenyl-d14 (Surr)	*91*		*40 - 145*	*11/07/19 15:45*	*11/23/19 15:11*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 05:17	1
Barium	**45**		10		ug/L		11/13/19 16:55	11/15/19 05:17	1
Boron	**4800**		50		ug/L		11/13/19 16:55	11/15/19 05:17	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:17	1
Manganese	**14**		10		ug/L		11/13/19 16:55	11/15/19 05:17	1
Molybdenum	**580**		10		ug/L		11/13/19 16:55	11/15/19 05:17	1
Potassium	**19**		0.50		mg/L		11/13/19 16:55	11/15/19 05:17	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 05:17	1
Sodium	**74**		1.0		mg/L		11/13/19 16:55	11/15/19 05:17	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**39**		10		ug/L		11/13/19 16:53	11/15/19 04:11	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**820**		10		mg/L			11/13/19 01:33	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**360**		20		mg/L			11/14/19 22:59	100
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**69**		2.0		mg/L			11/14/19 15:02	1
Fluoride	**0.27**		0.10		mg/L			11/22/19 22:22	1
Ammonia	**2.2**		0.20		mg/L		11/24/19 15:00	11/25/19 08:55	1
DOC Dup	**2.6**		1.0		mg/L			11/12/19 20:38	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**14.51**				ft			11/06/19 14:19	1
Depth to Water (ft from MP)	**16.54**				ft			11/06/19 14:19	1
Elevation of well (ft from MP)	**536.99**				ft			11/06/19 14:19	1
Field pH	**7.45**				SU			11/06/19 14:19	1
Field Temperature	**53.6**				Degrees F			11/06/19 14:19	1
Ground Water Elevation	**520.45**				ft			11/06/19 14:19	1
Specific Conductance	**785**				umhos/cm			11/06/19 14:19	1
Well bottom elevation	**457.84**				ft			11/06/19 14:19	1

Client Sample ID: G48D
Date Collected: 11/07/19 09:23
Date Received: 11/07/19 15:27

Lab Sample ID: 500-172766-12
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/08/19 08:19	11/20/19 19:42	1
Fluoranthene	ND		0.79		ug/L		11/08/19 08:19	11/20/19 19:42	1
Pyrene	ND		0.79		ug/L		11/08/19 08:19	11/20/19 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*79*		*36 - 120*	*11/08/19 08:19*	*11/20/19 19:42*	*1*
2-Fluorobiphenyl (Surr)	*87*		*34 - 110*	*11/08/19 08:19*	*11/20/19 19:42*	*1*
Terphenyl-d14 (Surr)	*115*		*40 - 145*	*11/08/19 08:19*	*11/20/19 19:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**25**		10		ug/L		11/13/19 16:53	11/15/19 04:15	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:15	1
Iron	**540**		200		ug/L		11/13/19 16:53	11/15/19 04:15	1
Lead	ND		5.0		ug/L		11/13/19 16:53	11/15/19 04:15	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 05:22	1
Barium	**25**		10		ug/L		11/13/19 16:55	11/15/19 05:22	1
Boron	**680**		50		ug/L		11/13/19 16:55	11/15/19 05:22	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:22	1
Manganese	**18**		10		ug/L		11/13/19 16:55	11/15/19 05:22	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 05:22	1
Potassium	**14**		0.50		mg/L		11/13/19 16:55	11/15/19 05:22	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 05:22	1
Sodium	**42**		1.0		mg/L		11/13/19 16:55	11/15/19 05:22	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		11/13/19 11:15	11/14/19 09:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**700**		10		mg/L			11/13/19 01:41	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**200**		20		mg/L			11/14/19 23:12	100
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**4.8**		2.0		mg/L			11/14/19 15:03	1
Fluoride	**0.30**		0.10		mg/L			11/22/19 22:26	1
Ammonia	**0.87**		0.20		mg/L		11/24/19 15:00	11/25/19 08:57	1
DOC Dup	**1.5**		1.0		mg/L			11/12/19 21:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**106.85**				ft			11/07/19 09:23	1
Depth to Water (ft from MP)	**109.60**				ft			11/07/19 09:23	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G48D
Date Collected: 11/07/19 09:23
Date Received: 11/07/19 15:27

Lab Sample ID: 500-172766-12
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Elevation of well (ft from MP)	620.98				ft			11/07/19 09:23	1
Field pH	7.22				SU			11/07/19 09:23	1
Field Temperature	50.0				Degrees F			11/07/19 09:23	1
Ground Water Elevation	511.38				ft			11/07/19 09:23	1
Specific Conductance	903				umhos/cm			11/07/19 09:23	1
Well bottom elevation	393.11				ft			11/07/19 09:23	1

Client Sample ID: G48S
Lab Sample ID: 500-172766-13
Date Collected: 11/07/19 10:41
Matrix: Water
Date Received: 11/07/19 15:27

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/08/19 08:19	11/20/19 20:12	1
Fluoranthene	ND		0.78		ug/L		11/08/19 08:19	11/20/19 20:12	1
Pyrene	ND		0.78		ug/L		11/08/19 08:19	11/20/19 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*87*		*36 - 120*	*11/08/19 08:19*	*11/20/19 20:12*	*1*
2-Fluorobiphenyl (Surr)	*91*		*34 - 110*	*11/08/19 08:19*	*11/20/19 20:12*	*1*
Terphenyl-d14 (Surr)	*124*		*40 - 145*	*11/08/19 08:19*	*11/20/19 20:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**27**		10		ug/L		11/13/19 16:53	11/15/19 04:19	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:19	1
Iron	ND		200		ug/L		11/13/19 16:53	11/15/19 04:19	1
Lead	ND		5.0		ug/L		11/13/19 16:53	11/15/19 04:19	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12**		10		ug/L		11/13/19 16:55	11/15/19 05:26	1
Barium	**22**		10		ug/L		11/13/19 16:55	11/15/19 05:26	1
Boron	**5800**		50		ug/L		11/13/19 16:55	11/15/19 05:26	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:26	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 05:26	1
Molybdenum	**590**		10		ug/L		11/13/19 16:55	11/15/19 05:26	1
Potassium	**13**		0.50		mg/L		11/13/19 16:55	11/15/19 05:26	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 05:26	1
Sodium	**280**		1.0		mg/L		11/13/19 16:55	11/15/19 05:26	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		11/13/19 11:15	11/14/19 09:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1000**		10		mg/L			11/13/19 01:46	1
Nitrogen, Nitrate	**0.33**		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**380**		20		mg/L			11/14/19 23:24	100
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**100**		10		mg/L			11/14/19 15:32	5
Fluoride	**0.89**		0.10		mg/L			11/22/19 22:31	1
Ammonia	**2.6**		0.20		mg/L		11/24/19 15:00	11/25/19 09:05	1
DOC Dup	**2.6**		1.0		mg/L			11/12/19 21:31	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**94.78**				ft			11/07/19 10:41	1
Depth to Water (ft from MP)	**97.23**				ft			11/07/19 10:41	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G48S
Date Collected: 11/07/19 10:41
Date Received: 11/07/19 15:27

Lab Sample ID: 500-172766-13
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Elevation of well (ft from MP)	620.78				ft			11/07/19 10:41	1
Field pH	7.83				SU			11/07/19 10:41	1
Field Temperature	51.4				Degrees F			11/07/19 10:41	1
Ground Water Elevation	523.55				ft			11/07/19 10:41	1
Specific Conductance	1340				umhos/cm			11/07/19 10:41	1
Well bottom elevation	468.32				ft			11/07/19 10:41	1

Client Sample ID: G47S
Lab Sample ID: 500-172766-14
Date Collected: 11/07/19 13:00
Matrix: Water
Date Received: 11/07/19 15:27

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/08/19 08:19	11/20/19 20:42	1
Fluoranthene	ND		0.80		ug/L		11/08/19 08:19	11/20/19 20:42	1
Pyrene	ND		0.80		ug/L		11/08/19 08:19	11/20/19 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*79*		*36 - 120*	*11/08/19 08:19*	*11/20/19 20:42*	*1*
2-Fluorobiphenyl (Surr)	*84*		*34 - 110*	*11/08/19 08:19*	*11/20/19 20:42*	*1*
Terphenyl-d14 (Surr)	*116*		*40 - 145*	*11/08/19 08:19*	*11/20/19 20:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**17**		10		ug/L		11/13/19 16:53	11/15/19 04:23	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:23	1
Iron	ND		200		ug/L		11/13/19 16:53	11/15/19 04:23	1
Lead	ND		5.0		ug/L		11/13/19 16:53	11/15/19 04:23	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**29**		10		ug/L		11/13/19 16:55	11/15/19 05:39	1
Barium	**16**		10		ug/L		11/13/19 16:55	11/15/19 05:39	1
Boron	**4300**		50		ug/L		11/13/19 16:55	11/15/19 05:39	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:39	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 05:39	1
Molybdenum	**380**		10		ug/L		11/13/19 16:55	11/15/19 05:39	1
Potassium	**14**		0.50		mg/L		11/13/19 16:55	11/15/19 05:39	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 05:39	1
Sodium	**330**		1.0		mg/L		11/13/19 16:55	11/15/19 05:39	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		11/13/19 11:15	11/14/19 09:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1100**		10		mg/L			11/13/19 01:49	1
Nitrogen, Nitrate	**2.1**		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**410**		20		mg/L			11/14/19 23:36	100
Nitrogen, Nitrate	**2.0**		0.10		mg/L			11/29/19 19:27	1
Chloride	**140**		10		mg/L			11/16/19 15:05	5
Fluoride	**0.55**		0.10		mg/L			11/22/19 22:35	1
Ammonia	ND		0.20		mg/L		11/24/19 15:00	11/25/19 09:08	1
DOC Dup	**2.1**		1.0		mg/L			11/12/19 21:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**87.05**				ft			11/07/19 13:00	1
Depth to Water (ft from MP)	**89.55**				ft			11/07/19 13:00	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G47S
Date Collected: 11/07/19 13:00
Date Received: 11/07/19 15:27

Lab Sample ID: 500-172766-14
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Elevation of well (ft from MP)	612.10				ft			11/07/19 13:00	1
Field pH	8.39				SU			11/07/19 13:00	1
Field Temperature	50.9				Degrees F			11/07/19 13:00	1
Ground Water Elevation	522.55				ft			11/07/19 13:00	1
Specific Conductance	1481				umhos/cm			11/07/19 13:00	1
Well bottom elevation	459.84				ft			11/07/19 13:00	1

Client Sample ID: G47D
Lab Sample ID: 500-172766-15

Date Collected: 11/07/19 14:00
Matrix: Water
Date Received: 11/07/19 15:27

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.17		ug/L		11/08/19 08:19	11/20/19 21:11	1
Fluoranthene	ND		0.84		ug/L		11/08/19 08:19	11/20/19 21:11	1
Pyrene	ND		0.84		ug/L		11/08/19 08:19	11/20/19 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*81*		*36 - 120*	*11/08/19 08:19*	*11/20/19 21:11*	*1*
2-Fluorobiphenyl (Surr)	*84*		*34 - 110*	*11/08/19 08:19*	*11/20/19 21:11*	*1*
Terphenyl-d14 (Surr)	*118*		*40 - 145*	*11/08/19 08:19*	*11/20/19 21:11*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**35**		10		ug/L		11/13/19 16:53	11/15/19 04:27	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:27	1
Iron	**260**		200		ug/L		11/13/19 16:53	11/15/19 04:27	1
Lead	ND		5.0		ug/L		11/13/19 16:53	11/15/19 04:27	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 05:43	1
Barium	**34**		10		ug/L		11/13/19 16:55	11/15/19 05:43	1
Boron	**660**		50		ug/L		11/13/19 16:55	11/15/19 05:43	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:43	1
Manganese	**24**		10		ug/L		11/13/19 16:55	11/15/19 05:43	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 05:43	1
Potassium	**13**		0.50		mg/L		11/13/19 16:55	11/15/19 05:43	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 05:43	1
Sodium	**58**		1.0		mg/L		11/13/19 16:55	11/15/19 05:43	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		11/13/19 11:15	11/14/19 09:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**480**		10		mg/L			11/13/19 01:52	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**110**		5.0		mg/L			11/14/19 23:48	25
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**7.3**		2.0		mg/L			11/16/19 14:40	1
Fluoride	**0.36**		0.10		mg/L			11/22/19 22:38	1
Ammonia	**1.1**		0.20		mg/L		11/24/19 15:00	11/25/19 09:11	1
DOC Dup	**1.5**		1.0		mg/L			11/12/19 22:04	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**104.95**				ft			11/07/19 14:00	1
Depth to Water (ft from MP)	**107.40**				ft			11/07/19 14:00	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G47D
Date Collected: 11/07/19 14:00
Date Received: 11/07/19 15:27

Lab Sample ID: 500-172766-15
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Elevation of well (ft from MP)	612.29				ft			11/07/19 14:00	1
Field pH	7.50				SU			11/07/19 14:00	1
Field Temperature	50.9				Degrees F			11/07/19 14:00	1
Ground Water Elevation	504.89				ft			11/07/19 14:00	1
Specific Conductance	732				umhos/cm			11/07/19 14:00	1
Well bottom elevation	384.69				ft			11/07/19 14:00	1

Client Sample ID: R08D
Date Collected: 11/11/19 10:56
Date Received: 11/11/19 15:44

Lab Sample ID: 500-172766-16
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/13/19 07:35	11/23/19 15:34	1
Fluoranthene	ND		0.76		ug/L		11/13/19 07:35	11/23/19 15:34	1
Pyrene	ND		0.76		ug/L		11/13/19 07:35	11/23/19 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*69*		*36 - 120*	*11/13/19 07:35*	*11/23/19 15:34*	*1*
2-Fluorobiphenyl (Surr)	*74*		*34 - 110*	*11/13/19 07:35*	*11/23/19 15:34*	*1*
Terphenyl-d14 (Surr)	*97*		*40 - 145*	*11/13/19 07:35*	*11/23/19 15:34*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**45**		10		ug/L		11/13/19 16:53	11/15/19 04:39	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:39	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 05:48	1
Barium	**45**		10		ug/L		11/13/19 16:55	11/15/19 05:48	1
Boron	**2800**		50		ug/L		11/13/19 16:55	11/15/19 05:48	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:48	1
Manganese	**11**		10		ug/L		11/13/19 16:55	11/15/19 05:48	1
Molybdenum	**330**		10		ug/L		11/13/19 16:55	11/15/19 05:48	1
Potassium	**17**		0.50		mg/L		11/13/19 16:55	11/15/19 05:48	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 05:48	1
Sodium	**150**		1.0		mg/L		11/13/19 16:55	11/15/19 05:48	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**780**		10		mg/L			11/13/19 01:54	1
Nitrogen, Nitrate	**0.66**		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**210**		20		mg/L			11/15/19 00:25	100
Nitrogen, Nitrate	**0.57**		0.10		mg/L			11/29/19 19:27	1
Chloride	**110**		10		mg/L			11/16/19 15:06	5
Fluoride	**0.65**		0.10		mg/L			11/22/19 22:43	1
Ammonia	**0.28**		0.20		mg/L		11/24/19 15:00	11/25/19 09:13	1
DOC Dup	**2.4**		1.0		mg/L			11/21/19 16:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**74.10**				ft			11/11/19 10:56	1
Depth to Water (ft from MP)	**76.76**				ft			11/11/19 10:56	1
Elevation of well (ft from MP)	**578.01**				ft			11/11/19 10:56	1
Field pH	**6.99**				SU			11/11/19 10:56	1
Field Temperature	**47.5**				Degrees F			11/11/19 10:56	1
Ground Water Elevation	**501.25**				ft			11/11/19 10:56	1
Specific Conductance	**1033**				umhos/cm			11/11/19 10:56	1
Well bottom elevation	**371.07**				ft			11/11/19 10:56	1

Client Sample ID: R08S
Lab Sample ID: 500-172766-17

Date Collected: 11/11/19 12:30
Matrix: Water
Date Received: 11/11/19 15:44

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/13/19 07:35	11/23/19 15:56	1
Fluoranthene	ND		0.76		ug/L		11/13/19 07:35	11/23/19 15:56	1
Pyrene	ND		0.76		ug/L		11/13/19 07:35	11/23/19 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*71*		*36 - 120*	*11/13/19 07:35*	*11/23/19 15:56*	*1*
2-Fluorobiphenyl (Surr)	*77*		*34 - 110*	*11/13/19 07:35*	*11/23/19 15:56*	*1*
Terphenyl-d14 (Surr)	*102*		*40 - 145*	*11/13/19 07:35*	*11/23/19 15:56*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**45**		10		ug/L		11/13/19 16:53	11/15/19 04:44	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:44	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 05:52	1
Barium	**44**		10		ug/L		11/13/19 16:55	11/15/19 05:52	1
Boron	**6400**		50		ug/L		11/13/19 16:55	11/15/19 05:52	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:52	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 05:52	1
Molybdenum	**340**		10		ug/L		11/13/19 16:55	11/15/19 05:52	1
Potassium	**24**		0.50		mg/L		11/13/19 16:55	11/15/19 05:52	1
Selenium	**13**		10		ug/L		11/13/19 16:55	11/15/19 05:52	1
Sodium	**51**		1.0		mg/L		11/13/19 16:55	11/15/19 05:52	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**730**		10		mg/L			11/13/19 01:57	1
Nitrogen, Nitrate	**0.19**		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**360**		20		mg/L			11/15/19 00:38	100
Nitrogen, Nitrate	**0.20**		0.10		mg/L			11/29/19 19:27	1
Chloride	**84**		10		mg/L			11/14/19 15:32	5
Fluoride	**0.15**		0.10		mg/L			11/22/19 22:47	1
Ammonia	ND		0.20		mg/L		11/24/19 15:00	11/25/19 09:16	1
DOC Dup	**1.6**		1.0		mg/L			11/21/19 17:23	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**62.06**				ft			11/11/19 12:30	1
Depth to Water (ft from MP)	**64.61**				ft			11/11/19 12:30	1
Elevation of well (ft from MP)	**578.62**				ft			11/11/19 12:30	1
Field pH	**7.91**				SU			11/11/19 12:30	1
Field Temperature	**50.0**				Degrees F			11/11/19 12:30	1
Ground Water Elevation	**514.01**				ft			11/11/19 12:30	1
Specific Conductance	**939**				umhos/cm			11/11/19 12:30	1
Well bottom elevation	**453.08**				ft			11/11/19 12:30	1

Client Sample ID: G39S
Lab Sample ID: 500-172766-18

Date Collected: 11/11/19 14:13
Matrix: Water
Date Received: 11/11/19 15:44

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/13/19 07:35	11/23/19 16:19	1
Fluoranthene	ND		0.81		ug/L		11/13/19 07:35	11/23/19 16:19	1
Pyrene	ND		0.81		ug/L		11/13/19 07:35	11/23/19 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*72*		*36 - 120*	*11/13/19 07:35*	*11/23/19 16:19*	*1*
2-Fluorobiphenyl (Surr)	*79*		*34 - 110*	*11/13/19 07:35*	*11/23/19 16:19*	*1*
Terphenyl-d14 (Surr)	*88*		*40 - 145*	*11/13/19 07:35*	*11/23/19 16:19*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**43**		10		ug/L		11/13/19 16:53	11/15/19 04:48	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:48	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 05:57	1
Barium	**32**		10		ug/L		11/13/19 16:55	11/15/19 05:57	1
Boron	**250**		50		ug/L		11/13/19 16:55	11/15/19 05:57	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 05:57	1
Manganese	**11**		10		ug/L		11/13/19 16:55	11/15/19 05:57	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 05:57	1
Potassium	**3.6**		0.50		mg/L		11/13/19 16:55	11/15/19 05:57	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 05:57	1
Sodium	**8.1**		1.0		mg/L		11/13/19 16:55	11/15/19 05:57	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 05:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**450**		10		mg/L			11/13/19 01:59	1
Nitrogen, Nitrate	**0.10**		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**73**		5.0		mg/L			11/15/19 00:50	25
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**11**		2.0		mg/L			11/14/19 15:06	1
Fluoride	**0.23**		0.10		mg/L			11/22/19 22:52	1
Ammonia	**0.30**		0.20		mg/L		11/20/19 12:40	11/20/19 16:41	1
DOC Dup	**1.5**		1.0		mg/L			11/21/19 17:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**89.44**				ft			11/11/19 14:13	1
Depth to Water (ft from MP)	**91.52**				ft			11/11/19 14:13	1
Elevation of well (ft from MP)	**598.85**				ft			11/11/19 14:13	1
Field pH	**7.78**				SU			11/11/19 14:13	1
Field Temperature	**37.0**				Degrees F			11/11/19 14:13	1
Ground Water Elevation	**507.33**				ft			11/11/19 14:13	1
Specific Conductance	**765**				umhos/cm			11/11/19 14:13	1
Well bottom elevation	**454.15**				ft			11/11/19 14:13	1

Client Sample ID: G44S
Lab Sample ID: 500-172766-19

Date Collected: 11/12/19 13:30
Matrix: Water
Date Received: 11/12/19 15:25

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/13/19 07:35	11/23/19 16:42	1
Fluoranthene	ND		0.77		ug/L		11/13/19 07:35	11/23/19 16:42	1
Pyrene	ND		0.77		ug/L		11/13/19 07:35	11/23/19 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*71*		*36 - 120*	*11/13/19 07:35*	*11/23/19 16:42*	*1*
2-Fluorobiphenyl (Surr)	*79*		*34 - 110*	*11/13/19 07:35*	*11/23/19 16:42*	*1*
Terphenyl-d14 (Surr)	*99*		*40 - 145*	*11/13/19 07:35*	*11/23/19 16:42*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 06:01	1
Barium	**65**		10		ug/L		11/13/19 16:55	11/15/19 06:01	1
Boron	**1300**		50		ug/L		11/13/19 16:55	11/15/19 06:01	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 06:01	1
Manganese	**34**		10		ug/L		11/13/19 16:55	11/15/19 06:01	1
Molybdenum	**200**		10		ug/L		11/13/19 16:55	11/15/19 06:01	1
Potassium	**6.2**		0.50		mg/L		11/13/19 16:55	11/15/19 06:01	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 06:01	1
Sodium	**24**		1.0		mg/L		11/13/19 16:55	11/15/19 06:01	1
Zinc	**85**		20		ug/L		11/13/19 16:55	11/15/19 06:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**62**		10		ug/L		11/13/19 16:53	11/15/19 04:52	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**670**		10		mg/L			11/13/19 02:02	1
Nitrogen, Nitrate	**0.12**		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**160**		5.0		mg/L			11/15/19 01:02	25
Nitrogen, Nitrate	**0.12**		0.10		mg/L			11/29/19 19:27	1
Chloride	**53**		2.0		mg/L			11/16/19 14:44	1
Fluoride	**0.21**		0.10		mg/L			11/22/19 23:06	1
Ammonia	**0.21**		0.20		mg/L		11/24/19 15:00	11/25/19 09:19	1
DOC Dup	**1.8**		1.0		mg/L			11/21/19 18:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**76.25**				ft			11/12/19 13:30	1
Depth to Water (ft from MP)	**78.43**				ft			11/12/19 13:30	1
Elevation of well (ft from MP)	**586.53**				ft			11/12/19 13:30	1
Field pH	**7.22**				SU			11/12/19 13:30	1
Field Temperature	**49.5**				Degrees F			11/12/19 13:30	1
Ground Water Elevation	**508.10**				ft			11/12/19 13:30	1
Specific Conductance	**932**				umhos/cm			11/12/19 13:30	1
Well bottom elevation	**455.11**				ft			11/12/19 13:30	1

Client Sample ID: G44D
Date Collected: 11/12/19 14:19
Date Received: 11/12/19 15:25

Lab Sample ID: 500-172766-20
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/13/19 07:35	11/23/19 17:05	1
Fluoranthene	ND		0.76		ug/L		11/13/19 07:35	11/23/19 17:05	1
Pyrene	ND		0.76		ug/L		11/13/19 07:35	11/23/19 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*61*		*36 - 120*	*11/13/19 07:35*	*11/23/19 17:05*	*1*
2-Fluorobiphenyl (Surr)	*68*		*34 - 110*	*11/13/19 07:35*	*11/23/19 17:05*	*1*
Terphenyl-d14 (Surr)	*89*		*40 - 145*	*11/13/19 07:35*	*11/23/19 17:05*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 06:05	1
Barium	**45**		10		ug/L		11/13/19 16:55	11/15/19 06:05	1
Boron	**1500**		50		ug/L		11/13/19 16:55	11/15/19 06:05	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 06:05	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 06:05	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 06:05	1
Potassium	**18**		0.50		mg/L		11/13/19 16:55	11/15/19 06:05	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 06:05	1
Sodium	**95**		1.0		mg/L		11/13/19 16:55	11/15/19 06:05	1
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 06:05	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**47**		10		ug/L		11/13/19 16:53	11/15/19 04:56	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 04:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**550**		10		mg/L			11/13/19 02:04	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**140**		5.0		mg/L			11/15/19 01:14	25
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**7.2**		2.0		mg/L			11/16/19 14:45	1
Fluoride	**1.0**		0.10		mg/L			11/22/19 23:09	1
Ammonia	**0.60**		0.20		mg/L		11/24/19 15:00	11/25/19 09:21	1
DOC Dup	**1.3**		1.0		mg/L			11/21/19 18:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**86.66**				ft			11/12/19 14:19	1
Depth to Water (ft from MP)	**88.70**				ft			11/12/19 14:19	1
Elevation of well (ft from MP)	**586.65**				ft			11/12/19 14:19	1
Field pH	**7.36**				SU			11/12/19 14:19	1
Field Temperature	**52.2**				Degrees F			11/12/19 14:19	1
Ground Water Elevation	**497.95**				ft			11/12/19 14:19	1
Specific Conductance	**793**				umhos/cm			11/12/19 14:19	1
Well bottom elevation	**377.81**				ft			11/12/19 14:19	1

Client Sample ID: G46D
Date Collected: 11/13/19 10:20
Date Received: 11/13/19 15:22

Lab Sample ID: 500-172766-21
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/14/19 07:46	11/26/19 14:29	1
Fluoranthene	ND		0.76		ug/L		11/14/19 07:46	11/26/19 14:29	1
Pyrene	ND		0.76		ug/L		11/14/19 07:46	11/26/19 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*63*		*36 - 120*	*11/14/19 07:46*	*11/26/19 14:29*	*1*
2-Fluorobiphenyl (Surr)	*58*		*34 - 110*	*11/14/19 07:46*	*11/26/19 14:29*	*1*
Terphenyl-d14 (Surr)	*84*		*40 - 145*	*11/14/19 07:46*	*11/26/19 14:29*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/24/19 17:57	11/25/19 21:01	1
Barium	**24**		10		ug/L		11/24/19 17:57	11/25/19 21:01	1
Boron	**920**		50		ug/L		11/24/19 17:57	11/26/19 12:00	1
Cadmium	ND		2.0		ug/L		11/24/19 17:57	11/25/19 21:01	1
Manganese	ND		10		ug/L		11/24/19 17:57	11/25/19 21:01	1
Molybdenum	ND		10		ug/L		11/24/19 17:57	11/25/19 21:01	1
Potassium	**15**		0.50		mg/L		11/24/19 17:57	11/26/19 12:00	1
Selenium	ND		10		ug/L		11/24/19 17:57	11/26/19 12:00	1
Sodium	**66**		1.0		mg/L		11/24/19 17:57	11/26/19 12:00	1
Zinc	ND	^	20		ug/L		11/24/19 17:57	11/25/19 21:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**24**		10		ug/L		11/24/19 17:57	11/25/19 20:57	1
Copper	ND		10		ug/L		11/24/19 17:57	11/25/19 20:57	1
Iron	ND	^	200		ug/L		11/24/19 17:57	11/25/19 20:57	1
Lead	ND		5.0		ug/L		11/24/19 17:57	11/25/19 20:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		11/19/19 10:10	11/20/19 09:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**570**		10		mg/L			11/19/19 22:32	1
Nitrogen, Nitrate	**0.23**		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**130**		5.0		mg/L			11/15/19 01:27	20
Nitrogen, Nitrate	**0.22**		0.10		mg/L			11/29/19 19:27	1
Chloride	**5.7**		2.0		mg/L			11/16/19 14:45	1
Fluoride	**0.54**		0.10		mg/L			11/22/19 23:12	1
Ammonia	**0.25**		0.20		mg/L		11/24/19 15:00	11/25/19 09:24	1
DOC Dup	**1.7**		1.0		mg/L			11/21/19 18:49	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**99.00**				ft			11/13/19 10:20	1
Depth to Water (ft from MP)	**101.60**				ft			11/13/19 10:20	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G46D
Date Collected: 11/13/19 10:20
Date Received: 11/13/19 15:22

Lab Sample ID: 500-172766-21
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Elevation of well (ft from MP)	601.25				ft			11/13/19 10:20	1
Field pH	7.42				SU			11/13/19 10:20	1
Field Temperature	46.2				Degrees F			11/13/19 10:20	1
Ground Water Elevation	499.65				ft			11/13/19 10:20	1
Specific Conductance	754				umhos/cm			11/13/19 10:20	1
Well bottom elevation	373.79				ft			11/13/19 10:20	1

Client Sample ID: G46S
Date Collected: 11/13/19 11:42
Date Received: 11/13/19 15:22

Lab Sample ID: 500-172766-22
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/14/19 07:46	11/26/19 14:56	1
Fluoranthene	ND		0.75		ug/L		11/14/19 07:46	11/26/19 14:56	1
Pyrene	ND		0.75		ug/L		11/14/19 07:46	11/26/19 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*70*		*36 - 120*	*11/14/19 07:46*	*11/26/19 14:56*	*1*
2-Fluorobiphenyl (Surr)	*76*		*34 - 110*	*11/14/19 07:46*	*11/26/19 14:56*	*1*
Terphenyl-d14 (Surr)	*89*		*40 - 145*	*11/14/19 07:46*	*11/26/19 14:56*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		50		ug/L		11/24/19 17:57	11/26/19 12:13	5
Barium	**35**		10		ug/L		11/24/19 17:57	11/25/19 21:10	1
Boron	**10000**		50		ug/L		11/24/19 17:57	11/26/19 12:08	1
Cadmium	ND		2.0		ug/L		11/24/19 17:57	11/25/19 21:10	1
Manganese	**30**		10		ug/L		11/24/19 17:57	11/25/19 21:10	1
Molybdenum	**1600**		50		ug/L		11/24/19 17:57	11/26/19 12:13	5
Potassium	**32**		0.50		mg/L		11/24/19 17:57	11/26/19 12:08	1
Selenium	ND		10		ug/L		11/24/19 17:57	11/26/19 12:08	1
Sodium	**160**		1.0		mg/L		11/24/19 17:57	11/26/19 12:08	1
Zinc	ND	^	20		ug/L		11/24/19 17:57	11/25/19 21:10	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**41**		10		ug/L		11/24/19 17:57	11/25/19 21:05	1
Copper	ND		10		ug/L		11/24/19 17:57	11/25/19 21:05	1
Iron	**4100**		200		ug/L		11/24/19 17:57	11/26/19 12:04	1
Lead	ND		5.0		ug/L		11/24/19 17:57	11/25/19 21:05	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		11/19/19 10:10	11/20/19 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1000**		10		mg/L			11/19/19 22:34	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**470**		20		mg/L			11/15/19 15:45	100
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**68**		2.0		mg/L			11/16/19 14:46	1
Fluoride	**0.31**		0.10		mg/L			11/22/19 23:16	1
Ammonia	**2.3**		0.20		mg/L		11/24/19 15:00	11/25/19 09:27	1
DOC Dup	**2.1**		1.0		mg/L			11/21/19 19:05	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**94.90**				ft			11/13/19 11:42	1
Depth to Water (ft from MP)	**97.60**				ft			11/13/19 11:42	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G46S
Date Collected: 11/13/19 11:42
Date Received: 11/13/19 15:22

Lab Sample ID: 500-172766-22
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Elevation of well (ft from MP)	601.43				ft			11/13/19 11:42	1
Field pH	7.68				SU			11/13/19 11:42	1
Field Temperature	51.3				Degrees F			11/13/19 11:42	1
Ground Water Elevation	503.83				ft			11/13/19 11:42	1
Specific Conductance	1199				umhos/cm			11/13/19 11:42	1
Well bottom elevation	453.62				ft			11/13/19 11:42	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G31D

Date Collected: 11/13/19 13:11
Date Received: 11/13/19 15:22

Lab Sample ID: 500-172766-23

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/14/19 07:46	11/26/19 15:23	1
Fluoranthene	ND		0.80		ug/L		11/14/19 07:46	11/26/19 15:23	1
Pyrene	ND		0.80		ug/L		11/14/19 07:46	11/26/19 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*66*		*36 - 120*	*11/14/19 07:46*	*11/26/19 15:23*	*1*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*	*11/14/19 07:46*	*11/26/19 15:23*	*1*
Terphenyl-d14 (Surr)	*86*		*40 - 145*	*11/14/19 07:46*	*11/26/19 15:23*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/24/19 17:57	11/25/19 21:18	1
Barium	**16**		10		ug/L		11/24/19 17:57	11/25/19 21:18	1
Boron	**1900**		50		ug/L		11/24/19 17:57	11/26/19 12:17	1
Cadmium	ND		2.0		ug/L		11/24/19 17:57	11/25/19 21:18	1
Manganese	ND		10		ug/L		11/24/19 17:57	11/25/19 21:18	1
Molybdenum	ND		10		ug/L		11/24/19 17:57	11/25/19 21:18	1
Potassium	**7.8**		0.50		mg/L		11/24/19 17:57	11/26/19 12:17	1
Selenium	ND		10		ug/L		11/24/19 17:57	11/26/19 12:17	1
Sodium	**220**		1.0		mg/L		11/24/19 17:57	11/26/19 12:17	1
Zinc	**38**		20		ug/L		11/24/19 17:57	11/26/19 12:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**16**		10		ug/L		11/24/19 17:57	11/25/19 21:14	1
Copper	ND		10		ug/L		11/24/19 17:57	11/25/19 21:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**520**		10		mg/L			11/19/19 22:37	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			11/15/19 15:57	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**15**		2.0		mg/L			11/16/19 14:46	1
Fluoride	**4.0**		0.10		mg/L			11/22/19 23:23	1
Ammonia	**0.57**		0.20		mg/L		11/24/19 15:00	11/25/19 09:29	1
DOC Dup	**1.2**		1.0		mg/L			11/21/19 19:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**33.56**				ft			11/13/19 13:11	1
Depth to Water (ft from MP)	**36.12**				ft			11/13/19 13:11	1
Elevation of well (ft from MP)	**535.61**				ft			11/13/19 13:11	1
Field pH	**8.13**				SU			11/13/19 13:11	1
Field Temperature	**49.5**				Degrees F			11/13/19 13:11	1
Ground Water Elevation	**499.49**				ft			11/13/19 13:11	1
Specific Conductance	**750**				umhos/cm			11/13/19 13:11	1
Well bottom elevation	**378.23**				ft			11/13/19 13:11	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G31S

Date Collected: 11/13/19 14:14
Date Received: 11/13/19 15:22

Lab Sample ID: 500-172766-24

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/14/19 07:46	11/26/19 15:50	1
Fluoranthene	ND		0.76		ug/L		11/14/19 07:46	11/26/19 15:50	1
Pyrene	ND		0.76		ug/L		11/14/19 07:46	11/26/19 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*64*		*36 - 120*	*11/14/19 07:46*	*11/26/19 15:50*	*1*
2-Fluorobiphenyl (Surr)	*73*		*34 - 110*	*11/14/19 07:46*	*11/26/19 15:50*	*1*
Terphenyl-d14 (Surr)	*88*		*40 - 145*	*11/14/19 07:46*	*11/26/19 15:50*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/24/19 17:57	11/25/19 21:34	1
Barium	**49**		10		ug/L		11/24/19 17:57	11/25/19 21:34	1
Boron	**4400**		50		ug/L		11/24/19 17:57	11/26/19 12:30	1
Cadmium	ND		2.0		ug/L		11/24/19 17:57	11/25/19 21:34	1
Manganese	**25**		10		ug/L		11/24/19 17:57	11/25/19 21:34	1
Molybdenum	**700**		10		ug/L		11/24/19 17:57	11/25/19 21:34	1
Potassium	**20**		0.50		mg/L		11/24/19 17:57	11/26/19 12:30	1
Selenium	ND		10		ug/L		11/24/19 17:57	11/26/19 12:30	1
Sodium	**150**		1.0		mg/L		11/24/19 17:57	11/26/19 12:30	1
Zinc	ND	^	20		ug/L		11/24/19 17:57	11/25/19 21:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**50**		10		ug/L		11/24/19 17:57	11/25/19 21:22	1
Copper	ND		10		ug/L		11/24/19 17:57	11/25/19 21:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1100**		10		mg/L			11/19/19 22:39	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**380**		20		mg/L			11/15/19 16:34	100
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**210**		10		mg/L			11/27/19 12:37	5
Fluoride	**0.25**		0.10		mg/L			11/22/19 23:30	1
Ammonia	**0.53**		0.20		mg/L		11/24/19 15:00	11/25/19 09:37	1
DOC Dup	**1.4**		1.0		mg/L			11/21/19 19:38	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**22.93**				ft			11/13/19 14:14	1
Depth to Water (ft from MP)	**25.51**				ft			11/13/19 14:14	1
Elevation of well (ft from MP)	**535.78**				ft			11/13/19 14:14	1
Field pH	**7.40**				SU			11/13/19 14:14	1
Field Temperature	**53.2**				Degrees F			11/13/19 14:14	1
Ground Water Elevation	**510.27**				ft			11/13/19 14:14	1
Specific Conductance	**1510**				umhos/cm			11/13/19 14:14	1
Well bottom elevation	**453.36**				ft			11/13/19 14:14	1

Client Sample Results

Client: Midwest Generation EME LLC
Job ID: 500-172766-1
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Client Sample ID: S501
Lab Sample ID: 500-172766-25
Date Collected: 11/14/19 08:55
Matrix: Water
Date Received: 11/14/19 13:40

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	0				SU			11/14/19 08:55	1
Field Temperature	0				Degrees F			11/14/19 08:55	1
Specific Conductance	0				umhos/cm			11/14/19 08:55	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: P40S
Date Collected: 11/14/19 09:10
Date Received: 11/14/19 13:40

Lab Sample ID: 500-172766-26
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	55.32				ft			11/14/19 09:10	1
Depth to Water (ft from MP)	57.10				ft			11/14/19 09:10	1
Elevation of well (ft from MP)	599.12				ft			11/14/19 09:10	1
Ground Water Elevation	542.02				ft			11/14/19 09:10	1
Well bottom elevation	474.84				ft			11/14/19 09:10	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G45S

Date Collected: 11/14/19 09:51
Date Received: 11/14/19 13:40

Lab Sample ID: 500-172766-27

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/15/19 07:35	11/26/19 19:04	1
Fluoranthene	ND		0.76		ug/L		11/15/19 07:35	11/26/19 19:04	1
Pyrene	ND		0.76		ug/L		11/15/19 07:35	11/26/19 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*57*		*36 - 120*	*11/15/19 07:35*	*11/26/19 19:04*	*1*
2-Fluorobiphenyl (Surr)	*64*		*34 - 110*	*11/15/19 07:35*	*11/26/19 19:04*	*1*
Terphenyl-d14 (Surr)	*90*		*40 - 145*	*11/15/19 07:35*	*11/26/19 19:04*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/24/19 17:57	11/25/19 21:42	1
Barium	**42**		10		ug/L		11/24/19 17:57	11/25/19 21:42	1
Boron	**480**		50		ug/L		11/24/19 17:57	11/26/19 12:34	1
Cadmium	ND		2.0		ug/L		11/24/19 17:57	11/25/19 21:42	1
Manganese	**14**		10		ug/L		11/24/19 17:57	11/25/19 21:42	1
Molybdenum	ND		10		ug/L		11/24/19 17:57	11/25/19 21:42	1
Potassium	**10**		0.50		mg/L		11/24/19 17:57	11/26/19 12:34	1
Selenium	ND		10		ug/L		11/24/19 17:57	11/26/19 12:34	1
Sodium	**50**		1.0		mg/L		11/24/19 17:57	11/26/19 12:34	1
Zinc	ND	^	20		ug/L		11/24/19 17:57	11/25/19 21:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**43**		10		ug/L		11/24/19 17:57	11/25/19 21:38	1
Copper	ND		10		ug/L		11/24/19 17:57	11/25/19 21:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**830**		10		mg/L			11/21/19 03:30	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**170**		10		mg/L			11/29/19 15:52	50
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**170**		10		mg/L			11/27/19 12:39	5
Fluoride	**0.33**		0.10		mg/L			11/22/19 23:34	1
Ammonia	**0.58**		0.20		mg/L		11/25/19 09:35	11/25/19 13:38	1
DOC Dup	**4.2**		1.0		mg/L			11/21/19 19:55	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**58.58**				ft			11/14/19 09:51	1
Depth to Water (ft from MP)	**61.55**				ft			11/14/19 09:51	1
Elevation of well (ft from MP)	**603.90**				ft			11/14/19 09:51	1
Field pH	**7.33**				SU			11/14/19 09:51	1
Field Temperature	**54.0**				Degrees F			11/14/19 09:51	1
Ground Water Elevation	**542.35**				ft			11/14/19 09:51	1
Specific Conductance	**1043**				umhos/cm			11/14/19 09:51	1
Well bottom elevation	**471.05**				ft			11/14/19 09:51	1

Client Sample ID: G38D
Date Collected: 11/14/19 11:26
Date Received: 11/14/19 13:40

Lab Sample ID: 500-172766-28
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/15/19 07:35	11/26/19 19:28	1
Fluoranthene	ND		0.77		ug/L		11/15/19 07:35	11/26/19 19:28	1
Pyrene	ND		0.77		ug/L		11/15/19 07:35	11/26/19 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*74*		*36 - 120*	*11/15/19 07:35*	*11/26/19 19:28*	*1*
2-Fluorobiphenyl (Surr)	*82*		*34 - 110*	*11/15/19 07:35*	*11/26/19 19:28*	*1*
Terphenyl-d14 (Surr)	*95*		*40 - 145*	*11/15/19 07:35*	*11/26/19 19:28*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/24/19 17:57	11/25/19 21:51	1
Barium	**25**		10		ug/L		11/24/19 17:57	11/25/19 21:51	1
Boron	**800**		50		ug/L		11/24/19 17:57	11/26/19 12:39	1
Cadmium	ND		2.0		ug/L		11/24/19 17:57	11/25/19 21:51	1
Manganese	**26**		10		ug/L		11/24/19 17:57	11/25/19 21:51	1
Molybdenum	ND		10		ug/L		11/24/19 17:57	11/25/19 21:51	1
Potassium	**13**		0.50		mg/L		11/24/19 17:57	11/26/19 12:39	1
Selenium	ND		10		ug/L		11/24/19 17:57	11/26/19 12:39	1
Sodium	**61**		1.0		mg/L		11/24/19 17:57	11/26/19 12:39	1
Zinc	ND	^	20		ug/L		11/24/19 17:57	11/25/19 21:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**24**		10		ug/L		11/24/19 17:57	11/25/19 21:46	1
Copper	ND		10		ug/L		11/24/19 17:57	11/25/19 21:46	1
Iron	ND	^	200		ug/L		11/24/19 17:57	11/25/19 21:46	1
Lead	ND		5.0		ug/L		11/24/19 17:57	11/25/19 21:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		11/19/19 10:10	11/20/19 09:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**570**		10		mg/L			11/21/19 03:35	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**130**		5.0		mg/L			11/29/19 16:05	25
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**5.5**		2.0		mg/L			11/27/19 12:40	1
Fluoride	**0.40**		0.10		mg/L			11/16/19 01:05	1
Ammonia	**0.64**		0.20		mg/L		11/25/19 09:35	11/25/19 13:40	1
DOC Dup	**1.6**		1.0		mg/L			11/21/19 20:11	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**105.55**				ft			11/14/19 11:26	1
Depth to Water (ft from MP)	**107.66**				ft			11/14/19 11:26	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G38D
Date Collected: 11/14/19 11:26
Date Received: 11/14/19 13:40

Lab Sample ID: 500-172766-28
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Elevation of well (ft from MP)	610.67				ft			11/14/19 11:26	1
Field pH	7.28				SU			11/14/19 11:26	1
Field Temperature	54.7				Degrees F			11/14/19 11:26	1
Ground Water Elevation	503.01				ft			11/14/19 11:26	1
Specific Conductance	743				umhos/cm			11/14/19 11:26	1
Well bottom elevation	382.38				ft			11/14/19 11:26	1

Client Sample ID: G38S
Lab Sample ID: 500-172766-29

Date Collected: 11/14/19 12:17
Matrix: Water
Date Received: 11/14/19 13:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.15		ug/L		11/15/19 07:35	11/26/19 19:52	1
Fluoranthene	ND		0.75		ug/L		11/15/19 07:35	11/26/19 19:52	1
Pyrene	ND		0.75		ug/L		11/15/19 07:35	11/26/19 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*72*		*36 - 120*	*11/15/19 07:35*	*11/26/19 19:52*	*1*
2-Fluorobiphenyl (Surr)	*77*		*34 - 110*	*11/15/19 07:35*	*11/26/19 19:52*	*1*
Terphenyl-d14 (Surr)	*98*		*40 - 145*	*11/15/19 07:35*	*11/26/19 19:52*	*1*

Method: 6010B - Dissolved Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/24/19 17:57	11/25/19 21:59	1
Barium	**44**		10		ug/L		11/24/19 17:57	11/25/19 21:59	1
Boron	**4400**		50		ug/L		11/24/19 17:57	11/26/19 12:43	1
Cadmium	ND		2.0		ug/L		11/24/19 17:57	11/25/19 21:59	1
Manganese	ND		10		ug/L		11/24/19 17:57	11/25/19 21:59	1
Molybdenum	**540**		10		ug/L		11/24/19 17:57	11/25/19 21:59	1
Potassium	**14**		0.50		mg/L		11/24/19 17:57	11/26/19 12:43	1
Selenium	ND		10		ug/L		11/24/19 17:57	11/26/19 12:43	1
Sodium	**170**		1.0		mg/L		11/24/19 17:57	11/26/19 12:43	1
Zinc	ND	^	20		ug/L		11/24/19 17:57	11/25/19 21:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**45**		10		ug/L		11/24/19 17:57	11/25/19 21:55	1
Copper	ND		10		ug/L		11/24/19 17:57	11/25/19 21:55	1
Iron	ND	^	200		ug/L		11/24/19 17:57	11/25/19 21:55	1
Lead	ND		5.0		ug/L		11/24/19 17:57	11/25/19 21:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		11/19/19 10:10	11/20/19 09:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**750**		10		mg/L			11/21/19 03:38	1
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**370**		20		mg/L			11/29/19 16:17	100
Nitrogen, Nitrate	ND		0.10		mg/L			11/29/19 19:27	1
Chloride	**67**		2.0		mg/L			11/27/19 12:44	1
Fluoride	**0.23**		0.10		mg/L			11/22/19 23:38	1
Ammonia	ND		0.20		mg/L		11/25/19 09:35	11/25/19 12:31	1
DOC Dup	**1.9**		1.0		mg/L			11/21/19 20:28	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**84.87**				ft			11/14/19 12:17	1
Depth to Water (ft from MP)	**87.09**				ft			11/14/19 12:17	1

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Client Sample ID: G38S
Date Collected: 11/14/19 12:17
Date Received: 11/14/19 13:40

Lab Sample ID: 500-172766-29
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Elevation of well (ft from MP)	610.78				ft			11/14/19 12:17	1
Field pH	8.63				SU			11/14/19 12:17	1
Field Temperature	55.2				Degrees F			11/14/19 12:17	1
Ground Water Elevation	523.69				ft			11/14/19 12:17	1
Specific Conductance	941				umhos/cm			11/14/19 12:17	1
Well bottom elevation	457.57				ft			11/14/19 12:17	1

Definitions/Glossary

Client: Midwest Generation EME LLC
Job ID: 500-172766-1
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

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

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

GC/MS Semi VOA

Prep Batch: 513555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Total/NA	Water	3510C	
500-172766-2	G41S	Total/NA	Water	3510C	
500-172766-3	G33D	Total/NA	Water	3510C	
MB 500-513555/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-513555/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 513702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-4	G42S	Total/NA	Water	3510C	
500-172766-5	G42D	Total/NA	Water	3510C	
500-172766-6	G33S	Total/NA	Water	3510C	
500-172766-7	G20S	Total/NA	Water	3510C	
500-172766-8	R16D	Total/NA	Water	3510C	
MB 500-513702/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-513702/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-513702/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 513740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-513555/1-A	Method Blank	Total/NA	Water	8270D	513555
LCS 500-513555/2-A	Lab Control Sample	Total/NA	Water	8270D	513555

Analysis Batch: 513803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Total/NA	Water	8270D	513555
500-172766-2	G41S	Total/NA	Water	8270D	513555
500-172766-3	G33D	Total/NA	Water	8270D	513555

Analysis Batch: 513975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-513702/1-A	Method Blank	Total/NA	Water	8270D	513702
LCS 500-513702/2-A	Lab Control Sample	Total/NA	Water	8270D	513702
LCSD 500-513702/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	513702

Prep Batch: 514198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-9	G30S	Total/NA	Water	3510C	
500-172766-10	G30D	Total/NA	Water	3510C	
500-172766-11	R32S	Total/NA	Water	3510C	
MB 500-514198/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-514198/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-514198/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 514313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-12	G48D	Total/NA	Water	3510C	
500-172766-13	G48S	Total/NA	Water	3510C	
500-172766-14	G47S	Total/NA	Water	3510C	
500-172766-15	G47D	Total/NA	Water	3510C	
MB 500-514313/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-514313/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 514313 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 500-514313/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 514832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-514198/1-A	Method Blank	Total/NA	Water	8270D	514198
MB 500-514313/1-A	Method Blank	Total/NA	Water	8270D	514313
LCS 500-514198/2-A	Lab Control Sample	Total/NA	Water	8270D	514198
LCS 500-514313/2-A	Lab Control Sample	Total/NA	Water	8270D	514313
LCSD 500-514198/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	514198
LCSD 500-514313/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	514313

Prep Batch: 515030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-16	R08D	Total/NA	Water	3510C	
500-172766-17	R08S	Total/NA	Water	3510C	
500-172766-18	G39S	Total/NA	Water	3510C	
500-172766-19	G44S	Total/NA	Water	3510C	
500-172766-20	G44D	Total/NA	Water	3510C	
MB 500-515030/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-515030/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-515030/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 515276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-21	G46D	Total/NA	Water	3510C	
500-172766-22	G46S	Total/NA	Water	3510C	
500-172766-23	G31D	Total/NA	Water	3510C	
500-172766-24	G31S	Total/NA	Water	3510C	
MB 500-515276/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-515276/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-515276/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 515510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-27	G45S	Total/NA	Water	3510C	
500-172766-28	G38D	Total/NA	Water	3510C	
500-172766-29	G38S	Total/NA	Water	3510C	
MB 500-515510/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-515510/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-515510/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 516000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-515030/1-A	Method Blank	Total/NA	Water	8270D	515030
LCS 500-515030/2-A	Lab Control Sample	Total/NA	Water	8270D	515030
LCSD 500-515030/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	515030

Analysis Batch: 516342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-4	G42S	Total/NA	Water	8270D	513702
500-172766-5	G42D	Total/NA	Water	8270D	513702

GC/MS Semi VOA (Continued)

Analysis Batch: 516342 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-6	G33S	Total/NA	Water	8270D	513702
500-172766-7	G20S	Total/NA	Water	8270D	513702
500-172766-8	R16D	Total/NA	Water	8270D	513702
500-172766-12	G48D	Total/NA	Water	8270D	514313
500-172766-13	G48S	Total/NA	Water	8270D	514313
500-172766-14	G47S	Total/NA	Water	8270D	514313
500-172766-15	G47D	Total/NA	Water	8270D	514313

Analysis Batch: 516976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-9	G30S	Total/NA	Water	8270D	514198
500-172766-10	G30D	Total/NA	Water	8270D	514198
500-172766-11	R32S	Total/NA	Water	8270D	514198
500-172766-16	R08D	Total/NA	Water	8270D	515030
500-172766-17	R08S	Total/NA	Water	8270D	515030
500-172766-18	G39S	Total/NA	Water	8270D	515030
500-172766-19	G44S	Total/NA	Water	8270D	515030
500-172766-20	G44D	Total/NA	Water	8270D	515030

Analysis Batch: 517373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-21	G46D	Total/NA	Water	8270D	515276
500-172766-22	G46S	Total/NA	Water	8270D	515276
500-172766-23	G31D	Total/NA	Water	8270D	515276
500-172766-24	G31S	Total/NA	Water	8270D	515276
MB 500-515276/1-A	Method Blank	Total/NA	Water	8270D	515276
LCS 500-515276/2-A	Lab Control Sample	Total/NA	Water	8270D	515276
LCSD 500-515276/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	515276

Analysis Batch: 517460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-27	G45S	Total/NA	Water	8270D	515510
500-172766-28	G38D	Total/NA	Water	8270D	515510
500-172766-29	G38S	Total/NA	Water	8270D	515510

Analysis Batch: 517495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-515510/1-A	Method Blank	Total/NA	Water	8270D	515510
LCS 500-515510/2-A	Lab Control Sample	Total/NA	Water	8270D	515510
LCSD 500-515510/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	515510

Metals

Prep Batch: 515100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-12	G48D	Total/NA	Water	7470A	
500-172766-13	G48S	Total/NA	Water	7470A	
500-172766-14	G47S	Total/NA	Water	7470A	
500-172766-15	G47D	Total/NA	Water	7470A	
MB 500-515100/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-515100/13-A	Lab Control Sample	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 515100 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-12 MS	G48D	Total/NA	Water	7470A	
500-172766-12 MSD	G48D	Total/NA	Water	7470A	
500-172766-12 DU	G48D	Total/NA	Water	7470A	

Prep Batch: 515215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Total/NA	Water	3010A	
500-172766-2	G41S	Total/NA	Water	3010A	
500-172766-3	G33D	Total/NA	Water	3010A	
500-172766-4	G42S	Total/NA	Water	3010A	
500-172766-5	G42D	Total/NA	Water	3010A	
500-172766-6	G33S	Total/NA	Water	3010A	
500-172766-7	G20S	Total/NA	Water	3010A	
500-172766-8	R16D	Total/NA	Water	3010A	
500-172766-9	G30S	Total/NA	Water	3010A	
500-172766-10	G30D	Total/NA	Water	3010A	
500-172766-11	R32S	Total/NA	Water	3010A	
500-172766-12	G48D	Total/NA	Water	3010A	
500-172766-13	G48S	Total/NA	Water	3010A	
500-172766-14	G47S	Total/NA	Water	3010A	
500-172766-15	G47D	Total/NA	Water	3010A	
500-172766-16	R08D	Total/NA	Water	3010A	
500-172766-17	R08S	Total/NA	Water	3010A	
500-172766-18	G39S	Total/NA	Water	3010A	
500-172766-19	G44S	Total/NA	Water	3010A	
500-172766-20	G44D	Total/NA	Water	3010A	
MB 500-515215/1-A	Method Blank	Total/NA	Water	3010A	
LCS 500-515215/2-A	Lab Control Sample	Total/NA	Water	3010A	
500-172766-1 MS	G41D	Total/NA	Water	3010A	
500-172766-1 MSD	G41D	Total/NA	Water	3010A	
500-172766-1 DU	G41D	Total/NA	Water	3010A	

Prep Batch: 515216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Dissolved	Water	3010A	
500-172766-2	G41S	Dissolved	Water	3010A	
500-172766-3	G33D	Dissolved	Water	3010A	
500-172766-4	G42S	Dissolved	Water	3010A	
500-172766-5	G42D	Dissolved	Water	3010A	
500-172766-6	G33S	Dissolved	Water	3010A	
500-172766-7	G20S	Dissolved	Water	3010A	
500-172766-8	R16D	Dissolved	Water	3010A	
500-172766-9	G30S	Dissolved	Water	3010A	
500-172766-10	G30D	Dissolved	Water	3010A	
500-172766-11	R32S	Dissolved	Water	3010A	
500-172766-12	G48D	Dissolved	Water	3010A	
500-172766-13	G48S	Dissolved	Water	3010A	
500-172766-14	G47S	Dissolved	Water	3010A	
500-172766-15	G47D	Dissolved	Water	3010A	
500-172766-16	R08D	Dissolved	Water	3010A	
500-172766-17	R08S	Dissolved	Water	3010A	

Metals (Continued)

Prep Batch: 515216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-18	G39S	Dissolved	Water	3010A	
500-172766-19	G44S	Dissolved	Water	3010A	
500-172766-20	G44D	Dissolved	Water	3010A	
MB 500-515216/1-A	Method Blank	Total/NA	Water	3010A	
LCS 500-515216/2-A	Lab Control Sample	Total/NA	Water	3010A	
500-172766-20 MS	G44D	Dissolved	Water	3010A	
500-172766-20 MSD	G44D	Dissolved	Water	3010A	
500-172766-20 DU	G44D	Dissolved	Water	3010A	

Analysis Batch: 515371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-12	G48D	Total/NA	Water	7470A	515100
500-172766-13	G48S	Total/NA	Water	7470A	515100
500-172766-14	G47S	Total/NA	Water	7470A	515100
500-172766-15	G47D	Total/NA	Water	7470A	515100
MB 500-515100/12-A	Method Blank	Total/NA	Water	7470A	515100
LCS 500-515100/13-A	Lab Control Sample	Total/NA	Water	7470A	515100
500-172766-12 MS	G48D	Total/NA	Water	7470A	515100
500-172766-12 MSD	G48D	Total/NA	Water	7470A	515100
500-172766-12 DU	G48D	Total/NA	Water	7470A	515100

Analysis Batch: 515482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Total/NA	Water	6010B	515215
500-172766-2	G41S	Total/NA	Water	6010B	515215
500-172766-3	G33D	Total/NA	Water	6010B	515215
500-172766-4	G42S	Total/NA	Water	6010B	515215
500-172766-5	G42D	Total/NA	Water	6010B	515215
500-172766-6	G33S	Total/NA	Water	6010B	515215
500-172766-7	G20S	Total/NA	Water	6010B	515215
500-172766-8	R16D	Total/NA	Water	6010B	515215
500-172766-9	G30S	Total/NA	Water	6010B	515215
500-172766-10	G30D	Total/NA	Water	6010B	515215
500-172766-11	R32S	Total/NA	Water	6010B	515215
500-172766-12	G48D	Total/NA	Water	6010B	515215
500-172766-13	G48S	Total/NA	Water	6010B	515215
500-172766-14	G47S	Total/NA	Water	6010B	515215
500-172766-15	G47D	Total/NA	Water	6010B	515215
500-172766-16	R08D	Total/NA	Water	6010B	515215
500-172766-17	R08S	Total/NA	Water	6010B	515215
500-172766-18	G39S	Total/NA	Water	6010B	515215
500-172766-19	G44S	Total/NA	Water	6010B	515215
500-172766-20	G44D	Total/NA	Water	6010B	515215
MB 500-515215/1-A	Method Blank	Total/NA	Water	6010B	515215
LCS 500-515215/2-A	Lab Control Sample	Total/NA	Water	6010B	515215
500-172766-1 MS	G41D	Total/NA	Water	6010B	515215
500-172766-1 MSD	G41D	Total/NA	Water	6010B	515215
500-172766-1 DU	G41D	Total/NA	Water	6010B	515215

Metals

Analysis Batch: 515501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Dissolved	Water	6010B	515216
500-172766-2	G41S	Dissolved	Water	6010B	515216
500-172766-3	G33D	Dissolved	Water	6010B	515216
500-172766-4	G42S	Dissolved	Water	6010B	515216
500-172766-5	G42D	Dissolved	Water	6010B	515216
500-172766-6	G33S	Dissolved	Water	6010B	515216
500-172766-7	G20S	Dissolved	Water	6010B	515216
500-172766-8	R16D	Dissolved	Water	6010B	515216
500-172766-9	G30S	Dissolved	Water	6010B	515216
500-172766-10	G30D	Dissolved	Water	6010B	515216
500-172766-11	R32S	Dissolved	Water	6010B	515216
500-172766-12	G48D	Dissolved	Water	6010B	515216
500-172766-13	G48S	Dissolved	Water	6010B	515216
500-172766-14	G47S	Dissolved	Water	6010B	515216
500-172766-15	G47D	Dissolved	Water	6010B	515216
500-172766-16	R08D	Dissolved	Water	6010B	515216
500-172766-17	R08S	Dissolved	Water	6010B	515216
500-172766-18	G39S	Dissolved	Water	6010B	515216
500-172766-19	G44S	Dissolved	Water	6010B	515216
500-172766-20	G44D	Dissolved	Water	6010B	515216
MB 500-515216/1-A	Method Blank	Total/NA	Water	6010B	515216
LCS 500-515216/2-A	Lab Control Sample	Total/NA	Water	6010B	515216
500-172766-20 MS	G44D	Dissolved	Water	6010B	515216
500-172766-20 MSD	G44D	Dissolved	Water	6010B	515216
500-172766-20 DU	G44D	Dissolved	Water	6010B	515216

Analysis Batch: 515612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-3	G33D	Dissolved	Water	6010B	515216

Prep Batch: 516163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-21	G46D	Total/NA	Water	7470A	
500-172766-22	G46S	Total/NA	Water	7470A	
500-172766-28	G38D	Total/NA	Water	7470A	
500-172766-29	G38S	Total/NA	Water	7470A	
MB 500-516163/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-516163/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 516412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-21	G46D	Total/NA	Water	7470A	516163
500-172766-22	G46S	Total/NA	Water	7470A	516163
500-172766-28	G38D	Total/NA	Water	7470A	516163
500-172766-29	G38S	Total/NA	Water	7470A	516163
MB 500-516163/12-A	Method Blank	Total/NA	Water	7470A	516163
LCS 500-516163/13-A	Lab Control Sample	Total/NA	Water	7470A	516163

Prep Batch: 517073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-21	G46D	Dissolved	Water	3010A	

Metals (Continued)

Prep Batch: 517073 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-21	G46D	Total/NA	Water	3010A	
500-172766-22	G46S	Dissolved	Water	3010A	
500-172766-22	G46S	Total/NA	Water	3010A	
500-172766-23	G31D	Dissolved	Water	3010A	
500-172766-23	G31D	Total/NA	Water	3010A	
500-172766-24	G31S	Dissolved	Water	3010A	
500-172766-24	G31S	Total/NA	Water	3010A	
500-172766-27	G45S	Dissolved	Water	3010A	
500-172766-27	G45S	Total/NA	Water	3010A	
500-172766-28	G38D	Dissolved	Water	3010A	
500-172766-28	G38D	Total/NA	Water	3010A	
500-172766-29	G38S	Dissolved	Water	3010A	
500-172766-29	G38S	Total/NA	Water	3010A	
MB 500-517073/1-A	Method Blank	Total/NA	Water	3010A	
LCS 500-517073/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 517287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-21	G46D	Dissolved	Water	6010B	517073
500-172766-21	G46D	Total/NA	Water	6010B	517073
500-172766-22	G46S	Dissolved	Water	6010B	517073
500-172766-22	G46S	Total/NA	Water	6010B	517073
500-172766-23	G31D	Dissolved	Water	6010B	517073
500-172766-23	G31D	Total/NA	Water	6010B	517073
500-172766-24	G31S	Dissolved	Water	6010B	517073
500-172766-24	G31S	Total/NA	Water	6010B	517073
500-172766-27	G45S	Dissolved	Water	6010B	517073
500-172766-27	G45S	Total/NA	Water	6010B	517073
500-172766-28	G38D	Dissolved	Water	6010B	517073
500-172766-28	G38D	Total/NA	Water	6010B	517073
500-172766-29	G38S	Dissolved	Water	6010B	517073
500-172766-29	G38S	Total/NA	Water	6010B	517073
MB 500-517073/1-A	Method Blank	Total/NA	Water	6010B	517073
LCS 500-517073/2-A	Lab Control Sample	Total/NA	Water	6010B	517073

Analysis Batch: 517424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-21	G46D	Dissolved	Water	6010B	517073
500-172766-22	G46S	Dissolved	Water	6010B	517073
500-172766-22	G46S	Dissolved	Water	6010B	517073
500-172766-22	G46S	Total/NA	Water	6010B	517073
500-172766-23	G31D	Dissolved	Water	6010B	517073
500-172766-24	G31S	Dissolved	Water	6010B	517073
500-172766-27	G45S	Dissolved	Water	6010B	517073
500-172766-28	G38D	Dissolved	Water	6010B	517073
500-172766-29	G38S	Dissolved	Water	6010B	517073
MB 500-517073/1-A	Method Blank	Total/NA	Water	6010B	517073
LCS 500-517073/2-A	Lab Control Sample	Total/NA	Water	6010B	517073

General Chemistry

Analysis Batch: 513700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Dissolved	Water	SM 4500 F C	
500-172766-2	G41S	Dissolved	Water	SM 4500 F C	
500-172766-3	G33D	Dissolved	Water	SM 4500 F C	
500-172766-4	G42S	Dissolved	Water	SM 4500 F C	
500-172766-5	G42D	Dissolved	Water	SM 4500 F C	
500-172766-6	G33S	Dissolved	Water	SM 4500 F C	
MB 500-513700/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-513700/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-172766-1 MS	G41D	Dissolved	Water	SM 4500 F C	
500-172766-1 MSD	G41D	Dissolved	Water	SM 4500 F C	

Analysis Batch: 513817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Total/NA	Water	2540 C	
500-172766-2	G41S	Total/NA	Water	2540 C	
500-172766-3	G33D	Total/NA	Water	2540 C	
500-172766-4	G42S	Total/NA	Water	2540 C	
500-172766-5	G42D	Total/NA	Water	2540 C	
500-172766-6	G33S	Total/NA	Water	2540 C	
500-172766-7	G20S	Total/NA	Water	2540 C	
500-172766-8	R16D	Total/NA	Water	2540 C	
MB 500-513817/1	Method Blank	Total/NA	Water	2540 C	
LCS 500-513817/2	Lab Control Sample	Total/NA	Water	2540 C	
500-172766-1 MS	G41D	Total/NA	Water	2540 C	
500-172766-1 DU	G41D	Total/NA	Water	2540 C	
500-172766-2 DU	G41S	Total/NA	Water	2540 C	

Analysis Batch: 514051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-9	G30S	Total/NA	Water	2540 C	
500-172766-10	G30D	Total/NA	Water	2540 C	
MB 500-514051/1	Method Blank	Total/NA	Water	2540 C	
LCS 500-514051/2	Lab Control Sample	Total/NA	Water	2540 C	
500-172766-9 MS	G30S	Total/NA	Water	2540 C	
500-172766-9 DU	G30S	Total/NA	Water	2540 C	
500-172766-10 DU	G30D	Total/NA	Water	2540 C	

Analysis Batch: 515001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-11	R32S	Total/NA	Water	2540 C	
500-172766-12	G48D	Total/NA	Water	2540 C	
500-172766-13	G48S	Total/NA	Water	2540 C	
500-172766-14	G47S	Total/NA	Water	2540 C	
500-172766-15	G47D	Total/NA	Water	2540 C	
500-172766-16	R08D	Total/NA	Water	2540 C	
500-172766-17	R08S	Total/NA	Water	2540 C	
500-172766-18	G39S	Total/NA	Water	2540 C	
500-172766-19	G44S	Total/NA	Water	2540 C	
500-172766-20	G44D	Total/NA	Water	2540 C	
MB 500-515001/1	Method Blank	Total/NA	Water	2540 C	
LCS 500-515001/2	Lab Control Sample	Total/NA	Water	2540 C	

General Chemistry (Continued)

Analysis Batch: 515001 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-11 MS	R32S	Total/NA	Water	2540 C	
500-172766-11 DU	R32S	Total/NA	Water	2540 C	
500-172766-12 DU	G48D	Total/NA	Water	2540 C	

Analysis Batch: 515061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Dissolved	Water	SM 5310C	
500-172766-2	G41S	Dissolved	Water	SM 5310C	
500-172766-3	G33D	Dissolved	Water	SM 5310C	
500-172766-4	G42S	Dissolved	Water	SM 5310C	
500-172766-5	G42D	Dissolved	Water	SM 5310C	
500-172766-6	G33S	Dissolved	Water	SM 5310C	
500-172766-7	G20S	Dissolved	Water	SM 5310C	
500-172766-8	R16D	Dissolved	Water	SM 5310C	
500-172766-9	G30S	Dissolved	Water	SM 5310C	
500-172766-10	G30D	Dissolved	Water	SM 5310C	
500-172766-11	R32S	Dissolved	Water	SM 5310C	
500-172766-12	G48D	Dissolved	Water	SM 5310C	
500-172766-13	G48S	Dissolved	Water	SM 5310C	
500-172766-14	G47S	Dissolved	Water	SM 5310C	
500-172766-15	G47D	Dissolved	Water	SM 5310C	
MB 500-515061/8	Method Blank	Dissolved	Water	SM 5310C	
LCS 500-515061/9	Lab Control Sample	Dissolved	Water	SM 5310C	
500-172766-1 MS	G41D	Dissolved	Water	SM 5310C	
500-172766-1 MSD	G41D	Dissolved	Water	SM 5310C	

Analysis Batch: 515426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Dissolved	Water	SM 4500 Cl- E	
500-172766-2	G41S	Dissolved	Water	SM 4500 Cl- E	
500-172766-3	G33D	Dissolved	Water	SM 4500 Cl- E	
500-172766-4	G42S	Dissolved	Water	SM 4500 Cl- E	
500-172766-5	G42D	Dissolved	Water	SM 4500 Cl- E	
500-172766-6	G33S	Dissolved	Water	SM 4500 Cl- E	
500-172766-8	R16D	Dissolved	Water	SM 4500 Cl- E	
500-172766-9	G30S	Dissolved	Water	SM 4500 Cl- E	
500-172766-10	G30D	Dissolved	Water	SM 4500 Cl- E	
500-172766-11	R32S	Dissolved	Water	SM 4500 Cl- E	
500-172766-12	G48D	Dissolved	Water	SM 4500 Cl- E	
500-172766-13	G48S	Dissolved	Water	SM 4500 Cl- E	
500-172766-17	R08S	Dissolved	Water	SM 4500 Cl- E	
500-172766-18	G39S	Dissolved	Water	SM 4500 Cl- E	
MB 500-515426/9	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-515426/10	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-172766-8 MS	R16D	Dissolved	Water	SM 4500 Cl- E	
500-172766-8 MSD	R16D	Dissolved	Water	SM 4500 Cl- E	
500-172766-9 MS	G30S	Dissolved	Water	SM 4500 Cl- E	
500-172766-9 MSD	G30S	Dissolved	Water	SM 4500 Cl- E	

General Chemistry

Analysis Batch: 515443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Dissolved	Water	9056A	
500-172766-2	G41S	Dissolved	Water	9056A	
500-172766-3	G33D	Dissolved	Water	9056A	
500-172766-4	G42S	Dissolved	Water	9056A	
500-172766-5	G42D	Dissolved	Water	9056A	
500-172766-6	G33S	Dissolved	Water	9056A	
500-172766-8	R16D	Dissolved	Water	9056A	
500-172766-9	G30S	Dissolved	Water	9056A	
500-172766-10	G30D	Dissolved	Water	9056A	
500-172766-11	R32S	Dissolved	Water	9056A	
500-172766-12	G48D	Dissolved	Water	9056A	
500-172766-13	G48S	Dissolved	Water	9056A	
500-172766-14	G47S	Dissolved	Water	9056A	
500-172766-15	G47D	Dissolved	Water	9056A	
500-172766-16	R08D	Dissolved	Water	9056A	
500-172766-17	R08S	Dissolved	Water	9056A	
500-172766-18	G39S	Dissolved	Water	9056A	
500-172766-19	G44S	Dissolved	Water	9056A	
500-172766-20	G44D	Dissolved	Water	9056A	
500-172766-21	G46D	Dissolved	Water	9056A	
MB 500-515443/3	Method Blank	Total/NA	Water	9056A	
LCS 500-515443/4	Lab Control Sample	Total/NA	Water	9056A	
500-172766-4 MS	G42S	Dissolved	Water	9056A	
500-172766-4 MSD	G42S	Dissolved	Water	9056A	
500-172766-6 MS	G33S	Dissolved	Water	9056A	
500-172766-6 MSD	G33S	Dissolved	Water	9056A	

Analysis Batch: 515641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-22	G46S	Dissolved	Water	9056A	
500-172766-23	G31D	Dissolved	Water	9056A	
500-172766-24	G31S	Dissolved	Water	9056A	
MB 500-515641/3	Method Blank	Total/NA	Water	9056A	
LCS 500-515641/4	Lab Control Sample	Total/NA	Water	9056A	
500-172766-23 MS	G31D	Dissolved	Water	9056A	
500-172766-23 MSD	G31D	Dissolved	Water	9056A	

Analysis Batch: 515692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-28	G38D	Dissolved	Water	SM 4500 F C	
MB 500-515692/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-515692/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 516025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-14	G47S	Dissolved	Water	SM 4500 Cl- E	
500-172766-15	G47D	Dissolved	Water	SM 4500 Cl- E	
500-172766-16	R08D	Dissolved	Water	SM 4500 Cl- E	
500-172766-19	G44S	Dissolved	Water	SM 4500 Cl- E	
500-172766-20	G44D	Dissolved	Water	SM 4500 Cl- E	
500-172766-21	G46D	Dissolved	Water	SM 4500 Cl- E	

General Chemistry (Continued)

Analysis Batch: 516025 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-22	G46S	Dissolved	Water	SM 4500 Cl- E	
500-172766-23	G31D	Dissolved	Water	SM 4500 Cl- E	
MB 500-516025/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-516025/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-172766-23 MS	G31D	Dissolved	Water	SM 4500 Cl- E	
500-172766-23 MSD	G31D	Dissolved	Water	SM 4500 Cl- E	

Prep Batch: 516229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-18	G39S	Dissolved	Water	SM 4500 NH3 B	
MB 500-516229/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 500-516229/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 516292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-21	G46D	Total/NA	Water	2540 C	
500-172766-22	G46S	Total/NA	Water	2540 C	
500-172766-23	G31D	Total/NA	Water	2540 C	
500-172766-24	G31S	Total/NA	Water	2540 C	
MB 500-516292/1	Method Blank	Total/NA	Water	2540 C	
LCS 500-516292/2	Lab Control Sample	Total/NA	Water	2540 C	

Prep Batch: 516456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Dissolved	Water	SM 4500 NH3 B	
500-172766-2	G41S	Dissolved	Water	SM 4500 NH3 B	
500-172766-3	G33D	Dissolved	Water	SM 4500 NH3 B	
500-172766-4	G42S	Dissolved	Water	SM 4500 NH3 B	
500-172766-5	G42D	Dissolved	Water	SM 4500 NH3 B	
500-172766-6	G33S	Dissolved	Water	SM 4500 NH3 B	
MB 500-516456/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 500-516456/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
500-172766-1 MS	G41D	Dissolved	Water	SM 4500 NH3 B	
500-172766-1 MSD	G41D	Dissolved	Water	SM 4500 NH3 B	

Analysis Batch: 516511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-27	G45S	Total/NA	Water	2540 C	
500-172766-28	G38D	Total/NA	Water	2540 C	
500-172766-29	G38S	Total/NA	Water	2540 C	
MB 500-516511/1	Method Blank	Total/NA	Water	2540 C	
LCS 500-516511/2	Lab Control Sample	Total/NA	Water	2540 C	
500-172766-27 DU	G45S	Total/NA	Water	2540 C	

Analysis Batch: 516531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-18	G39S	Dissolved	Water	SM 4500 NH3 G	516229
MB 500-516229/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	516229
LCS 500-516229/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	516229

General Chemistry

Prep Batch: 516629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-7	G20S	Dissolved	Water	SM 4500 NH3 B	
500-172766-8	R16D	Dissolved	Water	SM 4500 NH3 B	
500-172766-9	G30S	Dissolved	Water	SM 4500 NH3 B	
500-172766-10	G30D	Dissolved	Water	SM 4500 NH3 B	
500-172766-11	R32S	Dissolved	Water	SM 4500 NH3 B	
500-172766-12	G48D	Dissolved	Water	SM 4500 NH3 B	
500-172766-13	G48S	Dissolved	Water	SM 4500 NH3 B	
500-172766-14	G47S	Dissolved	Water	SM 4500 NH3 B	
500-172766-15	G47D	Dissolved	Water	SM 4500 NH3 B	
500-172766-16	R08D	Dissolved	Water	SM 4500 NH3 B	
500-172766-17	R08S	Dissolved	Water	SM 4500 NH3 B	
500-172766-19	G44S	Dissolved	Water	SM 4500 NH3 B	
500-172766-20	G44D	Dissolved	Water	SM 4500 NH3 B	
500-172766-21	G46D	Dissolved	Water	SM 4500 NH3 B	
500-172766-22	G46S	Dissolved	Water	SM 4500 NH3 B	
500-172766-23	G31D	Dissolved	Water	SM 4500 NH3 B	
500-172766-24	G31S	Dissolved	Water	SM 4500 NH3 B	
MB 500-516629/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 500-516629/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
500-172766-7 MS	G20S	Dissolved	Water	SM 4500 NH3 B	
500-172766-7 MSD	G20S	Dissolved	Water	SM 4500 NH3 B	

Analysis Batch: 516668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Dissolved	Water	SM 4500 NH3 G	516456
500-172766-2	G41S	Dissolved	Water	SM 4500 NH3 G	516456
500-172766-3	G33D	Dissolved	Water	SM 4500 NH3 G	516456
500-172766-4	G42S	Dissolved	Water	SM 4500 NH3 G	516456
500-172766-5	G42D	Dissolved	Water	SM 4500 NH3 G	516456
500-172766-6	G33S	Dissolved	Water	SM 4500 NH3 G	516456
MB 500-516456/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	516456
LCS 500-516456/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	516456
500-172766-1 MS	G41D	Dissolved	Water	SM 4500 NH3 G	516456
500-172766-1 MSD	G41D	Dissolved	Water	SM 4500 NH3 G	516456

Prep Batch: 516891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-27	G45S	Dissolved	Water	SM 4500 NH3 B	
500-172766-28	G38D	Dissolved	Water	SM 4500 NH3 B	
500-172766-29	G38S	Dissolved	Water	SM 4500 NH3 B	
MB 500-516891/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 500-516891/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 516901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-16	R08D	Dissolved	Water	SM 5310C	
500-172766-17	R08S	Dissolved	Water	SM 5310C	
500-172766-18	G39S	Dissolved	Water	SM 5310C	
500-172766-19	G44S	Dissolved	Water	SM 5310C	
500-172766-20	G44D	Dissolved	Water	SM 5310C	
500-172766-21	G46D	Dissolved	Water	SM 5310C	

General Chemistry (Continued)

Analysis Batch: 516901 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-22	G46S	Dissolved	Water	SM 5310C	
500-172766-23	G31D	Dissolved	Water	SM 5310C	
500-172766-24	G31S	Dissolved	Water	SM 5310C	
500-172766-27	G45S	Dissolved	Water	SM 5310C	
500-172766-28	G38D	Dissolved	Water	SM 5310C	
500-172766-29	G38S	Dissolved	Water	SM 5310C	
MB 500-516901/8	Method Blank	Dissolved	Water	SM 5310C	
LCS 500-516901/9	Lab Control Sample	Dissolved	Water	SM 5310C	
500-172766-16 MS	R08D	Dissolved	Water	SM 5310C	
500-172766-16 MSD	R08D	Dissolved	Water	SM 5310C	

Analysis Batch: 516975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-7	G20S	Dissolved	Water	SM 4500 F C	
500-172766-8	R16D	Dissolved	Water	SM 4500 F C	
500-172766-9	G30S	Dissolved	Water	SM 4500 F C	
500-172766-10	G30D	Dissolved	Water	SM 4500 F C	
500-172766-11	R32S	Dissolved	Water	SM 4500 F C	
500-172766-12	G48D	Dissolved	Water	SM 4500 F C	
500-172766-13	G48S	Dissolved	Water	SM 4500 F C	
500-172766-14	G47S	Dissolved	Water	SM 4500 F C	
500-172766-15	G47D	Dissolved	Water	SM 4500 F C	
500-172766-16	R08D	Dissolved	Water	SM 4500 F C	
500-172766-17	R08S	Dissolved	Water	SM 4500 F C	
500-172766-18	G39S	Dissolved	Water	SM 4500 F C	
500-172766-19	G44S	Dissolved	Water	SM 4500 F C	
500-172766-20	G44D	Dissolved	Water	SM 4500 F C	
500-172766-21	G46D	Dissolved	Water	SM 4500 F C	
500-172766-22	G46S	Dissolved	Water	SM 4500 F C	
500-172766-23	G31D	Dissolved	Water	SM 4500 F C	
500-172766-24	G31S	Dissolved	Water	SM 4500 F C	
500-172766-27	G45S	Dissolved	Water	SM 4500 F C	
500-172766-29	G38S	Dissolved	Water	SM 4500 F C	
MB 500-516975/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-516975/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-172766-8 MS	R16D	Dissolved	Water	SM 4500 F C	
500-172766-8 MSD	R16D	Dissolved	Water	SM 4500 F C	

Analysis Batch: 517184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-7	G20S	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-8	R16D	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-9	G30S	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-10	G30D	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-11	R32S	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-12	G48D	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-13	G48S	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-14	G47S	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-15	G47D	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-16	R08D	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-17	R08S	Dissolved	Water	SM 4500 NH3 G	516629

General Chemistry (Continued)

Analysis Batch: 517184 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-19	G44S	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-20	G44D	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-21	G46D	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-22	G46S	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-23	G31D	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-24	G31S	Dissolved	Water	SM 4500 NH3 G	516629
MB 500-516629/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	516629
LCS 500-516629/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	516629
500-172766-7 MS	G20S	Dissolved	Water	SM 4500 NH3 G	516629
500-172766-7 MSD	G20S	Dissolved	Water	SM 4500 NH3 G	516629

Analysis Batch: 517237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-27	G45S	Dissolved	Water	SM 4500 NH3 G	516891
500-172766-28	G38D	Dissolved	Water	SM 4500 NH3 G	516891
500-172766-29	G38S	Dissolved	Water	SM 4500 NH3 G	516891
MB 500-516891/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	516891
LCS 500-516891/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	516891

Analysis Batch: 517651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-7	G20S	Dissolved	Water	9056A	
500-172766-27	G45S	Dissolved	Water	9056A	
500-172766-28	G38D	Dissolved	Water	9056A	
500-172766-29	G38S	Dissolved	Water	9056A	
MB 500-517651/3	Method Blank	Total/NA	Water	9056A	
LCS 500-517651/4	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 517655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-7	G20S	Dissolved	Water	SM 4500 Cl- E	
500-172766-24	G31S	Dissolved	Water	SM 4500 Cl- E	
500-172766-27	G45S	Dissolved	Water	SM 4500 Cl- E	
500-172766-28	G38D	Dissolved	Water	SM 4500 Cl- E	
500-172766-29	G38S	Dissolved	Water	SM 4500 Cl- E	
MB 500-517655/63	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-517655/64	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-172766-24 MS	G31S	Dissolved	Water	SM 4500 Cl- E	
500-172766-24 MSD	G31S	Dissolved	Water	SM 4500 Cl- E	
500-172766-29 MS	G38S	Dissolved	Water	SM 4500 Cl- E	
500-172766-29 MSD	G38S	Dissolved	Water	SM 4500 Cl- E	

Analysis Batch: 517730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Dissolved	Water	Nitrate by calc	
500-172766-2	G41S	Dissolved	Water	Nitrate by calc	
500-172766-3	G33D	Dissolved	Water	Nitrate by calc	
500-172766-4	G42S	Dissolved	Water	Nitrate by calc	

General Chemistry

Analysis Batch: 517948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Total/NA	Water	Nitrate by calc	
500-172766-2	G41S	Total/NA	Water	Nitrate by calc	
500-172766-3	G33D	Total/NA	Water	Nitrate by calc	
500-172766-4	G42S	Total/NA	Water	Nitrate by calc	
500-172766-5	G42D	Total/NA	Water	Nitrate by calc	
500-172766-6	G33S	Total/NA	Water	Nitrate by calc	
500-172766-7	G20S	Total/NA	Water	Nitrate by calc	
500-172766-8	R16D	Total/NA	Water	Nitrate by calc	
500-172766-9	G30S	Total/NA	Water	Nitrate by calc	
500-172766-10	G30D	Total/NA	Water	Nitrate by calc	
500-172766-11	R32S	Total/NA	Water	Nitrate by calc	
500-172766-12	G48D	Total/NA	Water	Nitrate by calc	
500-172766-13	G48S	Total/NA	Water	Nitrate by calc	
500-172766-14	G47S	Total/NA	Water	Nitrate by calc	
500-172766-15	G47D	Total/NA	Water	Nitrate by calc	
500-172766-16	R08D	Total/NA	Water	Nitrate by calc	
500-172766-17	R08S	Total/NA	Water	Nitrate by calc	
500-172766-18	G39S	Total/NA	Water	Nitrate by calc	
500-172766-19	G44S	Total/NA	Water	Nitrate by calc	
500-172766-20	G44D	Total/NA	Water	Nitrate by calc	
500-172766-21	G46D	Total/NA	Water	Nitrate by calc	
500-172766-22	G46S	Total/NA	Water	Nitrate by calc	
500-172766-23	G31D	Total/NA	Water	Nitrate by calc	
500-172766-24	G31S	Total/NA	Water	Nitrate by calc	
500-172766-27	G45S	Total/NA	Water	Nitrate by calc	
500-172766-28	G38D	Total/NA	Water	Nitrate by calc	
500-172766-29	G38S	Total/NA	Water	Nitrate by calc	

Analysis Batch: 517951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-5	G42D	Dissolved	Water	Nitrate by calc	
500-172766-6	G33S	Dissolved	Water	Nitrate by calc	
500-172766-7	G20S	Dissolved	Water	Nitrate by calc	
500-172766-8	R16D	Dissolved	Water	Nitrate by calc	
500-172766-9	G30S	Dissolved	Water	Nitrate by calc	
500-172766-10	G30D	Dissolved	Water	Nitrate by calc	
500-172766-11	R32S	Dissolved	Water	Nitrate by calc	
500-172766-12	G48D	Dissolved	Water	Nitrate by calc	
500-172766-13	G48S	Dissolved	Water	Nitrate by calc	
500-172766-14	G47S	Dissolved	Water	Nitrate by calc	
500-172766-15	G47D	Dissolved	Water	Nitrate by calc	
500-172766-16	R08D	Dissolved	Water	Nitrate by calc	
500-172766-17	R08S	Dissolved	Water	Nitrate by calc	
500-172766-18	G39S	Dissolved	Water	Nitrate by calc	
500-172766-19	G44S	Dissolved	Water	Nitrate by calc	
500-172766-20	G44D	Dissolved	Water	Nitrate by calc	
500-172766-21	G46D	Dissolved	Water	Nitrate by calc	
500-172766-22	G46S	Dissolved	Water	Nitrate by calc	
500-172766-23	G31D	Dissolved	Water	Nitrate by calc	
500-172766-24	G31S	Dissolved	Water	Nitrate by calc	
500-172766-27	G45S	Dissolved	Water	Nitrate by calc	

General Chemistry (Continued)

Analysis Batch: 517951 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-28	G38D	Dissolved	Water	Nitrate by calc	
500-172766-29	G38S	Dissolved	Water	Nitrate by calc	

Field Service / Mobile Lab

Analysis Batch: 513615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-172766-1	G41D	Total/NA	Water	Field Sampling	
500-172766-2	G41S	Total/NA	Water	Field Sampling	
500-172766-3	G33D	Total/NA	Water	Field Sampling	
500-172766-4	G42S	Total/NA	Water	Field Sampling	
500-172766-5	G42D	Total/NA	Water	Field Sampling	
500-172766-6	G33S	Total/NA	Water	Field Sampling	
500-172766-7	G20S	Total/NA	Water	Field Sampling	
500-172766-8	R16D	Total/NA	Water	Field Sampling	
500-172766-9	G30S	Total/NA	Water	Field Sampling	
500-172766-10	G30D	Total/NA	Water	Field Sampling	
500-172766-11	R32S	Total/NA	Water	Field Sampling	
500-172766-12	G48D	Total/NA	Water	Field Sampling	
500-172766-13	G48S	Total/NA	Water	Field Sampling	
500-172766-14	G47S	Total/NA	Water	Field Sampling	
500-172766-15	G47D	Total/NA	Water	Field Sampling	
500-172766-16	R08D	Total/NA	Water	Field Sampling	
500-172766-17	R08S	Total/NA	Water	Field Sampling	
500-172766-18	G39S	Total/NA	Water	Field Sampling	
500-172766-19	G44S	Total/NA	Water	Field Sampling	
500-172766-20	G44D	Total/NA	Water	Field Sampling	
500-172766-21	G46D	Total/NA	Water	Field Sampling	
500-172766-22	G46S	Total/NA	Water	Field Sampling	
500-172766-23	G31D	Total/NA	Water	Field Sampling	
500-172766-24	G31S	Total/NA	Water	Field Sampling	
500-172766-25	S501	Total/NA	Water	Field Sampling	
500-172766-26	P40S	Total/NA	Water	Field Sampling	
500-172766-27	G45S	Total/NA	Water	Field Sampling	
500-172766-28	G38D	Total/NA	Water	Field Sampling	
500-172766-29	G38S	Total/NA	Water	Field Sampling	

Surrogate Summary

Client: Midwest Generation EME LLC
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Job ID: 500-172766-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	NBZ (36-120)	FBP (34-110)	TPHL (40-145)
500-172766-1	G41D	36	69	106
500-172766-2	G41S	27 X	64	91
500-172766-3	G33D	19 X	55	86
500-172766-4	G42S	105	112 X	171 X
500-172766-5	G42D	108	107	173 X
500-172766-6	G33S	65	69	105
500-172766-7	G20S	68	68	115
500-172766-8	R16D	77	77	121
500-172766-9	G30S	61	64	101
500-172766-10	G30D	53	58	96
500-172766-11	R32S	60	68	91
500-172766-12	G48D	79	87	115
500-172766-13	G48S	87	91	124
500-172766-14	G47S	79	84	116
500-172766-15	G47D	81	84	118
500-172766-16	R08D	69	74	97
500-172766-17	R08S	71	77	102
500-172766-18	G39S	72	79	88
500-172766-19	G44S	71	79	99
500-172766-20	G44D	61	68	89
500-172766-21	G46D	63	58	84
500-172766-22	G46S	70	76	89
500-172766-23	G31D	66	72	86
500-172766-24	G31S	64	73	88
500-172766-27	G45S	57	64	90
500-172766-28	G38D	74	82	95
500-172766-29	G38S	72	77	98
LCS 500-513555/2-A	Lab Control Sample	68	75	90
LCS 500-513702/2-A	Lab Control Sample	50	45	83
LCS 500-514198/2-A	Lab Control Sample	55	54	88
LCS 500-514313/2-A	Lab Control Sample	65	72	86
LCS 500-515030/2-A	Lab Control Sample	78	83	88
LCS 500-515276/2-A	Lab Control Sample	58	61	74
LCS 500-515510/2-A	Lab Control Sample	69	75	88
LCSD 500-513702/3-A	Lab Control Sample Dup	54	48	77
LCSD 500-514198/3-A	Lab Control Sample Dup	49	44	85
LCSD 500-514313/3-A	Lab Control Sample Dup	59	68	94
LCSD 500-515030/3-A	Lab Control Sample Dup	74	76	93
LCSD 500-515276/3-A	Lab Control Sample Dup	52	52	73
LCSD 500-515510/3-A	Lab Control Sample Dup	66	74	86
MB 500-513555/1-A	Method Blank	64	72	93
MB 500-513702/1-A	Method Blank	61	51	93
MB 500-514198/1-A	Method Blank	54	49	93
MB 500-514313/1-A	Method Blank	70	77	102
MB 500-515030/1-A	Method Blank	78	84	97
MB 500-515276/1-A	Method Blank	58	61	85
MB 500-515510/1-A	Method Blank	66	73	92

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)

Surrogate Summary

Client: Midwest Generation EME LLC
Job ID: 500-172766-1
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-513555/1-A
Matrix: Water
Analysis Batch: 513740

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 513555

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/05/19 07:46	11/06/19 02:53	1
Fluoranthene	ND		0.80		ug/L		11/05/19 07:46	11/06/19 02:53	1
Pyrene	ND		0.80		ug/L		11/05/19 07:46	11/06/19 02:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*64*		*36 - 120*	*11/05/19 07:46*	*11/06/19 02:53*	*1*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*	*11/05/19 07:46*	*11/06/19 02:53*	*1*
Terphenyl-d14 (Surr)	*93*		*40 - 145*	*11/05/19 07:46*	*11/06/19 02:53*	*1*

Lab Sample ID: LCS 500-513555/2-A
Matrix: Water
Analysis Batch: 513740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513555

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	32.0	29.1		ug/L		91	70 - 135
Fluoranthene	32.0	29.2		ug/L		91	68 - 126
Pyrene	32.0	25.1		ug/L		78	70 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*68*		*36 - 120*
2-Fluorobiphenyl (Surr)	*75*		*34 - 110*
Terphenyl-d14 (Surr)	*90*		*40 - 145*

Lab Sample ID: MB 500-513702/1-A
Matrix: Water
Analysis Batch: 513975

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 513702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/05/19 16:53	11/06/19 23:34	1
Fluoranthene	ND		0.80		ug/L		11/05/19 16:53	11/06/19 23:34	1
Pyrene	ND		0.80		ug/L		11/05/19 16:53	11/06/19 23:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*61*		*36 - 120*	*11/05/19 16:53*	*11/06/19 23:34*	*1*
2-Fluorobiphenyl (Surr)	*51*		*34 - 110*	*11/05/19 16:53*	*11/06/19 23:34*	*1*
Terphenyl-d14 (Surr)	*93*		*40 - 145*	*11/05/19 16:53*	*11/06/19 23:34*	*1*

Lab Sample ID: LCS 500-513702/2-A
Matrix: Water
Analysis Batch: 513975

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	32.0	33.1		ug/L		103	70 - 135
Fluoranthene	32.0	29.6		ug/L		93	68 - 126
Pyrene	32.0	30.6		ug/L		96	70 - 126

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-513702/2-A
Matrix: Water
Analysis Batch: 513975

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513702

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*50*		*36 - 120*
2-Fluorobiphenyl (Surr)	*45*		*34 - 110*
Terphenyl-d14 (Surr)	*83*		*40 - 145*

Lab Sample ID: LCSD 500-513702/3-A
Matrix: Water
Analysis Batch: 513975

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 513702

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene			32.0	28.0		ug/L		87	70 - 135	17	20
Fluoranthene			32.0	26.3		ug/L		82	68 - 126	12	20
Pyrene			32.0	26.4		ug/L		83	70 - 126	15	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*54*		*36 - 120*
2-Fluorobiphenyl (Surr)	*48*		*34 - 110*
Terphenyl-d14 (Surr)	*77*		*40 - 145*

Lab Sample ID: MB 500-514198/1-A
Matrix: Water
Analysis Batch: 514832

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514198

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/07/19 15:45	11/12/19 16:51	1
Fluoranthene	ND		0.80		ug/L		11/07/19 15:45	11/12/19 16:51	1
Pyrene	ND		0.80		ug/L		11/07/19 15:45	11/12/19 16:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*54*		*36 - 120*	*11/07/19 15:45*	*11/12/19 16:51*	*1*
2-Fluorobiphenyl (Surr)	*49*		*34 - 110*	*11/07/19 15:45*	*11/12/19 16:51*	*1*
Terphenyl-d14 (Surr)	*93*		*40 - 145*	*11/07/19 15:45*	*11/12/19 16:51*	*1*

Lab Sample ID: LCS 500-514198/2-A
Matrix: Water
Analysis Batch: 514832

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514198

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene			32.0	31.0		ug/L		97	70 - 135
Fluoranthene			32.0	29.6		ug/L		92	68 - 126
Pyrene			32.0	28.2		ug/L		88	70 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*55*		*36 - 120*
2-Fluorobiphenyl (Surr)	*54*		*34 - 110*
Terphenyl-d14 (Surr)	*88*		*40 - 145*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-514198/3-A
Matrix: Water
Analysis Batch: 514832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 514198

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene			32.0	29.8		ug/L		93	70 - 135	4	20
Fluoranthene			32.0	29.6		ug/L		92	68 - 126	0	20
Pyrene			32.0	27.5		ug/L		86	70 - 126	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*49*		*36 - 120*
2-Fluorobiphenyl (Surr)	*44*		*34 - 110*
Terphenyl-d14 (Surr)	*85*		*40 - 145*

Lab Sample ID: MB 500-514313/1-A
Matrix: Water
Analysis Batch: 514832

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/08/19 08:19	11/12/19 16:02	1
Fluoranthene	ND		0.80		ug/L		11/08/19 08:19	11/12/19 16:02	1
Pyrene	ND		0.80		ug/L		11/08/19 08:19	11/12/19 16:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*70*		*36 - 120*	*11/08/19 08:19*	*11/12/19 16:02*	*1*
2-Fluorobiphenyl (Surr)	*77*		*34 - 110*	*11/08/19 08:19*	*11/12/19 16:02*	*1*
Terphenyl-d14 (Surr)	*102*		*40 - 145*	*11/08/19 08:19*	*11/12/19 16:02*	*1*

Lab Sample ID: LCS 500-514313/2-A
Matrix: Water
Analysis Batch: 514832

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514313

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene			32.0	27.1		ug/L		85	70 - 135
Fluoranthene			32.0	25.8		ug/L		81	68 - 126
Pyrene			32.0	25.0		ug/L		78	70 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*65*		*36 - 120*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*
Terphenyl-d14 (Surr)	*86*		*40 - 145*

Lab Sample ID: LCSD 500-514313/3-A
Matrix: Water
Analysis Batch: 514832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 514313

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene			32.0	30.9		ug/L		96	70 - 135	13	20
Fluoranthene			32.0	29.5		ug/L		92	68 - 126	13	20
Pyrene			32.0	28.0		ug/L		88	70 - 126	11	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-514313/3-A
Matrix: Water
Analysis Batch: 514832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 514313

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*59*		*36 - 120*
2-Fluorobiphenyl (Surr)	*68*		*34 - 110*
Terphenyl-d14 (Surr)	*94*		*40 - 145*

Lab Sample ID: MB 500-515030/1-A
Matrix: Water
Analysis Batch: 516000

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/13/19 07:35	11/18/19 20:48	1
Fluoranthene	ND		0.80		ug/L		11/13/19 07:35	11/18/19 20:48	1
Pyrene	ND		0.80		ug/L		11/13/19 07:35	11/18/19 20:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*78*		*36 - 120*	*11/13/19 07:35*	*11/18/19 20:48*	*1*
2-Fluorobiphenyl (Surr)	*84*		*34 - 110*	*11/13/19 07:35*	*11/18/19 20:48*	*1*
Terphenyl-d14 (Surr)	*97*		*40 - 145*	*11/13/19 07:35*	*11/18/19 20:48*	*1*

Lab Sample ID: LCS 500-515030/2-A
Matrix: Water
Analysis Batch: 516000

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 515030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	32.0	33.4		ug/L		104	70 - 135
Fluoranthene	32.0	32.0		ug/L		100	68 - 126
Pyrene	32.0	30.7		ug/L		96	70 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*78*		*36 - 120*
2-Fluorobiphenyl (Surr)	*83*		*34 - 110*
Terphenyl-d14 (Surr)	*88*		*40 - 145*

Lab Sample ID: LCSD 500-515030/3-A
Matrix: Water
Analysis Batch: 516000

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 515030

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	32.0	34.5		ug/L		108	70 - 135	3	20
Fluoranthene	32.0	32.4		ug/L		101	68 - 126	1	20
Pyrene	32.0	31.8		ug/L		99	70 - 126	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*74*		*36 - 120*
2-Fluorobiphenyl (Surr)	*76*		*34 - 110*
Terphenyl-d14 (Surr)	*93*		*40 - 145*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-515276/1-A
Matrix: Water
Analysis Batch: 517373

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/14/19 07:46	11/26/19 13:08	1
Fluoranthene	ND		0.80		ug/L		11/14/19 07:46	11/26/19 13:08	1
Pyrene	ND		0.80		ug/L		11/14/19 07:46	11/26/19 13:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*58*		*36 - 120*	*11/14/19 07:46*	*11/26/19 13:08*	*1*
2-Fluorobiphenyl (Surr)	*61*		*34 - 110*	*11/14/19 07:46*	*11/26/19 13:08*	*1*
Terphenyl-d14 (Surr)	*85*		*40 - 145*	*11/14/19 07:46*	*11/26/19 13:08*	*1*

Lab Sample ID: LCS 500-515276/2-A
Matrix: Water
Analysis Batch: 517373

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 515276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	32.0	28.9		ug/L		90	70 - 135
Fluoranthene	32.0	25.9		ug/L		81	68 - 126
Pyrene	32.0	26.0		ug/L		81	70 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*58*		*36 - 120*
2-Fluorobiphenyl (Surr)	*61*		*34 - 110*
Terphenyl-d14 (Surr)	*74*		*40 - 145*

Lab Sample ID: LCSD 500-515276/3-A
Matrix: Water
Analysis Batch: 517373

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 515276

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	32.0	27.2		ug/L		85	70 - 135	6	20
Fluoranthene	32.0	26.3		ug/L		82	68 - 126	2	20
Pyrene	32.0	25.8		ug/L		81	70 - 126	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*52*		*36 - 120*
2-Fluorobiphenyl (Surr)	*52*		*34 - 110*
Terphenyl-d14 (Surr)	*73*		*40 - 145*

Lab Sample ID: MB 500-515510/1-A
Matrix: Water
Analysis Batch: 517495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.16		ug/L		11/15/19 07:35	11/27/19 05:26	1
Fluoranthene	ND		0.80		ug/L		11/15/19 07:35	11/27/19 05:26	1
Pyrene	ND		0.80		ug/L		11/15/19 07:35	11/27/19 05:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-515510/1-A
Matrix: Water
Analysis Batch: 517495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515510

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	66		36 - 120	11/15/19 07:35	11/27/19 05:26	1
2-Fluorobiphenyl (Surr)	73		34 - 110	11/15/19 07:35	11/27/19 05:26	1
Terphenyl-d14 (Surr)	92		40 - 145	11/15/19 07:35	11/27/19 05:26	1

Lab Sample ID: LCS 500-515510/2-A
Matrix: Water
Analysis Batch: 517495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 515510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	32.0	30.8		ug/L		96	70 - 135
Fluoranthene	32.0	29.2		ug/L		91	68 - 126
Pyrene	32.0	28.9		ug/L		90	70 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	69		36 - 120
2-Fluorobiphenyl (Surr)	75		34 - 110
Terphenyl-d14 (Surr)	88		40 - 145

Lab Sample ID: LCSD 500-515510/3-A
Matrix: Water
Analysis Batch: 517495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 515510

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	32.0	31.0		ug/L		97	70 - 135	1	20
Fluoranthene	32.0	28.8		ug/L		90	68 - 126	2	20
Pyrene	32.0	28.6		ug/L		90	70 - 126	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Nitrobenzene-d5 (Surr)	66		36 - 120
2-Fluorobiphenyl (Surr)	74		34 - 110
Terphenyl-d14 (Surr)	86		40 - 145

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-515215/1-A
Matrix: Water
Analysis Batch: 515482

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515215

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		10		ug/L		11/13/19 16:53	11/15/19 02:44	1
Copper	ND		10		ug/L		11/13/19 16:53	11/15/19 02:44	1
Iron	ND		200		ug/L		11/13/19 16:53	11/15/19 02:44	1
Lead	ND		5.0		ug/L		11/13/19 16:53	11/15/19 02:44	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-515215/2-A
Matrix: Water
Analysis Batch: 515482

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 515215

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Barium			2000	1990		ug/L		99	80 - 120		
Copper			250	252		ug/L		101	80 - 120		
Iron			1000	1110		ug/L		111	80 - 120		
Lead			100	93.8		ug/L		94	80 - 120		

Lab Sample ID: 500-172766-1 MS
Matrix: Water
Analysis Batch: 515482

Client Sample ID: G41D
Prep Type: Total/NA
Prep Batch: 515215

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Barium	31		2000	1990		ug/L		98	75 - 125		
Copper	ND		250	260		ug/L		104	75 - 125		
Iron	200		1000	1120		ug/L		92	75 - 125		
Lead	ND		100	96.2		ug/L		96	75 - 125		

Lab Sample ID: 500-172766-1 MSD
Matrix: Water
Analysis Batch: 515482

Client Sample ID: G41D
Prep Type: Total/NA
Prep Batch: 515215

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	31		2000	1980		ug/L		97	75 - 125	1	20
Copper	ND		250	257		ug/L		103	75 - 125	1	20
Iron	200		1000	1150		ug/L		94	75 - 125	2	20
Lead	ND		100	96.7		ug/L		97	75 - 125	1	20

Lab Sample ID: 500-172766-1 DU
Matrix: Water
Analysis Batch: 515482

Client Sample ID: G41D
Prep Type: Total/NA
Prep Batch: 515215

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Barium	31			29.7		ug/L				3	20
Copper	ND			ND		ug/L				NC	20
Iron	200			225		ug/L				11	20
Lead	ND			ND		ug/L				NC	20

Lab Sample ID: MB 500-515216/1-A
Matrix: Water
Analysis Batch: 515501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/13/19 16:55	11/15/19 04:16	1
Barium	ND		10		ug/L		11/13/19 16:55	11/15/19 04:16	1
Boron	ND		50		ug/L		11/13/19 16:55	11/15/19 04:16	1
Cadmium	ND		2.0		ug/L		11/13/19 16:55	11/15/19 04:16	1
Manganese	ND		10		ug/L		11/13/19 16:55	11/15/19 04:16	1
Molybdenum	ND		10		ug/L		11/13/19 16:55	11/15/19 04:16	1
Potassium	ND		0.50		mg/L		11/13/19 16:55	11/15/19 04:16	1
Selenium	ND		10		ug/L		11/13/19 16:55	11/15/19 04:16	1
Sodium	ND		1.0		mg/L		11/13/19 16:55	11/15/19 04:16	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 500-515216/1-A
Matrix: Water
Analysis Batch: 515501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		20		ug/L		11/13/19 16:55	11/15/19 04:16	1

Lab Sample ID: LCS 500-515216/2-A
Matrix: Water
Analysis Batch: 515501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 515216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	94.4		ug/L		94	80 - 120
Barium	2000	1920		ug/L		96	80 - 120
Boron	1000	910		ug/L		91	80 - 120
Cadmium	50.0	49.3		ug/L		99	80 - 120
Manganese	500	488		ug/L		98	80 - 120
Molybdenum	1000	1010		ug/L		101	80 - 120
Potassium	10.0	9.72		mg/L		97	80 - 120
Selenium	100	88.1		ug/L		88	80 - 120
Sodium	10.0	9.81		mg/L		98	80 - 120
Zinc	500	482		ug/L		96	80 - 120

Lab Sample ID: MB 500-517073/1-A
Matrix: Water
Analysis Batch: 517287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517073

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10		ug/L		11/24/19 17:57	11/25/19 20:16	1
Barium	ND		10		ug/L		11/24/19 17:57	11/25/19 20:16	1
Copper	ND		10		ug/L		11/24/19 17:57	11/25/19 20:16	1
Iron	ND	^	200		ug/L		11/24/19 17:57	11/25/19 20:16	1
Cadmium	ND		2.0		ug/L		11/24/19 17:57	11/25/19 20:16	1
Lead	ND		5.0		ug/L		11/24/19 17:57	11/25/19 20:16	1
Manganese	ND		10		ug/L		11/24/19 17:57	11/25/19 20:16	1
Molybdenum	ND		10		ug/L		11/24/19 17:57	11/25/19 20:16	1
Zinc	ND	^	20		ug/L		11/24/19 17:57	11/25/19 20:16	1

Lab Sample ID: MB 500-517073/1-A
Matrix: Water
Analysis Batch: 517424

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 517073

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		11/24/19 17:57	11/26/19 11:16	1
Potassium	ND		0.50		mg/L		11/24/19 17:57	11/26/19 11:16	1
Selenium	ND		10		ug/L		11/24/19 17:57	11/26/19 11:16	1
Sodium	ND		1.0		mg/L		11/24/19 17:57	11/26/19 11:16	1

Lab Sample ID: LCS 500-517073/2-A
Matrix: Water
Analysis Batch: 517287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	86.5		ug/L		87	80 - 120
Barium	2000	1820		ug/L		91	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-517073/2-A
Matrix: Water
Analysis Batch: 517287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	250	229		ug/L		92	80 - 120
Iron	1000	1100	^	ug/L		110	80 - 120
Cadmium	50.0	45.6		ug/L		91	80 - 120
Lead	100	99.9		ug/L		100	80 - 120
Manganese	500	526		ug/L		105	80 - 120
Molybdenum	1000	931		ug/L		93	80 - 120
Zinc	500	568	^	ug/L		114	80 - 120

Lab Sample ID: LCS 500-517073/2-A
Matrix: Water
Analysis Batch: 517424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 517073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1000	924		ug/L		92	80 - 120
Potassium	10.0	9.44		mg/L		94	80 - 120
Selenium	100	97.9		ug/L		98	80 - 120
Sodium	10.0	9.96		mg/L		100	80 - 120

Lab Sample ID: 500-172766-20 MS
Matrix: Water
Analysis Batch: 515501

Client Sample ID: G44D
Prep Type: Dissolved
Prep Batch: 515216

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		100	95.6		ug/L		96	75 - 125
Barium	45		2000	2000		ug/L		98	75 - 125
Boron	1500		1000	2390		ug/L		92	75 - 125
Cadmium	ND		50.0	50.6		ug/L		100	75 - 125
Manganese	ND		500	494		ug/L		97	75 - 125
Molybdenum	ND		1000	1020		ug/L		102	75 - 125
Potassium	18		10.0	28.1		mg/L		103	75 - 125
Selenium	ND		100	88.2		ug/L		88	75 - 125
Sodium	95		10.0	106	4	mg/L		110	75 - 125
Zinc	ND		500	501		ug/L		99	75 - 125

Lab Sample ID: 500-172766-20 MSD
Matrix: Water
Analysis Batch: 515501

Client Sample ID: G44D
Prep Type: Dissolved
Prep Batch: 515216

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		100	101		ug/L		101	75 - 125	6	20
Barium	45		2000	2010		ug/L		98	75 - 125	0	20
Boron	1500		1000	2420		ug/L		96	75 - 125	1	20
Cadmium	ND		50.0	50.7		ug/L		100	75 - 125	0	20
Manganese	ND		500	497		ug/L		98	75 - 125	1	20
Molybdenum	ND		1000	1020		ug/L		102	75 - 125	1	20
Potassium	18		10.0	28.3		mg/L		105	75 - 125	1	20
Selenium	ND		100	91.8		ug/L		92	75 - 125	4	20
Sodium	95		10.0	105	4	mg/L		93	75 - 125	2	20
Zinc	ND		500	509		ug/L		100	75 - 125	2	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-172766-20 DU
Matrix: Water
Analysis Batch: 515501

Client Sample ID: G44D
Prep Type: Dissolved
Prep Batch: 515216

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	ND		ND		ug/L		NC	20
Barium	45		46.2		ug/L		3	20
Boron	1500		1470		ug/L		0.5	20
Cadmium	ND		ND		ug/L		NC	20
Manganese	ND		ND		ug/L		NC	20
Molybdenum	ND		ND		ug/L		NC	20
Potassium	18		18.2		mg/L		2	20
Selenium	ND		ND		ug/L		NC	20
Sodium	95		95.8		mg/L		0.3	20
Zinc	ND		ND		ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-515100/12-A
Matrix: Water
Analysis Batch: 515371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 515100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		11/13/19 11:15	11/14/19 08:41	1

Lab Sample ID: LCS 500-515100/13-A
Matrix: Water
Analysis Batch: 515371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 515100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.00	2.14		ug/L		107	80 - 120

Lab Sample ID: 500-172766-12 MS
Matrix: Water
Analysis Batch: 515371

Client Sample ID: G48D
Prep Type: Total/NA
Prep Batch: 515100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		1.00	1.09		ug/L		108	75 - 125

Lab Sample ID: 500-172766-12 MSD
Matrix: Water
Analysis Batch: 515371

Client Sample ID: G48D
Prep Type: Total/NA
Prep Batch: 515100

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		1.00	0.947		ug/L		94	75 - 125	14	20

Lab Sample ID: 500-172766-12 DU
Matrix: Water
Analysis Batch: 515371

Client Sample ID: G48D
Prep Type: Total/NA
Prep Batch: 515100

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		ug/L		NC	20

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

Lab Sample ID: MB 500-516163/12-A
Matrix: Water
Analysis Batch: 516412

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		11/19/19 10:10	11/20/19 08:50	1

Lab Sample ID: LCS 500-516163/13-A
Matrix: Water
Analysis Batch: 516412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.00	1.87		ug/L		94	80 - 120

Method: 2540 C - Total Dissolved Solids - SM 20th Ed.

Lab Sample ID: MB 500-513817/1
Matrix: Water
Analysis Batch: 513817

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	ND		10		mg/L			11/06/19 05:54	1

Lab Sample ID: LCS 500-513817/2
Matrix: Water
Analysis Batch: 513817

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	260		mg/L		104	80 - 120

Lab Sample ID: 500-172766-1 MS
Matrix: Water
Analysis Batch: 513817

Client Sample ID: G41D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	540		250	826		mg/L		116	75 - 125

Lab Sample ID: 500-172766-1 DU
Matrix: Water
Analysis Batch: 513817

Client Sample ID: G41D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	540		516		mg/L		4	5

Lab Sample ID: 500-172766-2 DU
Matrix: Water
Analysis Batch: 513817

Client Sample ID: G41S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	740		778		mg/L		5	5

Method: 2540 C - Total Dissolved Solids - SM 20th Ed. (Continued)

Lab Sample ID: MB 500-514051/1
Matrix: Water
Analysis Batch: 514051

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	ND		10		mg/L			11/07/19 07:51	1

Lab Sample ID: LCS 500-514051/2
Matrix: Water
Analysis Batch: 514051

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	258		mg/L		103	80 - 120

Lab Sample ID: 500-172766-9 MS
Matrix: Water
Analysis Batch: 514051

Client Sample ID: G30S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1100		250	1350	4	mg/L		102	75 - 125

Lab Sample ID: 500-172766-9 DU
Matrix: Water
Analysis Batch: 514051

Client Sample ID: G30S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1100		1070		mg/L		2	5

Lab Sample ID: 500-172766-10 DU
Matrix: Water
Analysis Batch: 514051

Client Sample ID: G30D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	510		516		mg/L		2	5

Lab Sample ID: MB 500-515001/1
Matrix: Water
Analysis Batch: 515001

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	ND		10		mg/L			11/13/19 01:21	1

Lab Sample ID: LCS 500-515001/2
Matrix: Water
Analysis Batch: 515001

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

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

Lab Sample ID: 500-172766-11 MS
Matrix: Water
Analysis Batch: 515001

Client Sample ID: R32S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	820		250	1110		mg/L		117	75 - 125

Method: 2540 C - Total Dissolved Solids - SM 20th Ed.

Lab Sample ID: 500-172766-11 DU
Matrix: Water
Analysis Batch: 515001

Client Sample ID: R32S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	820			792		mg/L				4	5

Lab Sample ID: 500-172766-12 DU
Matrix: Water
Analysis Batch: 515001

Client Sample ID: G48D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	700			700		mg/L				0.6	5

Lab Sample ID: MB 500-516292/1
Matrix: Water
Analysis Batch: 516292

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	ND		10		mg/L			11/19/19 21:56	1

Lab Sample ID: LCS 500-516292/2
Matrix: Water
Analysis Batch: 516292

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	264		mg/L		106	80 - 120		

Lab Sample ID: MB 500-516511/1
Matrix: Water
Analysis Batch: 516511

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	ND		10		mg/L			11/21/19 02:39	1

Lab Sample ID: LCS 500-516511/2
Matrix: Water
Analysis Batch: 516511

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	264		mg/L		106	80 - 120		

Lab Sample ID: 500-172766-27 DU
Matrix: Water
Analysis Batch: 516511

Client Sample ID: G45S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	830			832		mg/L				0.2	5

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 500-515443/3
Matrix: Water
Analysis Batch: 515443

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			11/14/19 19:30	1

Lab Sample ID: LCS 500-515443/4
Matrix: Water
Analysis Batch: 515443

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.79		mg/L		96	80 - 120

Lab Sample ID: MB 500-515641/3
Matrix: Water
Analysis Batch: 515641

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.20		mg/L			11/15/19 15:21	1

Lab Sample ID: LCS 500-515641/4
Matrix: Water
Analysis Batch: 515641

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.72		mg/L		94	80 - 120

Lab Sample ID: MB 500-517651/3
Matrix: Water
Analysis Batch: 517651

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			11/29/19 11:31	1

Lab Sample ID: LCS 500-517651/4
Matrix: Water
Analysis Batch: 517651

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	5.04		mg/L		101	80 - 120

Lab Sample ID: 500-172766-4 MS
Matrix: Water
Analysis Batch: 515443

Client Sample ID: G42S
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	ND		2.50	ND		mg/L		90	80 - 120

Lab Sample ID: 500-172766-4 MSD
Matrix: Water
Analysis Batch: 515443

Client Sample ID: G42S
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	ND		2.50	ND		mg/L		91	80 - 120	1	15

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: 500-172766-6 MS
Matrix: Water
Analysis Batch: 515443

Client Sample ID: G33S
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	60		25.0	87.4		mg/L		110	80 - 120		

Lab Sample ID: 500-172766-6 MSD
Matrix: Water
Analysis Batch: 515443

Client Sample ID: G33S
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	60		25.0	87.3		mg/L		109	80 - 120	0	15

Lab Sample ID: 500-172766-23 MS
Matrix: Water
Analysis Batch: 515641

Client Sample ID: G31D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	ND		2.50	ND		mg/L		93	80 - 120		

Lab Sample ID: 500-172766-23 MSD
Matrix: Water
Analysis Batch: 515641

Client Sample ID: G31D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	ND		2.50	ND		mg/L		95	80 - 120	2	15

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-515426/9
Matrix: Water
Analysis Batch: 515426

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/14/19 14:42	1

Lab Sample ID: LCS 500-515426/10
Matrix: Water
Analysis Batch: 515426

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	54.1		mg/L		108	85 - 115		

Lab Sample ID: MB 500-516025/12
Matrix: Water
Analysis Batch: 516025

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/16/19 14:25	1

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

Lab Sample ID: LCS 500-516025/13
Matrix: Water
Analysis Batch: 516025

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			50.0	56.6		mg/L		113	85 - 115		

Lab Sample ID: MB 500-517655/63
Matrix: Water
Analysis Batch: 517655

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			11/27/19 12:34	1

Lab Sample ID: LCS 500-517655/64
Matrix: Water
Analysis Batch: 517655

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	51.0		mg/L		102	85 - 115		

Lab Sample ID: 500-172766-8 MS
Matrix: Water
Analysis Batch: 515426

Client Sample ID: R16D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	110		50.0	167		mg/L		117	75 - 125		

Lab Sample ID: 500-172766-8 MSD
Matrix: Water
Analysis Batch: 515426

Client Sample ID: R16D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	110		50.0	165		mg/L		112	75 - 125	2	20

Lab Sample ID: 500-172766-9 MS
Matrix: Water
Analysis Batch: 515426

Client Sample ID: G30S
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	210		50.0	252	4	mg/L		82	75 - 125		

Lab Sample ID: 500-172766-9 MSD
Matrix: Water
Analysis Batch: 515426

Client Sample ID: G30S
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	210		50.0	252	4	mg/L		82	75 - 125	0	20

Lab Sample ID: 500-172766-23 MS
Matrix: Water
Analysis Batch: 516025

Client Sample ID: G31D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	15		50.0	65.7		mg/L		102	75 - 125		

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: 500-172766-23 MSD
Matrix: Water
Analysis Batch: 516025

Client Sample ID: G31D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	15		50.0	67.0		mg/L		105	75 - 125	2	20

Lab Sample ID: 500-172766-24 MS
Matrix: Water
Analysis Batch: 517655

Client Sample ID: G31S
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	210		50.0	249	4	mg/L		70	75 - 125

Lab Sample ID: 500-172766-24 MSD
Matrix: Water
Analysis Batch: 517655

Client Sample ID: G31S
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	210		50.0	246	4	mg/L		64	75 - 125	1	20

Lab Sample ID: 500-172766-29 MS
Matrix: Water
Analysis Batch: 517655

Client Sample ID: G38S
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	67		50.0	105		mg/L		76	75 - 125

Lab Sample ID: 500-172766-29 MSD
Matrix: Water
Analysis Batch: 517655

Client Sample ID: G38S
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	67		50.0	108		mg/L		82	75 - 125	3	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-513700/3
Matrix: Water
Analysis Batch: 513700

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10		mg/L			11/05/19 12:02	1

Lab Sample ID: LCS 500-513700/4
Matrix: Water
Analysis Batch: 513700

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	10.6		mg/L		106	80 - 120

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 500-515692/31
Matrix: Water
Analysis Batch: 515692

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10		mg/L			11/15/19 23:02	1

Lab Sample ID: LCS 500-515692/32
Matrix: Water
Analysis Batch: 515692

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	10.1		mg/L		101	80 - 120

Lab Sample ID: MB 500-516975/31
Matrix: Water
Analysis Batch: 516975

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10		mg/L			11/22/19 21:28	1

Lab Sample ID: LCS 500-516975/32
Matrix: Water
Analysis Batch: 516975

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.77		mg/L		98	80 - 120

Lab Sample ID: 500-172766-1 MS
Matrix: Water
Analysis Batch: 513700

Client Sample ID: G41D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	3.1		5.00	8.46		mg/L		106	75 - 125

Lab Sample ID: 500-172766-1 MSD
Matrix: Water
Analysis Batch: 513700

Client Sample ID: G41D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	3.1		5.00	8.54		mg/L		108	75 - 125	1	20

Lab Sample ID: 500-172766-8 MS
Matrix: Water
Analysis Batch: 516975

Client Sample ID: R16D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.25		5.00	5.11		mg/L		97	75 - 125

Lab Sample ID: 500-172766-8 MSD
Matrix: Water
Analysis Batch: 516975

Client Sample ID: R16D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.25		5.00	5.18		mg/L		99	75 - 125	1	20

Method: SM 4500 NH3 G - Ammonia

Lab Sample ID: MB 500-516229/1-A
Matrix: Water
Analysis Batch: 516531

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516229

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		11/20/19 12:40	11/20/19 15:34	1

Lab Sample ID: LCS 500-516229/2-A
Matrix: Water
Analysis Batch: 516531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.60		mg/L		104	80 - 120

Lab Sample ID: MB 500-516456/1-A
Matrix: Water
Analysis Batch: 516668

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516456

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		11/21/19 09:45	11/21/19 12:16	1

Lab Sample ID: LCS 500-516456/2-A
Matrix: Water
Analysis Batch: 516668

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516456

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.58		mg/L		103	80 - 120

Lab Sample ID: MB 500-516629/1-A
Matrix: Water
Analysis Batch: 517184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516629

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		11/24/19 15:00	11/25/19 08:33	1

Lab Sample ID: LCS 500-516629/2-A
Matrix: Water
Analysis Batch: 517184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516629

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.57		mg/L		103	80 - 120

Lab Sample ID: MB 500-516891/1-A
Matrix: Water
Analysis Batch: 517237

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 516891

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		11/25/19 09:35	11/25/19 12:26	1

Lab Sample ID: LCS 500-516891/2-A
Matrix: Water
Analysis Batch: 517237

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 516891

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.47		mg/L		99	80 - 120

Method: SM 4500 NH3 G - Ammonia

Lab Sample ID: 500-172766-1 MS
Matrix: Water
Analysis Batch: 516668

Client Sample ID: G41D
Prep Type: Dissolved
Prep Batch: 516456

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.74		2.50	3.29		mg/L		102	75 - 125

Lab Sample ID: 500-172766-1 MSD
Matrix: Water
Analysis Batch: 516668

Client Sample ID: G41D
Prep Type: Dissolved
Prep Batch: 516456

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.74		2.50	3.25		mg/L		100	75 - 125	1	20

Lab Sample ID: 500-172766-7 MS
Matrix: Water
Analysis Batch: 517184

Client Sample ID: G20S
Prep Type: Dissolved
Prep Batch: 516629

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.29		2.50	2.72		mg/L		97	75 - 125

Lab Sample ID: 500-172766-7 MSD
Matrix: Water
Analysis Batch: 517184

Client Sample ID: G20S
Prep Type: Dissolved
Prep Batch: 516629

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.29		2.50	2.83		mg/L		101	75 - 125	4	20

Method: SM 5310C - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 500-515061/8
Matrix: Water
Analysis Batch: 515061

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DOC Dup	ND		1.0		mg/L			11/12/19 15:32	1

Lab Sample ID: LCS 500-515061/9
Matrix: Water
Analysis Batch: 515061

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DOC Result 1	10.0	9.70		mg/L		97	80 - 120
DOC Result 2	10.0	9.92		mg/L		99	80 - 120
DOC Dup	10.0	9.81		mg/L		98	80 - 120

Lab Sample ID: 500-172766-1 MS
Matrix: Water
Analysis Batch: 515061

Client Sample ID: G41D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
DOC Result 1	1.1		10.0	10.9		mg/L		98	75 - 125
DOC Result 2	ND		10.0	10.9		mg/L		100	75 - 125
DOC Dup	ND		10.0	10.9		mg/L		99	75 - 125

Method: SM 5310C - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: 500-172766-1 MSD
Matrix: Water
Analysis Batch: 515061

Client Sample ID: G41D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DOC Result 1	1.1		10.0	10.9		mg/L		99	75 - 125	0	20
DOC Result 2	ND		10.0	10.9		mg/L		101	75 - 125	0	20
DOC Dup	ND		10.0	10.9		mg/L		100	75 - 125	0	20

Lab Sample ID: MB 500-516901/8
Matrix: Water
Analysis Batch: 516901

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DOC Dup	ND		1.0		mg/L			11/21/19 15:38	1

Lab Sample ID: LCS 500-516901/9
Matrix: Water
Analysis Batch: 516901

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DOC Result 1	10.0	9.27		mg/L		93	80 - 120
DOC Result 2	10.0	9.36		mg/L		94	80 - 120
DOC Dup	10.0	9.32		mg/L		93	80 - 120

Lab Sample ID: 500-172766-16 MS
Matrix: Water
Analysis Batch: 516901

Client Sample ID: R08D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
DOC Result 1	2.5		10.0	12.3		mg/L		98	75 - 125
DOC Result 2	2.3		10.0	12.3		mg/L		100	75 - 125
DOC Dup	2.4		10.0	12.3		mg/L		99	75 - 125

Lab Sample ID: 500-172766-16 MSD
Matrix: Water
Analysis Batch: 516901

Client Sample ID: R08D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DOC Result 1	2.5		10.0	12.4		mg/L		99	75 - 125	1	20
DOC Result 2	2.3		10.0	12.4		mg/L		101	75 - 125	1	20
DOC Dup	2.4		10.0	12.4		mg/L		100	75 - 125	1	20

Chain of Custody Record 388787

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name:	☐ 1 week			Job / SDG No.:
Site: Lincoln Stone Quarry - 4&19	☐ 2 days			500-172766
PO# Routine + PAHs 6J	☐ 1 day			

500-172766 COC

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 Ba, Ca	Diss. Metals	Diss. TOC	TDS, Total NO2	Diss. NO2, SO4, Fl, Cl	Total NO3-NO2	Diss. Ammonia, NO3-NO2	PAHs	Sample Specific Notes:
G41D	11/01/19	1026		W	10			✓	✓	✓	✓	✓	✓	✓	✓	
G41S	11/01/19	1120		W	10			✓	✓	✓	✓	✓	✓	✓	✓	
G33D	11/01/19	1410		W	10			✓	✓	✓	✓	✓	✓	✓	✓	

3321-1

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: 4.7 Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TAL	11/01/19 1520			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TAL-CHI	Date/Time: 11/1/19 1520

Chain of Custody Record

388788 eurofins | Environment Testing TestAmerica

Address: _____

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

500-172766 TAL-8210

Client Contact	Project Manager: Erk Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL.	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Lincoln Stone Quarry - 4819	☐ 1 week			Job / SDG No.:
Site: Routine GW	☐ 2 days			
P O #	☐ 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 Ba, Cr	Diss. Metals	Diss. TOC	TDS, Total NO2	Diss. NO2, SO4, Fl, Cl	Total NO3 - NO2	Diss. Ammonia, NO2, NO3	PAHs	500-172766 COC	Sample Specific Notes:
4 G42S	11/04/19	0930		W	10			-	-	-	-	-	-	-	-		
5 G42D	11/04/19	1129		W	10			-	-	-	-	-	-	-	-		
6 G33S	11/04/19	1427		W	10			-	-	-	-	-	-	-	-		

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: 3.6 Corr'd: _____ Therm ID No.: _____		
Relinquished by:	Company: TAL	Date/Time: 11/04/19 1613	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA-Aut	Date/Time: 11/4/19 1613

Chain of Custody Record 388789

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	____ of ____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Lincoln Stone Quarry	☐ 1 week			
Site: 4Q19 Routine GW	☐ 2 days			Job / SDG No.: 500-172766
PO #	☐ 1 day			

500-172766 COC

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 Ba, Cd	Diss. Metals	Diss. TOC	TDS, Total NO2	Diss. NO2, Sol. Fl, Cl	Total NO3-NO2	Diss. Ammonia, NO3-NO2	PAHs	Sample Specific Notes:
G20S	11/05/19	0934		W	10			✓	✓	✓	✓	✓	✓	✓	✓	
R16D	11/05/19	1337		W	10			✓	✓	✓	✓	✓	✓	✓	✓	

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:

5.4 48 hr

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____		
Relinquished by:	Company: TAL	Date/Time: 11/05/19 1520	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA-Ctrt	Date/Time: 11/5/19 1520

Chain of Custody Record

388790

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Address: _____

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

TAL-8210

Client Contact	Project Manager: Eric Long	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	____ of ____ COCs
Address:	**Analysis Turnaround Time**			Sampler:
City/State/Zip: Joliet, IL.	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Lincoln Stone Quarry - 4019	☐ 1 week			
Site: Routine GW + PAHs	☐ 2 days			Job / SDG No.: 500-172766
P.O.#	☐ 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 Ba, Cu	Dissolved Metals	TOC	Dissolved TDS, Total NO2	Dissolved NO2, SO4, Fl, Cl	Total NO3-N	Dissolved Ammonia, NO3-NO2	PAHs
9 GW05	11/06/19	1018		W	10			✓	✓	✓	✓	✓	✓	✓	✓
10 GW0D	11/06/19	1254		W	10			✓	✓	✓	✓	✓	✓	✓	✓
11 R325	11/06/19	1419		W	10			✓	✓	✓	✓	✓	✓	✓	✓

500-172766 COC

Sample Specific Notes:

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:

5.3 48hr.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company: TAL	Date/Time: 11/06/19 1527	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA-CHI	Date/Time: 11/6/19 1527

Chain of Custody Record 388791

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL.	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Lincoln Stone Quarry - 4919	☐ 1 week			
Site: Routine GW + PAHs	☐ 2 days			Job / SDG No.: 500-172766
P O #	☐ 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 Ba, Cu, Fe, Mn, Zn	Diss. Metals	Diss. TOC	TDS, Total NO2	Diss. NO2, SO4, Fl, Cl	Total NO3-NO2	Diss. Ammonia, NO3-NO2	PAHs	500-172766 COC	Sample Specific Notes:
12	G48D	11/07/19	0923		W	10			✓	✓	✓	✓	✓	✓	✓	✓		
13	G48S	11/07/19	1041		W	10			✓	✓	✓	✓	✓	✓	✓	✓		
14	G47S	11/07/19	1300		W	10			✓	✓	✓	✓	✓	✓	✓	✓		
15	G47D	11/07/19	1400		W	10			✓	✓	✓	✓	✓	✓	✓	✓		
									12/9/19									

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:

1.9 → 2.9, 3.4 48hr.

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TAL	11/07/19 1527			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			[signature]	TAL-ART	11/7/19 1527

Chain of Custody Record 387591

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Address: _____

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

TAL-8210

500-172766 COC

Client Contact	Project Manager: Erik Long	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Lincoln Stone Quarry - 4Q19	☐ 1 week			
Site: Routine GW + PAHs	☐ 2 days			Job / SDG No.: 500-172766
P O #	☐ 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 Ba, Cr	Diss. Metals	Dis. TOC	TDS, Total NO2	Diss. NO2, SO4, F, Cl	Total NO3-NO2	Dis. Ammonia, NO3-NO2	PAHs	Sample Specific Notes:
16 R08D	11/11/19	1056		W	10			-	-	-	-	-	-	-	-	
17 R08S	11/11/19	1230		W	10			-	-	-	-	-	-	-	-	
18 G39S	11/11/19	1413		W	10			-	-	-	-	-	-	-	-	

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: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company: TAL	Date/Time: 11/11/19 1544	Received by:	Company: TA	Date/Time: 11-11-19 1544
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Chain of Custody Record 387523

eurofins | Environment Testing TestAmerica

Address: _____

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

TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Lincoln Stone Quarry-4Q19	☐ 1 week			
Site: Routine GW + PAHs	☐ 2 days			Job / SDG No.: 500-172766
PO #	☐ 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 Ba, Cu	Diss. Metals	Diss. TOC	TDS, Total NO2	Diss. NO2, SO4 F,Cl	Total NO3-NO2	Diss. Arsenic, NO3-NO2	PAHs
19 G445	11/12/19	1330		GW	10			-	-	-	-	-	-	-	-
20 G44D	11/12/19	1419		GW	10			-	-	-	-	-	-	-	-

500-172766 COC

Sample Specific Notes:

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: 5.1 Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TAL	11/12/19 1525			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TA-CHI	Date/Time: 11/12/19 1525

Chain of Custody Record

387524

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Address: _____

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

TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL.	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Lincoln Stone Quarry-4619	☐ 1 week			
Site: Routine GW + PAHs	☐ 2 days			Job / SDG No.: 500-172766
P O #	☐ 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 Ba, Cu	Diss. Metals	Diss. TOC	Diss. TDS, Total NO2	Diss. NO2, Perf. Fl, Cl	Total NO3 - NO2	Diss. Ammonia, NO3-NO2	PAHs	Total Ba Cu Pb Hg	500-172766 COC	Sample Specific Notes:
21	G46D	11/13/19	1020		W	10			/	-	-	-	-	-	-	-	X		
22	G46S	11/13/19	1142		W	10			/	-	-	-	-	-	-	-	X		
23	G31D	11/13/19	1311		W	10			-	-	-	-	-	-	-	-			
24	G31S	11/13/19	1414		W	10			-	-	-	-	-	-	-	-			

12/2/19 JF

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:

4.6, 3.7

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by:	Company: TAL	Date/Time: 11/13/19 @ 1522	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA-Cht	Date/Time: 11/13/19 1522

Chain of Custody Record

387525

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Address: _____

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

TAL-8210

500-172766 COC

Client Contact	Project Manager: Erik Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	____ of ____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL.	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Lincoln Stone Quarry - 4Q19	☐ 1 week			Job / SDG No.: 500-172766
Site: Routine GW + PAHs	☐ 2 days			
PO #	☐ 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 Ba, Cu	Diss. Metals	Diss. TDL	Diss. Total Nor	TDS, Total NO2, SO4, Fl, Cl	Diss. NO2, SO4, Fl, Cl	Total NO3 - NO2	Diss. Ammonia, NO3-NO2	PAHs	Levels Only	Total Ba Cu Fe Pb Hg	Sample Specific Notes:
25	S501	11/14/19	0855		—	—														Settling Pond Frozen, No Samples
26	P405	11/14/19	0910		—													✓		
27	G455	11/14/19	0951		W	10			✓	✓	✓	✓	✓	✓	✓	✓	✓			
28	G381D	11/14/19	1126		W	10		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		X	
29	G385	11/14/19	1217		W	10		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		X	
													12/8/19							

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 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:

4.2 48qt.

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____		
Relinquished by:	Company: TAL	Date/Time: 11/14/19 @ 1340	Received by:	Company: TAL	Date/Time: 11-14-19 0945
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-172766-1

Login Number: 172766
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.7,3.6,5.4,5.3,2.9,3.4,5.9,5.1,4.6,3.7,4.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Midwest Generation EME LLC
Job ID: 500-172766-1
Project/Site: Lincoln Stone Quarry - 4Q19 Routine

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Field Sampling		Water	Depth to Water (ft from MP)
Field Sampling		Water	Depth to water from land surface
Field Sampling		Water	Elevation of well (ft from MP)
Field Sampling		Water	Field pH
Field Sampling		Water	Field Temperature
Field Sampling		Water	Ground Water Elevation
Field Sampling		Water	Specific Conductance
Field Sampling		Water	Well bottom elevation

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TestAmerica Chicago
2417 Bond Street
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID:
Facility: Midwest Generation
Job #:

Date: 10/21/19

Sampling Method: Levels Only

Well	Water Level	Time	Well	Water Level	Time
G31S	26.89	0900	G46WT	25.42	1055
G31D	35.61	0903	G44S	79.96	1103
G41S	26.25	0910	G44D	88.66	1106
G41D	27.92	0913	G39S	93.48	1112
G33S	25.64	0918	G48WT	37.59	1150
G33D	25.91	0921	G48S	98.30	1153
G42S	12.01	0926	G48D	111.06	1156
G42D	16.46	0929	G47WT	26.72	1240
R32S	19.09	0937	G47S	91.98	1243
G30S	1.53	0942	G47D	108.25	1246
G30D	14.83	0945	T02S	129.36	1255
R16WT	45.65	0953	T03S	133.84	1315
R16D	62.73	0956	T01S	113.37	1340
G20S	41.82	1000	T04S	152.07	1330
G45S	62.38	1000	G38S	93.02	1127
G45D	92.55	1010	G38D	107.55	1130
G45WT	57.89	1013	T05S	117.14	1412
P40S	~~49.40~~ / ~~21.50~~	inc. 58.15 / 124.34	T06S	112.43	1406
R08S	66.78	1025	T07S	120.74	1304
R08D	77.25	1028	T08S	125.15	1300
A08WT	39.55	1031	T09S	101.91	1400
P105	41.40 / 21.50	1042	T10S	117.72	1310
G46S	100.01	1049	T11S	50.88	1352
G46D	101.59	1052			

Updated: 01/24/14

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 2

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G41D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172706-1

Type Sample: (circle one) Ground Water Surface Water Leachate Other:
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/01/19 Start Purge: 1005 (2400 Hr. Clock) End Purge: 1026

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.54

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.13 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.76 (ft./msl)
Water Level 25.51 (ft.)
Ground Water Elev. 510.25 (ft./msl)
Well Bottom Elevation *378.43 (ft./msl)

	1st	2nd	Final	
pH	7.84	7.86	7.86	(std.)
SC	718	720	720	(umhos/cm)
Temp.	13.26	13.26	13.26	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 35°F, Sunny, SW winds e 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 25.51 - 2.13 = 23.38 (ft.)
Levels were taken on 11/01/19 @ 0950 .

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G41S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766.2

Type Sample: (circle one) Ground Water Surface Water Leachate Other:
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/01/19 Start Purge: 1100 (2400 Hr. Clock) End Purge: 1120

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.39

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.29 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.86 (ft./msl)
Water Level 24.00 (ft.)
Ground Water Elev. 511.86 (ft./msl)
Well Bottom Elevation *453.96 (ft./msl)

	1st	2nd	Final	
pH	7.74	7.71	7.71	(std.)
SC	881	884	884	(umhos/cm)
Temp.	11.69	11.67	11.67	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 36°F, Fair, SW winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 24.00 - 2.29 = 21.71 (ft.)
Levels were taken on 11/01/19 @ 1050.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G33D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172706-3

Type Sample: (circle one) Ground Water Surface Water Leachate Other:
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/01/19 Start Purge: 1350 (2400 Hr. Clock) End Purge: 1410

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.52

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.35 (ft)
Ref. Measuring Pt. TIC
Well Elevation *536.20 (ft./msl)
Water Level 24.35 (ft.)
Ground Water Elev. 511.85 (ft./msl)
Well Bottom Elevation *369.10 (ft./msl)

	1st	2nd	Final	
pH	7.65	7.65	7.65	(std.)
SC	658	661		(umhos/cm)
Temp.	12.94	12.95	12.95	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 45°F, Cloudy, SW winds @ 10-15 mph

Other: *Reference Measurement
Depth To Water from L.S. = 24.35 - 2.35 = 22.00 (ft.)
Levels were taken on 11/01/19 @ 1345.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G42S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172706-4

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/04/19 Start Purge: 0915 (2400 Hr. Clock) End Purge: 0930

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.29

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 1.99 (ft)
Ref. Measuring Pt. TIC
Well Elevation *528.56 (ft./msl)
Water Level 10.11 (ft.)
Ground Water Elev. 518.45 (ft./msl)
Well Bottom Elevation *451.26 (ft./msl)

	1st	2nd	Final	
pH	7.62	7.66	7.66	(std.)
SC	652	657	657	(umhos/cm)
Temp.	13.23	13.24	13.24	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 49°F, Fair, W winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 10.11 - 1.99 = 8.12 (ft.)
Levels were taken on 11/04/19 @ 0900.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G42D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172716-5

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/04/19 Start Purge: 1110 (2400 Hr. Clock) End Purge: 1129

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.25

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.23 (ft)

Ref. Measuring Pt. TIC

Well Elevation *528.83 (ft./msl)

Water Level 14.13 (ft.)

Ground Water Elev. 514.70 (ft./msl)

Well Bottom Elevation *376.55 (ft./msl)

	1st	2nd	Final	
pH	7.94	7.91	7.91	(std.)
SC	855	859	859	(umhos/cm)
Temp.	13.97	13.93	13.93	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 51°F, Sunny, SW under 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 14.13 - 2.23 = 11.90 (ft.)

Levels were taken on 11/04/19 @ 1105.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G33S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-6

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/04/19 Start Purge: 1410 (2400 Hr. Clock) End Purge: 1427

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.44

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 1.73 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.66 (ft./msl)
Water Level 24.09 (ft.)
Ground Water Elev. 511.57 (ft./msl)
Well Bottom Elevation *452.72 (ft./msl)

	1st	2nd	Final	
pH	7.56	7.59	7.59	(std.)
SC	628	627	627	(umhos/cm)
Temp.	13.10	13.11	13.11	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Gray, Slight Turbidity, NO odor
Weather Conditions: 52°F, Mostly Cloudy, W winds @ 10-15 mph

Other: *Reference Measurement
Depth To Water from L.S. = 24.09 - 1.73 = 22.36 (ft)
Levels were taken on 11/04/19 @ 1405.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G20S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-7

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/05/19 Start Purge: 0920 (2400 Hr. Clock) End Purge: 0934

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.09

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.78 (ft)
Ref. Measuring Pt. TIC
Well Elevation *580.91 (ft./msl)
Water Level 39.52 (ft.)
Ground Water Elev. 541.39 (ft./msl)
Well Bottom Elevation *442.28 (ft./msl)

	1st	2nd	Final	
pH	7.90	7.88	7.88	(std.)
SC	563	568	568	(umhos/cm)
Temp.	12.20	12.17	12.17	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 40°F, Partly Cloudy, W winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 39.52 - 2.78 = 36.74 (ft.)
Levels were taken on 11/05/19 @ 0905.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: R16D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172706-8

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/05/19 Start Purge: 1320 (2400 Hr. Clock) End Purge: 1337

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.55

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.73 (ft)

Ref. Measuring Pt. TIC

Well Elevation *581.09 (ft./msl)

Water Level 54.71 (ft.)

Ground Water Elev. 526.38 (ft./msl)

Well Bottom Elevation *385.45 (ft./msl)

	1st	2nd	Final	
pH	7.50	7.49	7.49	(std.)
SC	1111	1106	1106	(umhos/cm)
Temp.	13.06	13.05	13.05	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 43°F, Sunny, W winds e 10-15 mph

Other: *Reference Measurement

Depth To Water from L.S. = 54.71 - 2.73 = 51.98 (ft.)

Levels were taken on 11/05/19 @ 1315.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G30S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172746-9

Type Sample: (circle one) Ground Water | Surface Water | Leachate | Other:
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/06/19 Start Purge: 1000 (2400 Hr. Clock) End Purge: 1018

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.23

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.31 (ft)
Ref. Measuring Pt. TIC
Well Elevation *524.70 (ft./msl)
Water Level 1.34 (ft.)
Ground Water Elev. 523.36 (ft./msl)
Well Bottom Elevation *462.58 (ft./msl)

	1st	2nd	Final	
pH	8.00	7.99	7.99	(std.)
SC	1469	1476	1476	(umhos/cm)
Temp.	9.49	9.51	9.51	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 48°F, Cloudy, SW winds @ 10-15 mph

Other: *Reference Measurement
Depth To Water from L.S. = 1.34 - 2.31 = -0.97 (ft.)
Levels were taken on 11/06/19 @ 0950.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G30D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172706-10

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/06/19 Start Purge: 1240 (2400 Hr. Clock) End Purge: 1254

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.54

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.42 (ft)
Ref. Measuring Pt. TIC
Well Elevation *524.81 (ft./msl)
Water Level 13.04 (ft.)
Ground Water Elev. 511.77 (ft./msl)
Well Bottom Elevation *389.30 (ft./msl)

	1st	2nd	Final	
pH	7.74	7.71	7.71	(std.)
SC	689	691	691	(umhos/cm)
Temp.	11.37	11.40	11.40	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 57°F, Partly Cloudy, SW winds @ 15-20 mph
Other: *Reference Measurement
Depth To Water from L.S. = 13.04 - 2.42 = 10.62 (ft.)
Levels were taken on 11/06/19 @ 1235.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: R32S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-11

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/06/19 Start Purge: 1400 (2400 Hr. Clock) End Purge: 1419

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.98

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.03 (ft)

Ref. Measuring Pt. TIC

Well Elevation *536.99 (ft./msl)

Water Level 16.54 (ft.)

Ground Water Elev. 520.45 (ft./msl)

Well Bottom Elevation *457.84 (ft./msl)

	1st	2nd	Final	
pH	7.47	7.45	7.45	(std.)
SC	796	785	785	(umhos/cm)
Temp.	12.01	12.03	12.03	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 58°F, Cloudy, SW wind 5e 10-15 mph

Other: *Reference Measurement

Depth To Water from L.S. = 16.54 - 2.03 = 14.51 (Ft.)

Levels were taken on 11/06/19 @ 1350.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G48D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172706-12

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/07/19 Start Purge: 0905 (2400 Hr. Clock) End Purge: 0923

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.70

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.75 (ft)
Ref. Measuring Pt. TIC
Well Elevation *620.98 (ft./msl)
Water Level 109.60 (ft.)
Ground Water Elev. 511.38 (ft./msl)
Well Bottom Elevation *393.11 (ft./msl)

	1st	2nd	Final	
pH	7.23	7.22	7.22	(std.)
SC	899	903	903	(umhos/cm)
Temp.	10.03	10.03	10.03	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 27°F, Sunny, NW winds @ 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 109.60 - 2.75 = 106.85 (ft)
Levels were taken on 11/07/19 @ 0900.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G48S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-13

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/07/19 Start Purge: 1025 (2400 Hr. Clock) End Purge: 1041

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.62

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.45 (ft)
Ref. Measuring Pt. TIC
Well Elevation *620.78 (ft./msl)
Water Level 97.23 (ft.)
Ground Water Elev. 523.55 (ft./msl)
Well Bottom Elevation *468.32 (ft./msl)

	1st	2nd	Final	
pH	7.85	7.83	7.83	(std.)
SC	1,355	1,340	1,340	(umhos/cm)
Temp.	10.80	10.81	10.81	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 29°F, Sunny, NW winds e 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 97.23 - 2.45 = 94.78 (ft.)
Levels were taken on 11/07/19 @ 1020.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G47S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172706-14

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/07/19 Start Purge: 1245 (2400 Hr. Clock) End Purge: 1300

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.48

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.50 (ft)
Ref. Measuring Pt. TIC
Well Elevation *612.10 (ft./msl)
Water Level 89.55 (ft.)
Ground Water Elev. 522.55 (ft./msl)
Well Bottom Elevation *459.84 (ft./msl)

	1st	2nd	Final	
pH	8.41	8.39	8.39	(std.)
SC	1,487	1,481	1,481	(umhos/cm)
Temp.	10.55	10.51	10.51	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 31°F, Sunny, NW winds e 5-10 mpl

Other: *Reference Measurement
Depth To Water from L.S. = 89.55 - 2.50 = 87.05 (ft.)
Levels were taken on 11/07/19 @ 1240.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G47D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-15

Type Sample: (circle one) (Ground Water) Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/07/19 Start Purge: 1345 (2400 Hr. Clock) End Purge: 1400

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.77

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.45 (ft)
Ref. Measuring Pt. TIC
Well Elevation *612.29 (ft./msl)
Water Level 107.40 (ft.)
Ground Water Elev. 504.89 (ft./msl)
Well Bottom Elevation *384.69 (ft./msl)

	1st	2nd	Final	
pH	7.53	7.50	7.50	(std.)
SC	733	732	732	(umhos/cm)
Temp.	10.56	10.50	10.50	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 32°F, Sunny, NW winds e 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 107.40 - 2.45 = 104.95 (ft.)
Levels were taken on 11/07/19 @ 1340.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: R08D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172706-16

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/11/19 Start Purge: 1040 (2400 Hr. Clock) End Purge: 1056

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.41

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.66 (ft)

Ref. Measuring Pt. TIC

Well Elevation *578.01 (ft./msl)

Water Level 76.76 (ft.)

Ground Water Elev. 501.25 (ft./msl)

Well Bottom Elevation *371.07 (ft./msl)

	1st	2nd	Final	
pH	6.98	6.99	6.99	(std.)
SC	1,041	1,033	1,033	(umhos/cm)
Temp.	8.56	8.55	8.55	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 25°F, Snow Shower, NW wind 15-20 mph

Other: *Reference Measurement (Well ID updated 11-25-2015)

Depth To Water from L.S. = 76.76 - 2.66 = 74.10 (ft)

Levels were taken on 11/11/19 @ 1020.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: R08S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-17

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/11/19 Start Purge: 1215 (2400 Hr. Clock) End Purge: 1230

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.68

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.55 (ft)
Ref. Measuring Pt. TIC
Well Elevation *578.62 (ft./msl)
Water Level 64.61 (ft.)
Ground Water Elev. 514.01 (ft./msl)
Well Bottom Elevation *453.08 (ft./msl)

	1st	2nd	Final	
pH	7.90	7.91	7.91	(std.)
SC	936	939	939	(umhos/cm)
Temp.	9.95	9.96	9.96	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 24°F, Snow Shower, NW winds 10-15 mph

Other: *Reference Measurement (Well ID updated 11-25-15)
Depth To Water from L.S. = 64.61 - 2.55 = 62.06 (ft.)
Levels were taken on 11/11/19 @ 1210.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G39S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-18

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/11/19 Start Purge: 1355 (2400 Hr. Clock) End Purge: 1413

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.93

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.08 (ft)

Ref. Measuring Pt. TIC

Well Elevation *598.85 (ft./msl)

Water Level 91.52 (ft.)

Ground Water Elev. 507.33 (ft./msl)

Well Bottom Elevation *454.15 (ft./msl)

	1st	2nd	Final	
pH	7.78	7.78	7.78	(std.)
SC	768	765	765	(umhos/cm)
Temp.	2.79	2.75	2.75	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Tan, Slight Turbidity, No Odor

Weather Conditions: 24°F, Snow Shower, NW winds 15-20 mph

Other: *Reference Measurement

Depth To Water from L.S. = 91.52 - 2.08 = 89.44 (ft.)

Levels were taken on 11/11/19 @ 1340.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G44S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172716le-19

Type Sample: (circle one) (Ground Water) Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/12/19 Start Purge: 1310 (2400 Hr. Clock) End Purge: 1330

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.65

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.18 (ft)
Ref. Measuring Pt. TIC
Well Elevation *586.53 (ft./msl)
Water Level 78.43 (ft.)
Ground Water Elev. 508.10 (ft./msl)
Well Bottom Elevation *455.11 (ft./msl)

	1st	2nd	Final	
pH	7.23	7.22	7.22	(std.)
SC	928	932	932	(umhos/cm)
Temp.	9.65	9.67	9.67	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 19°F, Sunny, NW winds @ 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 78.43 - 2.18 = 76.25 (ft.)
Levels were taken on 11/12/19 @ 1300.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G44D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-20

Type Sample: (circle one) Ground Water Surface Water Leachate Other:
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/12/19 Start Purge: 1405 (2400 Hr. Clock) End Purge: 1419

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.90

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.04 (ft)
Ref. Measuring Pt. TIC
Well Elevation *586.65 (ft./msl)
Water Level 88.70 (ft.)
Ground Water Elev. 497.95 (ft./msl)
Well Bottom Elevation *377.81 (ft./msl)

	1st	2nd	Final	
pH	7.39	7.36	7.36	(std.)
SC	795	793	793	(umhos/cm)
Temp.	11.22	11.21	11.21	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 190F, Sunny, NW winds e 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 88.70 - 2.04 = 86.66 (ft)
Levels were taken on 11/12/19 @ 1400 .

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G46D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-21

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/13/19 Start Purge: 1000 (2400 Hr. Clock) End Purge: 1020

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.39

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.60 (ft)
Ref. Measuring Pt. TIC
Well Elevation *601.25 (ft./msl)
Water Level 101.60 (ft.)
Ground Water Elev. 499.65 (ft./msl)
Well Bottom Elevation *373.79 (ft./msl)

	1st	2nd	Final	
pH	7.44	7.42	7.42	(std.)
SC	753	754	754	(umhos/cm)
Temp.	7.87	7.92		(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 21°F, Cloudy, S winds e 15-20 mph

Other: *Reference Measurement
Depth To Water from L.S. = 101.60 - 2.60 = 99.00 (ft.)
Levels were taken on 11/13/19 @ 0950.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G46S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-22

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/13/19 Start Purge: 1125 (2400 Hr. Clock) End Purge: 1142

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.77

MEASUREMENTS

Well Diameter 4.0 (inches)

Stick Up 2.70 (ft)

Ref. Measuring Pt. TIC

Well Elevation *601.43 (ft./msl)

Water Level 97.60 (ft.)

Ground Water Elev. 503.83 (ft./msl)

Well Bottom Elevation *453.62 (ft./msl)

	1st	2nd	Final	
pH	7.64	7.68	7.68	(std.)
SC	1199	1199	1199	(umhos/cm)
Temp.	10.69	10.72	10.72	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Tan, Slight Turbidity, No Odor

Weather Conditions: 23°F, Sunny, S winds @ 15-20 mph

Other: *Reference Measurement

Depth To Water from L.S. = 97.60 - 2.70 = 94.90 (ft.)

Levels were taken on 11/13/19 @ 1115.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G31D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172716-23

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/13/19 Start Purge: 1250 (2400 Hr. Clock) End Purge: 1311

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.54

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.56 (ft)

Ref. Measuring Pt. TIC

Well Elevation *535.61 (ft./msl)

Water Level 36.12 (ft.)

Ground Water Elev. 499.49 (ft./msl)

Well Bottom Elevation *378.23 (ft./msl)

	1st	2nd	Final	
pH	8.11	8.13	8.13	(std.)
SC	749	750	750	(umhos/cm)
Temp.	9.75	9.70	9.70	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 25°F, Sunny, S winds @ 10-15 mph

Other: *Reference Measurement

Depth To Water from L.S. = 36.12 - 2.56 = 33.56 (ft)

Levels were taken on 11/13/19 @ 1240.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G31S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172716-24

Type Sample: (circle one) Ground Water Surface Water Leachate Other:

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/13/19 Start Purge: 1350 (2400 Hr. Clock) End Purge: 1414

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 1.08

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.58 (ft)

Ref. Measuring Pt. TIC

Well Elevation *535.78 (ft./msl)

Water Level 25.51 (ft.)

Ground Water Elev. 510.27 (ft./msl)

Well Bottom Elevation *453.36 (ft./msl)

	1st	2nd	Final	
pH	7.39	7.40	7.40	(std.)
SC	1520	1510	1510	(umhos/cm)
Temp.	11.91	11.85	11.85	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 26°F, Sunny, S winds 15-20 mph

Other: *Reference Measurement

Depth To Water from L.S. = 25.51 - 2.58 = 22.93 (ft.)

Levels were taken on 11/13/19 @ 1345.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: S501
Facility: Midwest Generation-Joliet Quarry
Job #: 560-172766-25

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging _____ Dedicated (Y/N)
Sampling Long-arm PVC Sampler Dedicated (Y/N)

PURGING INFORMATION

Purge Date: _____ Start Purge: _____ (2400 Hr. Clock) End Purge: _____

Water Volume in Casing (gallons): N/A Volume Purged (gallons): _____

MEASUREMENTS

Well Diameter _____(inches) pH _____(std.)

Stick Up _____(ft) SC _____(umhos/cm)

Ref. Measuring Pt. _____ Temp._____(°C)

Well Elevation _____(ft./msl)

Water Level _____(ft.) Well Stabilization / Recharge Grid

Ground Water Elev. _____(ft./msl)

Well Bottom Elevation_____(ft./msl)

COMMENTS

Sample Appearance/Odor:_____

Weather Conditions: _____

Other: The sample was taken using a long-arm sampler and dipping it into the settling pond. The long-arm sampler was first washed with Liquinox and then triple rinsed with DI water that was obtained in STLs glassware prep room. The sample was taken in the settling pond at the Lincoln Quarry just north of the pump house. The dissolved parameters were poured into stainless steel filter and the total parameters were poured directly into the bottles. The sample was taken on @ .

* Sample point frozen, unable to obtain samples on 11/14/19 @ 0855

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: P40S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172616-26

Type Sample: (circle one) Ground Water Surface Water Leachate Other: Piezometer
Equipment Used: Purging _____ Dedicated (Y/N)
Sampling _____ Dedicated (Y/N)

PURGING INFORMATION

Purge Date: _____ Start Purge: _____ (2400 Hr. Clock) End Purge: _____

Water Volume in Casing (gallons): N/A Volume Purged (gallons): _____

MEASUREMENTS

Well Diameter 2.0 (inches) pH _____ (std.)

Stick Up 1.78 (ft) SC _____ (umhos/cm)

Ref. Measuring Pt. TIC Temp. _____ (°C)

Well Elevation *599.12 (ft./msl)

Water Level 57.10 (ft.)

Ground Water Elev. 542.02 (ft./msl)

Well Depth 124.28 (ft./msl)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: _____

Weather Conditions: _____

Other: *Reference Measurement

Depth To Water from L.S. = 57.10 - 1.78 = 55.32 (ft)

Well Bottom Elevation = 599.12 - 124.28 = 474.84 (ft./msl)

Levels were taken on 11/14/19 @ 0910

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G45S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766.27

Type Sample: (circle one) Ground Water Surface Water Leachate Other:

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/14/19 Start Purge: 0935 (2400 Hr. Clock) End Purge: 0951

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.83

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.97 (ft)

Ref. Measuring Pt. TIC

Well Elevation *603.90 (ft./msl)

Water Level 61.55 (ft.)

Ground Water Elev. 542.35 (ft./msl)

Well Bottom Elevation *471.05 (ft./msl)

	1st	2nd	Final	
pH	7.34	7.33	7.33	(std.)
SC	1046	1043	1043	(umhos/cm)
Temp.	12.21	12.18	12.18	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor

Weather Conditions: 31°F, Cloudy, NW winds e 0-5 mph

Other: *Reference Measurement

Depth To Water from L.S. = 61.55 - 2.97 = 58.58 (ft.)

Levels were taken on 11/14/19 @ 0925.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G38D
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-28

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/14/19 Start Purge: 1105 (2400 Hr. Clock) End Purge: 1126

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.68

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.11 (ft)

Ref. Measuring Pt. TIC

Well Elevation *610.67 (ft./msl)

Water Level 107.66 (ft.)

Ground Water Elev. 503.01 (ft./msl)

Well Bottom Elevation *382.38 (ft./msl)

	1st	2nd	Final	
pH	7.27	7.28	7.28	(std.)
SC	748	743	743	(umhos/cm)
Temp.	12.63	12.59	12.59	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 33°F, Cloudy, W winds e 0-5 mph

Other: *Reference Measurement

Depth To Water from L.S. = 107.66 - 2.11 = 105.55 (ft)

Levels were taken on 11/14/19 @ 1055.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G38S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-172766-29

Type Sample: (circle one) (Ground Water) Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 11/14/19 Start Purge: 1200 (2400 Hr. Clock) End Purge: 1217

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.77

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.22 (ft)
Ref. Measuring Pt. TIC
Well Elevation *610.78 (ft./msl)
Water Level 87.09 (ft.)
Ground Water Elev. 523.69 (ft./msl)
Well Bottom Elevation *457.57 (ft./msl)

	1st	2nd	Final	
pH	8.64	8.63	8.63	(std.)
SC	938	941	941	(umhos/cm)
Temp.	12.91	12.92	12.92	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 33°F, Cloudy, NW winds @ 0-5 mph
Other: *Reference Measurement
Depth To Water from L.S. = 87.09 - 2.22 = 84.87 (ft.)
Levels were taken on 11/14/19 @ 1155.

(Updated: 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 500-175096-1
Client Project/Site: Joliet #9 (Quarry) CCR

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

Attn: Richard Gnat

Authorized for release by:
1/17/2020 11:52:32 AM

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

LINKS

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Visit us at: www.testamericainc.com

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

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

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Case Narrative

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Job ID: 500-175096-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-175096-1

Comments
No additional comments.

Receipt
The samples were received on 12/13/2019 3:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 10 coolers at receipt time were 2.0º C, 2.3º C, 2.9º C, 3.6º C, 4.2º C, 4.2º C, 4.3º C, 4.4º C, 5.3º C and 5.9º C.

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

General Chemistry
Method SM 4500 Cl- E: The matrix spike (MS) recovery for analytical batch 500-521937 were outside control limits for Chloride. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. (500-175096-C-5 MS)

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

Method Summary

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CHI
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
Field Sampling	Field Sampling	EPA	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

TAL CHI = 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: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-175096-1	G33S	Water	12/13/19 12:57	12/13/19 15:35	
500-175096-2	DUP	Water	12/13/19 12:57	12/13/19 15:35	
500-175096-3	G30S	Water	12/17/19 09:33	12/17/19 14:38	
500-175096-4	R32S	Water	12/17/19 12:12	12/17/19 14:38	
500-175096-5	G31S	Water	12/18/19 10:39	12/18/19 14:50	
500-175096-6	G48S	Water	12/18/19 12:51	12/18/19 14:50	
500-175096-7	G47S	Water	12/19/19 10:20	12/19/19 16:07	
500-175096-8	G45S	Water	12/19/19 13:16	12/19/19 16:07	
500-175096-9	G46S	GW	12/23/19 09:25	12/23/19 15:20	
500-175096-10	R08S	GW	12/23/19 10:25	12/23/19 15:20	
500-175096-11	G20S	GW	12/23/19 11:15	12/23/19 15:20	
500-175096-12	G44S	GW	12/23/19 13:50	12/23/19 15:20	
500-175096-13	T01S	Water	12/26/19 08:47	12/26/19 16:05	
500-175096-14	T04S	Water	12/26/19 13:02	12/26/19 16:05	
500-175096-15	T02S	Water	12/27/19 08:54	12/27/19 14:40	
500-175096-16	T08S	Water	12/27/19 11:07	12/27/19 14:40	
500-175096-17	T03S	Water	12/27/19 13:33	12/27/19 14:40	
500-175096-18	T09S	Water	12/30/19 08:26	12/30/19 12:10	
500-175096-19	T05S	Water	12/30/19 10:12	12/30/19 12:10	
500-175096-20	T06S	Water	12/31/19 09:30	12/31/19 12:00	

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G33S

Date Collected: 12/13/19 12:57
Date Received: 12/13/19 15:35

Lab Sample ID: 500-175096-1

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.041**		0.010		mg/L		12/19/19 07:21	12/20/19 01:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/19/19 07:21	12/19/19 15:43	1
Barium	**0.057**		0.0025		mg/L		12/19/19 07:21	12/19/19 15:43	1
Boron	**1.6**		0.25		mg/L		12/19/19 07:21	12/20/19 11:57	5
Calcium	**44**		0.20		mg/L		12/19/19 07:21	12/19/19 15:43	1
Cobalt	<0.0010		0.0010		mg/L		12/19/19 07:21	12/19/19 15:43	1
Lead	**0.00064**		0.00050		mg/L		12/19/19 07:21	12/19/19 15:43	1
Molybdenum	<0.0050		0.0050		mg/L		12/19/19 07:21	12/19/19 15:43	1
Selenium	<0.0025		0.0025		mg/L		12/19/19 07:21	12/19/19 15:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**440**		10		mg/L			12/16/19 08:34	1
Chloride	**4.8**		2.0		mg/L			12/21/19 16:17	1
Fluoride	**1.4**		0.10		mg/L			12/17/19 11:37	1
Sulfate	**66**		10		mg/L			12/23/19 10:43	2

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**25.24**				ft			12/13/19 12:57	1
Depth to Water (ft from MP)	**26.97**				ft			12/13/19 12:57	1
Elevation of well (ft from MP)	**535.66**				ft			12/13/19 12:57	1
Field pH	**7.59**				SU			12/13/19 12:57	1
Field Temperature	**54.5**				Degrees F			12/13/19 12:57	1
Ground Water Elevation	**508.69**				ft			12/13/19 12:57	1
Specific Conductance	**625**				umhos/cm			12/13/19 12:57	1
Well bottom elevation	**452.72**				ft			12/13/19 12:57	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: DUP

Date Collected: 12/13/19 12:57
Date Received: 12/13/19 15:35

Lab Sample ID: 500-175096-2

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.044**		0.010		mg/L		12/19/19 07:21	12/20/19 01:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/19/19 07:21	12/19/19 15:47	1
Barium	**0.060**		0.0025		mg/L		12/19/19 07:21	12/19/19 15:47	1
Boron	**1.6**		0.25		mg/L		12/19/19 07:21	12/20/19 12:01	5
Calcium	**44**		0.20		mg/L		12/19/19 07:21	12/19/19 15:47	1
Cobalt	<0.0010		0.0010		mg/L		12/19/19 07:21	12/19/19 15:47	1
Lead	**0.00065**		0.00050		mg/L		12/19/19 07:21	12/19/19 15:47	1
Molybdenum	<0.0050		0.0050		mg/L		12/19/19 07:21	12/19/19 15:47	1
Selenium	<0.0025		0.0025		mg/L		12/19/19 07:21	12/19/19 15:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**460**		10		mg/L			12/16/19 08:36	1
Chloride	**5.5**		2.0		mg/L			12/21/19 16:18	1
Fluoride	**1.5**		0.10		mg/L			12/17/19 11:42	1
Sulfate	**69**		10		mg/L			12/23/19 10:43	2

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**25.24**				ft			12/13/19 12:57	1
Depth to Water (ft from MP)	**26.97**				ft			12/13/19 12:57	1
Elevation of well (ft from MP)	**535.66**				ft			12/13/19 12:57	1
Field pH	**7.59**				SU			12/13/19 12:57	1
Field Temperature	**54.5**				Degrees F			12/13/19 12:57	1
Ground Water Elevation	**508.69**				ft			12/13/19 12:57	1
Specific Conductance	**625**				umhos/cm			12/13/19 12:57	1
Well bottom elevation	**452.72**				ft			12/13/19 12:57	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G30S

Date Collected: 12/17/19 09:33
Date Received: 12/17/19 14:38

Lab Sample ID: 500-175096-3

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.019		0.010		mg/L		12/19/19 07:21	12/20/19 01:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0074		0.0010		mg/L		12/19/19 07:21	12/19/19 15:51	1
Barium	0.042		0.0025		mg/L		12/19/19 07:21	12/19/19 15:51	1
Boron	5.3		1.0		mg/L		12/19/19 07:21	12/20/19 12:04	20
Calcium	58		0.20		mg/L		12/19/19 07:21	12/19/19 15:51	1
Cobalt	<0.0010		0.0010		mg/L		12/19/19 07:21	12/19/19 15:51	1
Lead	<0.00050		0.00050		mg/L		12/19/19 07:21	12/19/19 15:51	1
Molybdenum	0.030		0.0050		mg/L		12/19/19 07:21	12/19/19 15:51	1
Selenium	<0.0025		0.0025		mg/L		12/19/19 07:21	12/19/19 15:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L			12/18/19 05:56	1
Chloride	210		10		mg/L			12/21/19 16:57	5
Fluoride	1.2		0.10		mg/L			01/07/20 13:37	1
Sulfate	380		100		mg/L			12/23/19 10:43	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	-0.89				ft			12/17/19 09:33	1
Depth to Water (ft from MP)	1.42				ft			12/17/19 09:33	1
Elevation of well (ft from MP)	524.70				ft			12/17/19 09:33	1
Field pH	8.15				SU			12/17/19 09:33	1
Field Temperature	40.6				Degrees F			12/17/19 09:33	1
Ground Water Elevation	523.28				ft			12/17/19 09:33	1
Specific Conductance	1459				umhos/cm			12/17/19 09:33	1
Well bottom elevation	462.58				ft			12/17/19 09:33	1

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: R32S

Date Collected: 12/17/19 12:12
Date Received: 12/17/19 14:38

Lab Sample ID: 500-175096-4

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.13**		0.010		mg/L		12/19/19 07:21	12/20/19 17:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0024**		0.0010		mg/L		12/19/19 07:21	12/19/19 15:54	1
Barium	**0.042**		0.0025		mg/L		12/19/19 07:21	12/19/19 15:54	1
Boron	**6.4**		1.0		mg/L		12/19/19 07:21	12/20/19 12:08	20
Calcium	**150**		0.20		mg/L		12/19/19 07:21	12/19/19 15:54	1
Cobalt	<0.0010		0.0010		mg/L		12/19/19 07:21	12/19/19 15:54	1
Lead	<0.00050		0.00050		mg/L		12/19/19 07:21	12/19/19 15:54	1
Molybdenum	**0.77**		0.0050		mg/L		12/19/19 07:21	12/19/19 15:54	1
Selenium	<0.0025		0.0025		mg/L		12/19/19 07:21	12/19/19 15:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**960**		10		mg/L			12/18/19 06:04	1
Chloride	**83**		10		mg/L			12/21/19 16:58	5
Fluoride	**0.30**		0.10		mg/L			01/07/20 13:42	1
Sulfate	**390**		100		mg/L			12/23/19 10:47	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**16.90**				ft			12/17/19 12:12	1
Depth to Water (ft from MP)	**18.93**				ft			12/17/19 12:12	1
Elevation of well (ft from MP)	**536.99**				ft			12/17/19 12:12	1
Field pH	**7.69**				SU			12/17/19 12:12	1
Field Temperature	**51.6**				Degrees F			12/17/19 12:12	1
Ground Water Elevation	**518.06**				ft			12/17/19 12:12	1
Specific Conductance	**947**				umhos/cm			12/17/19 12:12	1
Well bottom elevation	**457.84**				ft			12/17/19 12:12	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G31S

Date Collected: 12/18/19 10:39
Date Received: 12/18/19 14:50

Lab Sample ID: 500-175096-5

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.11		0.010		mg/L		12/19/19 16:45	12/20/19 17:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0049		0.0010		mg/L		12/19/19 16:45	12/20/19 14:12	1
Barium	0.049		0.0025		mg/L		12/19/19 16:45	12/20/19 14:12	1
Boron	5.1		1.0		mg/L		12/19/19 16:45	12/23/19 12:23	20
Calcium	140		0.20		mg/L		12/19/19 16:45	12/20/19 14:12	1
Cobalt	<0.0010		0.0010		mg/L		12/19/19 16:45	12/20/19 14:12	1
Lead	<0.00050		0.00050		mg/L		12/19/19 16:45	12/20/19 14:12	1
Molybdenum	0.75		0.0050		mg/L		12/19/19 16:45	12/20/19 14:12	1
Selenium	<0.0025		0.0025		mg/L		12/19/19 16:45	12/20/19 14:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L			12/20/19 08:43	1
Chloride	190	F1	10		mg/L			12/21/19 16:58	5
Fluoride	0.28		0.10		mg/L			01/07/20 13:49	1
Sulfate	380		100		mg/L			12/23/19 10:47	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	25.00				ft			12/18/19 10:39	1
Depth to Water (ft from MP)	27.58				ft			12/18/19 10:39	1
Elevation of well (ft from MP)	535.78				ft			12/18/19 10:39	1
Field pH	7.48				SU			12/18/19 10:39	1
Field Temperature	52.9				Degrees F			12/18/19 10:39	1
Ground Water Elevation	508.20				ft			12/18/19 10:39	1
Specific Conductance	1570				umhos/cm			12/18/19 10:39	1
Well bottom elevation	453.36				ft			12/18/19 10:39	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G48S

Date Collected: 12/18/19 12:51
Date Received: 12/18/19 14:50

Lab Sample ID: 500-175096-6

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.019		0.010		mg/L		12/19/19 16:45	12/20/19 17:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.024		0.0010		mg/L		12/19/19 16:45	12/20/19 14:16	1
Barium	0.016		0.0025		mg/L		12/19/19 16:45	12/20/19 14:16	1
Boron	7.1		1.0		mg/L		12/19/19 16:45	12/23/19 12:26	20
Calcium	18		0.20		mg/L		12/19/19 16:45	12/20/19 14:16	1
Cobalt	<0.0010		0.0010		mg/L		12/19/19 16:45	12/20/19 14:16	1
Lead	<0.00050		0.00050		mg/L		12/19/19 16:45	12/20/19 14:16	1
Molybdenum	0.74		0.0050		mg/L		12/19/19 16:45	12/20/19 14:16	1
Selenium	<0.0025		0.0025		mg/L		12/19/19 16:45	12/20/19 14:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		10		mg/L			12/20/19 08:50	1
Chloride	110		10		mg/L			12/21/19 17:00	5
Fluoride	1.1		0.10		mg/L			01/07/20 13:55	1
Sulfate	390		100		mg/L			12/23/19 10:47	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	94.50				ft			12/18/19 12:51	1
Depth to Water (ft from MP)	96.95				ft			12/18/19 12:51	1
Elevation of well (ft from MP)	620.78				ft			12/18/19 12:51	1
Field pH	8.69				SU			12/18/19 12:51	1
Field Temperature	46.4				Degrees F			12/18/19 12:51	1
Ground Water Elevation	523.83				ft			12/18/19 12:51	1
Specific Conductance	1338				umhos/cm			12/18/19 12:51	1
Well bottom elevation	468.32				ft			12/18/19 12:51	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G47S

Date Collected: 12/19/19 10:20
Date Received: 12/19/19 16:07

Lab Sample ID: 500-175096-7

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.053		0.010		mg/L		12/20/19 07:54	12/20/19 17:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.035		0.0010		mg/L		12/20/19 07:54	12/20/19 17:54	1
Barium	0.016		0.0025		mg/L		12/20/19 07:54	12/20/19 17:54	1
Boron	5.0		1.0		mg/L		12/20/19 07:54	12/23/19 12:38	20
Calcium	15		0.20		mg/L		12/20/19 07:54	12/20/19 17:54	1
Cobalt	<0.0010		0.0010		mg/L		12/20/19 07:54	12/20/19 17:54	1
Lead	<0.00050		0.00050		mg/L		12/20/19 07:54	12/20/19 17:54	1
Molybdenum	0.40		0.0050		mg/L		12/20/19 07:54	12/20/19 17:54	1
Selenium	<0.0025		0.0025		mg/L		12/20/19 07:54	12/20/19 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L			12/20/19 08:56	1
Chloride	140		10		mg/L			12/21/19 17:02	5
Fluoride	0.63		0.10		mg/L			01/07/20 14:12	1
Sulfate	440		100		mg/L			12/23/19 10:43	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	88.26				ft			12/19/19 10:20	1
Depth to Water (ft from MP)	90.76				ft			12/19/19 10:20	1
Elevation of well (ft from MP)	612.10				ft			12/19/19 10:20	1
Field pH	8.72				SU			12/19/19 10:20	1
Field Temperature	50.5				Degrees F			12/19/19 10:20	1
Ground Water Elevation	521.34				ft			12/19/19 10:20	1
Specific Conductance	1490				umhos/cm			12/19/19 10:20	1
Well bottom elevation	459.84				ft			12/19/19 10:20	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G45S

Date Collected: 12/19/19 13:16
Date Received: 12/19/19 16:07

Lab Sample ID: 500-175096-8

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.034		0.010		mg/L		12/20/19 07:54	12/20/19 18:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.010		0.0010		mg/L		12/20/19 07:54	12/20/19 18:13	1
Barium	0.044		0.0025		mg/L		12/20/19 07:54	12/20/19 18:13	1
Boron	<1.0		1.0		mg/L		12/20/19 07:54	12/23/19 12:57	20
Calcium	110		0.20		mg/L		12/20/19 07:54	12/20/19 18:13	1
Cobalt	<0.0010		0.0010		mg/L		12/20/19 07:54	12/20/19 18:13	1
Lead	<0.00050		0.00050		mg/L		12/20/19 07:54	12/20/19 18:13	1
Molybdenum	0.0090		0.0050		mg/L		12/20/19 07:54	12/20/19 18:13	1
Selenium	<0.0025		0.0025		mg/L		12/20/19 07:54	12/20/19 18:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	740		10		mg/L			12/20/19 08:58	1
Chloride	170		10		mg/L			12/21/19 17:02	5
Fluoride	0.36		0.10		mg/L			01/07/20 14:16	1
Sulfate	120		100		mg/L			12/23/19 13:20	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	58.21				ft			12/19/19 13:16	1
Depth to Water (ft from MP)	61.18				ft			12/19/19 13:16	1
Elevation of well (ft from MP)	603.31				ft			12/19/19 13:16	1
Field pH	7.44				SU			12/19/19 13:16	1
Field Temperature	54.0				Degrees F			12/19/19 13:16	1
Ground Water Elevation	542.13				ft			12/19/19 13:16	1
Specific Conductance	1055				umhos/cm			12/19/19 13:16	1
Well bottom elevation	471.05				ft			12/19/19 13:16	1

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G46S

Date Collected: 12/23/19 09:25
Date Received: 12/23/19 15:20

Lab Sample ID: 500-175096-9

Matrix: GW

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.11		0.010		mg/L		12/24/19 16:43	12/26/19 09:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.033		0.0010		mg/L		12/24/19 16:43	12/26/19 17:20	1
Barium	0.047		0.0025		mg/L		12/24/19 16:43	12/26/19 17:20	1
Boron	7.7		1.0		mg/L		12/24/19 16:43	12/27/19 11:53	20
Calcium	120		0.20		mg/L		12/24/19 16:43	12/26/19 17:20	1
Cobalt	<0.0010		0.0010		mg/L		12/24/19 16:43	12/26/19 17:20	1
Lead	<0.00050		0.00050		mg/L		12/24/19 16:43	12/26/19 17:20	1
Molybdenum	0.89		0.0050		mg/L		12/24/19 16:43	12/26/19 17:20	1
Selenium	<0.0025		0.0025		mg/L		12/24/19 16:43	12/26/19 17:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		10		mg/L			12/26/19 23:02	1
Chloride	110		10		mg/L			01/03/20 17:28	5
Fluoride	0.37		0.10		mg/L			01/07/20 14:20	1
Sulfate	360		100		mg/L			12/27/19 18:52	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	96.68				ft			12/23/19 09:25	1
Depth to Water (ft from MP)	99.38				ft			12/23/19 09:25	1
Elevation of well (ft from MP)	601.32				ft			12/23/19 09:25	1
Field pH	7.58				SU			12/23/19 09:25	1
Field Temperature	54.3				Degrees F			12/23/19 09:25	1
Ground Water Elevation	501.94				ft			12/23/19 09:25	1
Specific Conductance	1197				umhos/cm			12/23/19 09:25	1
Well bottom elevation	453.62				ft			12/23/19 09:25	1

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: R08S

Date Collected: 12/23/19 10:25
Date Received: 12/23/19 15:20

Lab Sample ID: 500-175096-10

Matrix: GW

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.15		0.010		mg/L		12/24/19 16:43	12/26/19 09:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0012		0.0010		mg/L		12/24/19 16:43	12/26/19 17:24	1
Barium	0.044		0.0025		mg/L		12/24/19 16:43	12/26/19 17:24	1
Boron	7.6		1.0		mg/L		12/24/19 16:43	12/27/19 11:57	20
Calcium	140		0.20		mg/L		12/24/19 16:43	12/26/19 17:24	1
Cobalt	<0.0010		0.0010		mg/L		12/24/19 16:43	12/26/19 17:24	1
Lead	<0.00050		0.00050		mg/L		12/24/19 16:43	12/26/19 17:24	1
Molybdenum	0.34		0.0050		mg/L		12/24/19 16:43	12/26/19 17:24	1
Selenium	0.016		0.0025		mg/L		12/24/19 16:43	12/26/19 17:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	820		10		mg/L			12/26/19 23:09	1
Chloride	82		10		mg/L			01/03/20 17:29	5
Fluoride	0.17		0.10		mg/L			01/07/20 14:23	1
Sulfate	350		50		mg/L			12/27/19 18:31	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	64.65				ft			12/23/19 10:25	1
Depth to Water (ft from MP)	67.20				ft			12/23/19 10:25	1
Elevation of well (ft from MP)	578.62				ft			12/23/19 10:25	1
Field pH	7.82				SU			12/23/19 10:25	1
Field Temperature	53.6				Degrees F			12/23/19 10:25	1
Ground Water Elevation	511.42				ft			12/23/19 10:25	1
Specific Conductance	954				umhos/cm			12/23/19 10:25	1
Well bottom elevation	453.08				ft			12/23/19 10:25	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G20S

Lab Sample ID: 500-175096-11

Date Collected: 12/23/19 11:15

Matrix: GW

Date Received: 12/23/19 15:20

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.044**		0.010		mg/L		12/24/19 16:43	12/26/19 09:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/24/19 16:43	12/26/19 17:28	1
Barium	**0.049**		0.0025		mg/L		12/24/19 16:43	12/26/19 17:28	1
Boron	**1.4**		0.50		mg/L		12/24/19 16:43	12/27/19 12:01	10
Calcium	**58**		0.20		mg/L		12/24/19 16:43	12/26/19 17:28	1
Cobalt	**0.0023**		0.0010		mg/L		12/24/19 16:43	12/26/19 17:28	1
Lead	<0.00050		0.00050		mg/L		12/24/19 16:43	12/26/19 17:28	1
Molybdenum	**0.019**		0.0050		mg/L		12/24/19 16:43	12/26/19 17:28	1
Selenium	<0.0025		0.0025		mg/L		12/24/19 16:43	12/26/19 17:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**430**		10		mg/L			12/26/19 23:15	1
Chloride	**13**		2.0		mg/L			01/03/20 16:33	1
Fluoride	**0.82**		0.10		mg/L			01/07/20 14:30	1
Sulfate	**56**		25		mg/L			12/27/19 18:33	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**38.68**				ft			12/23/19 11:15	1
Depth to Water (ft from MP)	**41.46**				ft			12/23/19 11:15	1
Elevation of well (ft from MP)	**580.33**				ft			12/23/19 11:15	1
Field pH	**7.82**				SU			12/23/19 11:15	1
Field Temperature	**56.1**				Degrees F			12/23/19 11:15	1
Ground Water Elevation	**538.87**				ft			12/23/19 11:15	1
Specific Conductance	**585**				umhos/cm			12/23/19 11:15	1
Well bottom elevation	**442.28**				ft			12/23/19 11:15	1

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G44S

Date Collected: 12/23/19 13:50
Date Received: 12/23/19 15:20

Lab Sample ID: 500-175096-12

Matrix: GW

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.026**		0.010		mg/L		12/24/19 16:43	12/26/19 09:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/24/19 16:43	12/30/19 13:47	1
Barium	**0.062**		0.0025		mg/L		12/24/19 16:43	12/27/19 13:37	1
Boron	**1.7**		0.50		mg/L		12/24/19 16:43	12/27/19 12:04	10
Calcium	**140**		0.20		mg/L		12/24/19 16:43	12/27/19 13:37	1
Cobalt	<0.0010		0.0010		mg/L		12/24/19 16:43	12/27/19 13:37	1
Lead	<0.00050		0.00050		mg/L		12/24/19 16:43	12/30/19 12:30	1
Molybdenum	**0.23**		0.0050		mg/L		12/24/19 16:43	12/27/19 13:37	1
Selenium	<0.0025		0.0025		mg/L		12/24/19 16:43	12/30/19 12:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**690**		10		mg/L			12/26/19 23:17	1
Chloride	**55**		2.0		mg/L			01/03/20 16:34	1
Fluoride	**0.23**		0.10		mg/L			01/07/20 14:36	1
Sulfate	**160**		25		mg/L			12/28/19 09:12	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**78.87**				ft			12/23/19 13:50	1
Depth to Water (ft from MP)	**81.05**				ft			12/23/19 13:50	1
Elevation of well (ft from MP)	**586.69**				ft			12/23/19 13:50	1
Field pH	**7.24**				SU			12/23/19 13:50	1
Field Temperature	**52.9**				Degrees F			12/23/19 13:50	1
Ground Water Elevation	**505.64**				ft			12/23/19 13:50	1
Specific Conductance	**930**				umhos/cm			12/23/19 13:50	1
Well bottom elevation	**455.11**				ft			12/23/19 13:50	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: T01S

Date Collected: 12/26/19 08:47
Date Received: 12/26/19 16:05

Lab Sample ID: 500-175096-13

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.012		0.010		mg/L		12/27/19 16:44	12/31/19 05:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.012		0.0010		mg/L		12/27/19 16:44	12/30/19 12:46	1
Barium	0.052		0.0025		mg/L		12/27/19 16:44	12/30/19 12:46	1
Boron	4.4		1.0		mg/L		12/27/19 16:44	12/31/19 15:20	20
Calcium	57		0.20		mg/L		12/27/19 16:44	12/30/19 12:46	1
Cobalt	0.0019		0.0010		mg/L		12/27/19 16:44	12/30/19 12:46	1
Lead	0.0018		0.00050		mg/L		12/27/19 16:44	12/30/19 12:46	1
Molybdenum	0.32		0.0050		mg/L		12/27/19 16:44	12/30/19 12:46	1
Selenium	<0.0025		0.0025		mg/L		12/27/19 16:44	12/30/19 12:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	940		10		mg/L			12/26/19 23:20	1
Chloride	100		10		mg/L			01/03/20 17:33	5
Fluoride	1.2		0.10		mg/L			01/07/20 14:41	1
Sulfate	340		100		mg/L			01/07/20 00:33	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	110.35				ft			12/26/19 08:47	1
Depth to Water (ft from MP)	112.83				ft			12/26/19 08:47	1
Elevation of well (ft from MP)	621.78				ft			12/26/19 08:47	1
Field pH	7.86				SU			12/26/19 08:47	1
Field Temperature	52.3				Degrees F			12/26/19 08:47	1
Ground Water Elevation	508.95				ft			12/26/19 08:47	1
Specific Conductance	1186				umhos/cm			12/26/19 08:47	1
Well bottom elevation	451.46				ft			12/26/19 08:47	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: T04S

Date Collected: 12/26/19 13:02
Date Received: 12/26/19 16:05

Lab Sample ID: 500-175096-14

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.041		0.010		mg/L		12/27/19 16:44	12/31/19 05:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0022		0.0010		mg/L		12/27/19 16:44	12/30/19 12:50	1
Barium	0.078		0.0025		mg/L		12/27/19 16:44	12/30/19 12:50	1
Boron	0.28		0.050		mg/L		12/27/19 16:44	12/31/19 15:23	1
Calcium	110		0.20		mg/L		12/27/19 16:44	12/30/19 12:50	1
Cobalt	0.0044		0.0010		mg/L		12/27/19 16:44	12/30/19 12:50	1
Lead	0.0049		0.00050		mg/L		12/27/19 16:44	12/30/19 12:50	1
Molybdenum	0.013		0.0050		mg/L		12/27/19 16:44	12/30/19 12:50	1
Selenium	<0.0025		0.0025		mg/L		12/27/19 16:44	12/30/19 12:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	680		10		mg/L			12/26/19 23:22	1
Chloride	30		2.0		mg/L			01/03/20 16:40	1
Fluoride	0.32		0.10		mg/L			01/07/20 14:45	1
Sulfate	120		100		mg/L			01/07/20 00:57	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	150.47				ft			12/26/19 13:02	1
Depth to Water (ft from MP)	152.89				ft			12/26/19 13:02	1
Elevation of well (ft from MP)	631.35				ft			12/26/19 13:02	1
Field pH	7.37				SU			12/26/19 13:02	1
Field Temperature	60.4				Degrees F			12/26/19 13:02	1
Ground Water Elevation	478.46				ft			12/26/19 13:02	1
Specific Conductance	707				umhos/cm			12/26/19 13:02	1
Well bottom elevation	458.07				ft			12/26/19 13:02	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: T02S

Date Collected: 12/27/19 08:54
Date Received: 12/27/19 14:40

Lab Sample ID: 500-175096-15

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.038		0.010		mg/L		12/27/19 16:44	12/31/19 06:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.019		0.0010		mg/L		12/27/19 16:44	12/30/19 12:54	1
Barium	0.083		0.0025		mg/L		12/27/19 16:44	12/30/19 12:54	1
Boron	5.2		1.0		mg/L		12/27/19 16:44	12/31/19 15:27	20
Calcium	76		0.20		mg/L		12/27/19 16:44	12/30/19 12:54	1
Cobalt	0.012		0.0010		mg/L		12/27/19 16:44	12/30/19 12:54	1
Lead	0.0044		0.00050		mg/L		12/27/19 16:44	12/30/19 12:54	1
Molybdenum	0.42		0.0050		mg/L		12/27/19 16:44	12/30/19 12:54	1
Selenium	<0.0025		0.0025		mg/L		12/27/19 16:44	12/30/19 12:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		10		mg/L			12/30/19 08:48	1
Chloride	96		10		mg/L			01/03/20 17:36	5
Fluoride	0.67		0.10		mg/L			01/07/20 14:49	1
Sulfate	340		100		mg/L			01/07/20 00:18	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	127.46				ft			12/27/19 08:54	1
Depth to Water (ft from MP)	129.79				ft			12/27/19 08:54	1
Elevation of well (ft from MP)	626.16				ft			12/27/19 08:54	1
Field pH	8.03				SU			12/27/19 08:54	1
Field Temperature	42.3				Degrees F			12/27/19 08:54	1
Ground Water Elevation	496.37				ft			12/27/19 08:54	1
Specific Conductance	1178				umhos/cm			12/27/19 08:54	1
Well bottom elevation	453.40				ft			12/27/19 08:54	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: T08S

Date Collected: 12/27/19 11:07
Date Received: 12/27/19 14:40

Lab Sample ID: 500-175096-16

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.031		0.010		mg/L		12/27/19 16:44	12/31/19 06:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.012		0.0010		mg/L		12/27/19 16:44	12/30/19 12:58	1
Barium	0.047		0.0025		mg/L		12/27/19 16:44	12/30/19 12:58	1
Boron	5.8		1.0		mg/L		12/27/19 16:44	12/31/19 15:31	20
Calcium	43		0.20		mg/L		12/27/19 16:44	12/30/19 12:58	1
Cobalt	<0.0010		0.0010		mg/L		12/27/19 16:44	12/30/19 12:58	1
Lead	<0.00050		0.00050		mg/L		12/27/19 16:44	12/30/19 12:58	1
Molybdenum	0.56		0.0050		mg/L		12/27/19 16:44	12/30/19 12:58	1
Selenium	<0.0025		0.0025		mg/L		12/27/19 16:44	12/30/19 12:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	830		10		mg/L			12/30/19 08:56	1
Chloride	100		10		mg/L			01/03/20 17:38	5
Fluoride	0.65		0.10		mg/L			01/07/20 14:54	1
Sulfate	280		100		mg/L			01/07/20 01:07	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	122.81				ft			12/27/19 11:07	1
Depth to Water (ft from MP)	125.19				ft			12/27/19 11:07	1
Elevation of well (ft from MP)	627.39				ft			12/27/19 11:07	1
Field pH	8.01				SU			12/27/19 11:07	1
Field Temperature	41.5				Degrees F			12/27/19 11:07	1
Ground Water Elevation	502.20				ft			12/27/19 11:07	1
Specific Conductance	1070				umhos/cm			12/27/19 11:07	1
Well bottom elevation	447.38				ft			12/27/19 11:07	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: T03S

Date Collected: 12/27/19 13:33
Date Received: 12/27/19 14:40

Lab Sample ID: 500-175096-17

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.026		0.010		mg/L		12/27/19 16:44	12/31/19 06:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0023		0.0010		mg/L		12/27/19 16:44	12/30/19 13:02	1
Barium	0.085		0.0025		mg/L		12/27/19 16:44	12/30/19 13:02	1
Boron	2.7		0.50		mg/L		12/27/19 16:44	12/31/19 15:35	10
Calcium	100		0.20		mg/L		12/27/19 16:44	12/30/19 13:02	1
Cobalt	0.0011		0.0010		mg/L		12/27/19 16:44	12/30/19 13:02	1
Lead	<0.00050		0.00050		mg/L		12/27/19 16:44	12/30/19 13:02	1
Molybdenum	0.28		0.0050		mg/L		12/27/19 16:44	12/30/19 13:02	1
Selenium	<0.0025		0.0025		mg/L		12/27/19 16:44	12/30/19 13:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	800		10		mg/L			12/30/19 08:58	1
Chloride	83		10		mg/L			01/03/20 17:39	5
Fluoride	0.32		0.10		mg/L			01/07/20 15:15	1
Sulfate	220		100		mg/L			01/07/20 01:07	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	131.22				ft			12/27/19 13:33	1
Depth to Water (ft from MP)	134.30				ft			12/27/19 13:33	1
Elevation of well (ft from MP)	629.89				ft			12/27/19 13:33	1
Field pH	7.57				SU			12/27/19 13:33	1
Field Temperature	51.4				Degrees F			12/27/19 13:33	1
Ground Water Elevation	495.59				ft			12/27/19 13:33	1
Specific Conductance	1037				umhos/cm			12/27/19 13:33	1
Well bottom elevation	456.70				ft			12/27/19 13:33	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: T09S

Date Collected: 12/30/19 08:26
Date Received: 12/30/19 12:10

Lab Sample ID: 500-175096-18

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.082		0.010		mg/L		01/06/20 07:18	01/07/20 04:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0026		0.0010		mg/L		01/06/20 07:18	01/06/20 18:37	1
Barium	0.084		0.0025		mg/L		01/06/20 07:18	01/06/20 18:37	1
Boron	5.1		1.0		mg/L		01/06/20 07:18	01/07/20 12:06	20
Calcium	120		0.20		mg/L		01/06/20 07:18	01/06/20 18:37	1
Cobalt	<0.0010		0.0010		mg/L		01/06/20 07:18	01/06/20 18:37	1
Lead	0.00064		0.00050		mg/L		01/06/20 07:18	01/06/20 18:37	1
Molybdenum	0.75		0.0050		mg/L		01/06/20 07:18	01/06/20 18:37	1
Selenium	<0.0025		0.0025		mg/L		01/06/20 07:18	01/06/20 18:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	940		10		mg/L			01/06/20 03:24	1
Chloride	120		10		mg/L			01/03/20 17:43	5
Fluoride	0.39		0.10		mg/L			01/07/20 15:21	1
Sulfate	350		100		mg/L			01/14/20 09:53	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	98.85				ft			12/30/19 08:26	1
Depth to Water (ft from MP)	101.25				ft			12/30/19 08:26	1
Elevation of well (ft from MP)	603.74				ft			12/30/19 08:26	1
Field pH	7.68				SU			12/30/19 08:26	1
Field Temperature	45.5				Degrees F			12/30/19 08:26	1
Ground Water Elevation	502.49				ft			12/30/19 08:26	1
Specific Conductance	1085				umhos/cm			12/30/19 08:26	1
Well bottom elevation	444.80				ft			12/30/19 08:26	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: T05S

Date Collected: 12/30/19 10:12
Date Received: 12/30/19 12:10

Lab Sample ID: 500-175096-19

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.020		0.010		mg/L		01/06/20 07:18	01/07/20 04:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.14		0.0010		mg/L		01/06/20 07:18	01/06/20 18:41	1
Barium	0.011		0.0025		mg/L		01/06/20 07:18	01/06/20 18:41	1
Boron	14		5.0		mg/L		01/06/20 07:18	01/07/20 12:10	100
Calcium	1.7		0.20		mg/L		01/06/20 07:18	01/06/20 18:41	1
Cobalt	<0.0010		0.0010		mg/L		01/06/20 07:18	01/06/20 18:41	1
Lead	<0.00050		0.00050		mg/L		01/06/20 07:18	01/06/20 18:41	1
Molybdenum	1.0		0.0050		mg/L		01/06/20 07:18	01/06/20 18:41	1
Selenium	0.0049		0.0025		mg/L		01/06/20 07:18	01/06/20 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1600		10		mg/L			01/06/20 03:32	1
Chloride	140		10		mg/L			01/03/20 17:44	5
Fluoride	1.9		0.10		mg/L			01/07/20 15:25	1
Sulfate	680		100		mg/L			01/07/20 09:10	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	114.24				ft			12/30/19 10:12	1
Depth to Water (ft from MP)	116.64				ft			12/30/19 10:12	1
Elevation of well (ft from MP)	623.45				ft			12/30/19 10:12	1
Field pH	10.35				SU			12/30/19 10:12	1
Field Temperature	45.3				Degrees F			12/30/19 10:12	1
Ground Water Elevation	506.81				ft			12/30/19 10:12	1
Specific Conductance	2040				umhos/cm			12/30/19 10:12	1
Well bottom elevation	448.35				ft			12/30/19 10:12	1

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: T06S

Date Collected: 12/31/19 09:30
Date Received: 12/31/19 12:00

Lab Sample ID: 500-175096-20

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.029**		0.010		mg/L		01/06/20 07:18	01/07/20 04:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		01/06/20 07:18	01/06/20 18:44	1
Barium	**0.035**		0.0025		mg/L		01/06/20 07:18	01/06/20 18:44	1
Boron	**0.77**		0.25		mg/L		01/06/20 07:18	01/07/20 12:14	5
Calcium	**95**		0.20		mg/L		01/06/20 07:18	01/06/20 18:44	1
Cobalt	<0.0010		0.0010		mg/L		01/06/20 07:18	01/06/20 18:44	1
Lead	<0.00050		0.00050		mg/L		01/06/20 07:18	01/06/20 18:44	1
Molybdenum	**0.011**		0.0050		mg/L		01/06/20 07:18	01/06/20 18:44	1
Selenium	<0.0025		0.0025		mg/L		01/06/20 07:18	01/06/20 18:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**540**		10		mg/L			01/06/20 03:35	1
Chloride	**15**		2.0		mg/L			01/03/20 17:45	1
Fluoride	**0.47**		0.10		mg/L			01/07/20 15:28	1
Sulfate	**76**		50		mg/L			01/07/20 09:10	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**108.17**				ft			12/31/19 09:30	1
Depth to Water (ft from MP)	**110.47**				ft			12/31/19 09:30	1
Elevation of well (ft from MP)	**621.02**				ft			12/31/19 09:30	1
Field pH	**5.01**				SU			12/31/19 09:30	1
Field Temperature	**46.0**				Degrees F			12/31/19 09:30	1
Ground Water Elevation	**510.55**				ft			12/31/19 09:30	1
Specific Conductance	**668**				umhos/cm			12/31/19 09:30	1
Well bottom elevation	**447.94**				ft			12/31/19 09:30	1

Definitions/Glossary

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Qualifiers

Metals

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.

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.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Metals

Prep Batch: 521415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-1	G33S	Total Recoverable	Water	3005A	
500-175096-2	DUP	Total Recoverable	Water	3005A	
500-175096-3	G30S	Total Recoverable	Water	3005A	
500-175096-4	R32S	Total Recoverable	Water	3005A	
MB 500-521415/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-521415/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 521599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-5	G31S	Total Recoverable	Water	3005A	
500-175096-6	G48S	Total Recoverable	Water	3005A	
MB 500-521599/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-521599/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 521635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-1	G33S	Total Recoverable	Water	6010C	521415
500-175096-2	DUP	Total Recoverable	Water	6010C	521415
500-175096-3	G30S	Total Recoverable	Water	6010C	521415
MB 500-521415/1-A	Method Blank	Total Recoverable	Water	6010C	521415
LCS 500-521415/2-A	Lab Control Sample	Total Recoverable	Water	6010C	521415

Prep Batch: 521655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-7	G47S	Total Recoverable	Water	3005A	
500-175096-8	G45S	Total Recoverable	Water	3005A	
MB 500-521655/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-521655/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-175096-7 MS	G47S	Total Recoverable	Water	3005A	
500-175096-7 MSD	G47S	Total Recoverable	Water	3005A	
500-175096-7 DU	G47S	Total Recoverable	Water	3005A	

Analysis Batch: 521733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-1	G33S	Total Recoverable	Water	6020A	521415
500-175096-2	DUP	Total Recoverable	Water	6020A	521415
500-175096-3	G30S	Total Recoverable	Water	6020A	521415
500-175096-4	R32S	Total Recoverable	Water	6020A	521415
MB 500-521415/1-A	Method Blank	Total Recoverable	Water	6020A	521415
LCS 500-521415/2-A	Lab Control Sample	Total Recoverable	Water	6020A	521415

Analysis Batch: 521915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-1	G33S	Total Recoverable	Water	6020A	521415
500-175096-2	DUP	Total Recoverable	Water	6020A	521415
500-175096-3	G30S	Total Recoverable	Water	6020A	521415
500-175096-4	R32S	Total Recoverable	Water	6020A	521415
500-175096-5	G31S	Total Recoverable	Water	6020A	521599
500-175096-6	G48S	Total Recoverable	Water	6020A	521599
500-175096-7	G47S	Total Recoverable	Water	6020A	521655
500-175096-8	G45S	Total Recoverable	Water	6020A	521655

Metals (Continued)

Analysis Batch: 521915 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-521415/1-A	Method Blank	Total Recoverable	Water	6020A	521415
MB 500-521599/1-A	Method Blank	Total Recoverable	Water	6020A	521599
MB 500-521655/1-A	Method Blank	Total Recoverable	Water	6020A	521655
LCS 500-521415/2-A	Lab Control Sample	Total Recoverable	Water	6020A	521415
LCS 500-521599/2-A	Lab Control Sample	Total Recoverable	Water	6020A	521599
LCS 500-521655/2-A	Lab Control Sample	Total Recoverable	Water	6020A	521655
500-175096-7 MS	G47S	Total Recoverable	Water	6020A	521655
500-175096-7 MSD	G47S	Total Recoverable	Water	6020A	521655
500-175096-7 DU	G47S	Total Recoverable	Water	6020A	521655

Analysis Batch: 522048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-4	R32S	Total Recoverable	Water	6010C	521415
500-175096-5	G31S	Total Recoverable	Water	6010C	521599
500-175096-6	G48S	Total Recoverable	Water	6010C	521599
500-175096-7	G47S	Total Recoverable	Water	6010C	521655
500-175096-8	G45S	Total Recoverable	Water	6010C	521655
MB 500-521599/1-A	Method Blank	Total Recoverable	Water	6010C	521599
MB 500-521655/1-A	Method Blank	Total Recoverable	Water	6010C	521655
LCS 500-521599/2-A	Lab Control Sample	Total Recoverable	Water	6010C	521599
LCS 500-521655/2-A	Lab Control Sample	Total Recoverable	Water	6010C	521655
500-175096-7 MS	G47S	Total Recoverable	Water	6010C	521655
500-175096-7 MSD	G47S	Total Recoverable	Water	6010C	521655
500-175096-7 DU	G47S	Total Recoverable	Water	6010C	521655

Analysis Batch: 522322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-5	G31S	Total Recoverable	Water	6020A	521599
500-175096-6	G48S	Total Recoverable	Water	6020A	521599
500-175096-7	G47S	Total Recoverable	Water	6020A	521655
500-175096-8	G45S	Total Recoverable	Water	6020A	521655
MB 500-521655/1-A	Method Blank	Total Recoverable	Water	6020A	521655
LCS 500-521655/2-A	Lab Control Sample	Total Recoverable	Water	6020A	521655
500-175096-7 MS	G47S	Total Recoverable	Water	6020A	521655
500-175096-7 MSD	G47S	Total Recoverable	Water	6020A	521655
500-175096-7 DU	G47S	Total Recoverable	Water	6020A	521655

Prep Batch: 522376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-9	G46S	Total Recoverable	GW	3005A	
500-175096-10	R08S	Total Recoverable	GW	3005A	
500-175096-11	G20S	Total Recoverable	GW	3005A	
500-175096-12	G44S	Total Recoverable	GW	3005A	
MB 500-522376/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-522376/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 522538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-9	G46S	Total Recoverable	GW	6010C	522376
500-175096-10	R08S	Total Recoverable	GW	6010C	522376
500-175096-11	G20S	Total Recoverable	GW	6010C	522376

Metals (Continued)

Analysis Batch: 522538 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-12	G44S	Total Recoverable	GW	6010C	522376
MB 500-522376/1-A	Method Blank	Total Recoverable	Water	6010C	522376
LCS 500-522376/2-A	Lab Control Sample	Total Recoverable	Water	6010C	522376

Analysis Batch: 522708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-9	G46S	Total Recoverable	GW	6020A	522376
500-175096-10	R08S	Total Recoverable	GW	6020A	522376
500-175096-11	G20S	Total Recoverable	GW	6020A	522376
MB 500-522376/1-A	Method Blank	Total Recoverable	Water	6020A	522376
LCS 500-522376/2-A	Lab Control Sample	Total Recoverable	Water	6020A	522376

Analysis Batch: 522772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-9	G46S	Total Recoverable	GW	6020A	522376
500-175096-10	R08S	Total Recoverable	GW	6020A	522376
500-175096-11	G20S	Total Recoverable	GW	6020A	522376
500-175096-12	G44S	Total Recoverable	GW	6020A	522376
500-175096-12	G44S	Total Recoverable	GW	6020A	522376
MB 500-522376/1-A	Method Blank	Total Recoverable	Water	6020A	522376
LCS 500-522376/2-A	Lab Control Sample	Total Recoverable	Water	6020A	522376

Prep Batch: 522799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-13	T01S	Total Recoverable	Water	3005A	
500-175096-14	T04S	Total Recoverable	Water	3005A	
500-175096-15	T02S	Total Recoverable	Water	3005A	
500-175096-16	T08S	Total Recoverable	Water	3005A	
500-175096-17	T03S	Total Recoverable	Water	3005A	
MB 500-522799/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-522799/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 523081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-12	G44S	Total Recoverable	GW	6020A	522376

Analysis Batch: 523089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-12	G44S	Total Recoverable	GW	6020A	522376
500-175096-13	T01S	Total Recoverable	Water	6020A	522799
500-175096-14	T04S	Total Recoverable	Water	6020A	522799
500-175096-15	T02S	Total Recoverable	Water	6020A	522799
500-175096-16	T08S	Total Recoverable	Water	6020A	522799
500-175096-17	T03S	Total Recoverable	Water	6020A	522799
MB 500-522799/1-A	Method Blank	Total Recoverable	Water	6020A	522799
LCS 500-522799/2-A	Lab Control Sample	Total Recoverable	Water	6020A	522799

Analysis Batch: 523133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-13	T01S	Total Recoverable	Water	6010C	522799
500-175096-14	T04S	Total Recoverable	Water	6010C	522799

Metals (Continued)

Analysis Batch: 523133 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-15	T02S	Total Recoverable	Water	6010C	522799
500-175096-16	T08S	Total Recoverable	Water	6010C	522799
500-175096-17	T03S	Total Recoverable	Water	6010C	522799
MB 500-522799/1-A	Method Blank	Total Recoverable	Water	6010C	522799
LCS 500-522799/2-A	Lab Control Sample	Total Recoverable	Water	6010C	522799

Prep Batch: 523446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-18	T09S	Total Recoverable	Water	3005A	
500-175096-19	T05S	Total Recoverable	Water	3005A	
500-175096-20	T06S	Total Recoverable	Water	3005A	
MB 500-523446/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-523446/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 523516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-13	T01S	Total Recoverable	Water	6020A	522799
500-175096-14	T04S	Total Recoverable	Water	6020A	522799
500-175096-15	T02S	Total Recoverable	Water	6020A	522799
500-175096-16	T08S	Total Recoverable	Water	6020A	522799
500-175096-17	T03S	Total Recoverable	Water	6020A	522799

Analysis Batch: 523614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-18	T09S	Total Recoverable	Water	6010C	523446
500-175096-19	T05S	Total Recoverable	Water	6010C	523446
500-175096-20	T06S	Total Recoverable	Water	6010C	523446
MB 500-523446/1-A	Method Blank	Total Recoverable	Water	6010C	523446
LCS 500-523446/2-A	Lab Control Sample	Total Recoverable	Water	6010C	523446

Analysis Batch: 523677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-18	T09S	Total Recoverable	Water	6020A	523446
500-175096-19	T05S	Total Recoverable	Water	6020A	523446
500-175096-20	T06S	Total Recoverable	Water	6020A	523446
MB 500-523446/1-A	Method Blank	Total Recoverable	Water	6020A	523446
LCS 500-523446/2-A	Lab Control Sample	Total Recoverable	Water	6020A	523446

Analysis Batch: 523733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-18	T09S	Total Recoverable	Water	6020A	523446
500-175096-19	T05S	Total Recoverable	Water	6020A	523446
500-175096-20	T06S	Total Recoverable	Water	6020A	523446
MB 500-523446/1-A	Method Blank	Total Recoverable	Water	6020A	523446
LCS 500-523446/2-A	Lab Control Sample	Total Recoverable	Water	6020A	523446

General Chemistry

Analysis Batch: 471445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-1	G33S	Total/NA	Water	SM 4500 SO4 E	

General Chemistry (Continued)

Analysis Batch: 471445 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-2	DUP	Total/NA	Water	SM 4500 SO4 E	
500-175096-3	G30S	Total/NA	Water	SM 4500 SO4 E	
500-175096-4	R32S	Total/NA	Water	SM 4500 SO4 E	
500-175096-5	G31S	Total/NA	Water	SM 4500 SO4 E	
500-175096-6	G48S	Total/NA	Water	SM 4500 SO4 E	
500-175096-7	G47S	Total/NA	Water	SM 4500 SO4 E	
MB 400-471445/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-471445/37	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-471445/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 471466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-8	G45S	Total/NA	Water	SM 4500 SO4 E	
MB 400-471466/5	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-471466/6	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-471466/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-175096-8 MS	G45S	Total/NA	Water	SM 4500 SO4 E	
500-175096-8 MSD	G45S	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 472105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-9	G46S	Total/NA	GW	SM 4500 SO4 E	
500-175096-10	R08S	Total/NA	GW	SM 4500 SO4 E	
500-175096-11	G20S	Total/NA	GW	SM 4500 SO4 E	
MB 400-472105/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-472105/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-472105/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 472162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-12	G44S	Total/NA	GW	SM 4500 SO4 E	
MB 400-472162/5	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-472162/15	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-472162/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 473163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-13	T01S	Total/NA	Water	SM 4500 SO4 E	
500-175096-14	T04S	Total/NA	Water	SM 4500 SO4 E	
500-175096-15	T02S	Total/NA	Water	SM 4500 SO4 E	
500-175096-16	T08S	Total/NA	Water	SM 4500 SO4 E	
500-175096-17	T03S	Total/NA	Water	SM 4500 SO4 E	
500-175096-19	T05S	Total/NA	Water	SM 4500 SO4 E	
500-175096-20	T06S	Total/NA	Water	SM 4500 SO4 E	
MB 400-473163/5	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-473163/52	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-175096-13 MS	T01S	Total/NA	Water	SM 4500 SO4 E	
500-175096-13 MSD	T01S	Total/NA	Water	SM 4500 SO4 E	

General Chemistry

Analysis Batch: 473946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-18	T09S	Total/NA	Water	SM 4500 SO4 E	
MB 400-473946/22	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-473946/5	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-473946/20	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 520703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-1	G33S	Total/NA	Water	SM 2540C	
500-175096-2	DUP	Total/NA	Water	SM 2540C	
MB 500-520703/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-520703/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 521061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-1	G33S	Total/NA	Water	SM 4500 F C	
500-175096-2	DUP	Total/NA	Water	SM 4500 F C	
MB 500-521061/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-521061/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 521154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-3	G30S	Total/NA	Water	SM 2540C	
500-175096-4	R32S	Total/NA	Water	SM 2540C	
MB 500-521154/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-521154/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-175096-3 MS	G30S	Total/NA	Water	SM 2540C	
500-175096-3 DU	G30S	Total/NA	Water	SM 2540C	
500-175096-4 DU	R32S	Total/NA	Water	SM 2540C	

Analysis Batch: 521713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-5	G31S	Total/NA	Water	SM 2540C	
500-175096-6	G48S	Total/NA	Water	SM 2540C	
500-175096-7	G47S	Total/NA	Water	SM 2540C	
500-175096-8	G45S	Total/NA	Water	SM 2540C	
MB 500-521713/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-521713/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-175096-5 MS	G31S	Total/NA	Water	SM 2540C	
500-175096-5 DU	G31S	Total/NA	Water	SM 2540C	
500-175096-6 DU	G48S	Total/NA	Water	SM 2540C	

Analysis Batch: 521937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-1	G33S	Total/NA	Water	SM 4500 Cl- E	
500-175096-2	DUP	Total/NA	Water	SM 4500 Cl- E	
500-175096-3	G30S	Total/NA	Water	SM 4500 Cl- E	
500-175096-4	R32S	Total/NA	Water	SM 4500 Cl- E	
500-175096-5	G31S	Total/NA	Water	SM 4500 Cl- E	
500-175096-6	G48S	Total/NA	Water	SM 4500 Cl- E	
500-175096-7	G47S	Total/NA	Water	SM 4500 Cl- E	
500-175096-8	G45S	Total/NA	Water	SM 4500 Cl- E	

General Chemistry (Continued)

Analysis Batch: 521937 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-521937/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-521937/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-175096-5 MS	G31S	Total/NA	Water	SM 4500 Cl- E	
500-175096-5 MSD	G31S	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 522616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-9	G46S	Total/NA	GW	SM 2540C	
500-175096-10	R08S	Total/NA	GW	SM 2540C	
500-175096-11	G20S	Total/NA	GW	SM 2540C	
500-175096-12	G44S	Total/NA	GW	SM 2540C	
500-175096-13	T01S	Total/NA	Water	SM 2540C	
500-175096-14	T04S	Total/NA	Water	SM 2540C	
MB 500-522616/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-522616/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-175096-9 MS	G46S	Total/NA	GW	SM 2540C	
500-175096-9 DU	G46S	Total/NA	GW	SM 2540C	
500-175096-10 DU	R08S	Total/NA	GW	SM 2540C	

Analysis Batch: 522961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-15	T02S	Total/NA	Water	SM 2540C	
500-175096-16	T08S	Total/NA	Water	SM 2540C	
500-175096-17	T03S	Total/NA	Water	SM 2540C	
MB 500-522961/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-522961/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-175096-15 MS	T02S	Total/NA	Water	SM 2540C	
500-175096-15 DU	T02S	Total/NA	Water	SM 2540C	

Analysis Batch: 523397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-9	G46S	Total/NA	GW	SM 4500 Cl- E	
500-175096-10	R08S	Total/NA	GW	SM 4500 Cl- E	
500-175096-11	G20S	Total/NA	GW	SM 4500 Cl- E	
500-175096-12	G44S	Total/NA	GW	SM 4500 Cl- E	
500-175096-13	T01S	Total/NA	Water	SM 4500 Cl- E	
500-175096-14	T04S	Total/NA	Water	SM 4500 Cl- E	
500-175096-15	T02S	Total/NA	Water	SM 4500 Cl- E	
500-175096-16	T08S	Total/NA	Water	SM 4500 Cl- E	
500-175096-17	T03S	Total/NA	Water	SM 4500 Cl- E	
500-175096-18	T09S	Total/NA	Water	SM 4500 Cl- E	
500-175096-19	T05S	Total/NA	Water	SM 4500 Cl- E	
500-175096-20	T06S	Total/NA	Water	SM 4500 Cl- E	
MB 500-523397/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-523397/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-175096-13 MS	T01S	Total/NA	Water	SM 4500 Cl- E	
500-175096-13 MSD	T01S	Total/NA	Water	SM 4500 Cl- E	
500-175096-15 MS	T02S	Total/NA	Water	SM 4500 Cl- E	
500-175096-15 MSD	T02S	Total/NA	Water	SM 4500 Cl- E	

General Chemistry

Analysis Batch: 523422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-18	T09S	Total/NA	Water	SM 2540C	
500-175096-19	T05S	Total/NA	Water	SM 2540C	
500-175096-20	T06S	Total/NA	Water	SM 2540C	
MB 500-523422/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-523422/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-175096-18 MS	T09S	Total/NA	Water	SM 2540C	
500-175096-18 DU	T09S	Total/NA	Water	SM 2540C	

Analysis Batch: 523784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-3	G30S	Total/NA	Water	SM 4500 F C	
500-175096-4	R32S	Total/NA	Water	SM 4500 F C	
500-175096-5	G31S	Total/NA	Water	SM 4500 F C	
500-175096-6	G48S	Total/NA	Water	SM 4500 F C	
500-175096-7	G47S	Total/NA	Water	SM 4500 F C	
500-175096-8	G45S	Total/NA	Water	SM 4500 F C	
500-175096-9	G46S	Total/NA	GW	SM 4500 F C	
500-175096-10	R08S	Total/NA	GW	SM 4500 F C	
500-175096-11	G20S	Total/NA	GW	SM 4500 F C	
500-175096-12	G44S	Total/NA	GW	SM 4500 F C	
500-175096-13	T01S	Total/NA	Water	SM 4500 F C	
500-175096-14	T04S	Total/NA	Water	SM 4500 F C	
500-175096-15	T02S	Total/NA	Water	SM 4500 F C	
500-175096-16	T08S	Total/NA	Water	SM 4500 F C	
500-175096-17	T03S	Total/NA	Water	SM 4500 F C	
500-175096-18	T09S	Total/NA	Water	SM 4500 F C	
500-175096-19	T05S	Total/NA	Water	SM 4500 F C	
500-175096-20	T06S	Total/NA	Water	SM 4500 F C	
MB 500-523784/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-523784/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 524727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-1	G33S	Total/NA	Water	Field Sampling	
500-175096-2	DUP	Total/NA	Water	Field Sampling	
500-175096-3	G30S	Total/NA	Water	Field Sampling	
500-175096-4	R32S	Total/NA	Water	Field Sampling	
500-175096-5	G31S	Total/NA	Water	Field Sampling	
500-175096-6	G48S	Total/NA	Water	Field Sampling	
500-175096-7	G47S	Total/NA	Water	Field Sampling	
500-175096-8	G45S	Total/NA	Water	Field Sampling	
500-175096-9	G46S	Total/NA	GW	Field Sampling	
500-175096-10	R08S	Total/NA	GW	Field Sampling	
500-175096-11	G20S	Total/NA	GW	Field Sampling	
500-175096-12	G44S	Total/NA	GW	Field Sampling	
500-175096-13	T01S	Total/NA	Water	Field Sampling	
500-175096-14	T04S	Total/NA	Water	Field Sampling	
500-175096-15	T02S	Total/NA	Water	Field Sampling	
500-175096-16	T08S	Total/NA	Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 524727 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175096-17	T03S	Total/NA	Water	Field Sampling	
500-175096-18	T09S	Total/NA	Water	Field Sampling	
500-175096-19	T05S	Total/NA	Water	Field Sampling	
500-175096-20	T06S	Total/NA	Water	Field Sampling	

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-521415/1-A
Matrix: Water
Analysis Batch: 521635

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 521415

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/19/19 07:21	12/20/19 01:36	1

Lab Sample ID: LCS 500-521415/2-A
Matrix: Water
Analysis Batch: 521635

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 521415

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.100	0.0956		mg/L		96	80 - 120

Lab Sample ID: MB 500-521599/1-A
Matrix: Water
Analysis Batch: 522048

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 521599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/19/19 16:45	12/20/19 17:16	1

Lab Sample ID: LCS 500-521599/2-A
Matrix: Water
Analysis Batch: 522048

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 521599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.543		mg/L		109	80 - 120

Lab Sample ID: MB 500-521655/1-A
Matrix: Water
Analysis Batch: 522048

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/20/19 07:54	12/20/19 17:48	1

Lab Sample ID: LCS 500-521655/2-A
Matrix: Water
Analysis Batch: 522048

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 521655

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

Lab Sample ID: 500-175096-7 MS
Matrix: Water
Analysis Batch: 522048

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.053		0.100	0.160		mg/L		106	75 - 125

Lab Sample ID: 500-175096-7 MSD
Matrix: Water
Analysis Batch: 522048

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.053		0.100	0.170		mg/L		117	75 - 125	6	20

Method: 6010C - Metals (ICP)

Lab Sample ID: 500-175096-7 DU
Matrix: Water
Analysis Batch: 522048

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lithium	0.053		0.0536		mg/L		0.6	20

Lab Sample ID: MB 500-522376/1-A
Matrix: Water
Analysis Batch: 522538

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 522376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/24/19 16:43	12/26/19 09:21	1

Lab Sample ID: LCS 500-522376/2-A
Matrix: Water
Analysis Batch: 522538

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 522376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.504		mg/L		101	80 - 120

Lab Sample ID: MB 500-522799/1-A
Matrix: Water
Analysis Batch: 523133

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 522799

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/27/19 16:44	12/31/19 05:44	1

Lab Sample ID: LCS 500-522799/2-A
Matrix: Water
Analysis Batch: 523133

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 522799

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.508		mg/L		102	80 - 120

Lab Sample ID: MB 500-523446/1-A
Matrix: Water
Analysis Batch: 523614

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 523446

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		01/06/20 07:18	01/07/20 04:37	1

Lab Sample ID: LCS 500-523446/2-A
Matrix: Water
Analysis Batch: 523614

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 523446

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.100	0.114		mg/L		114	80 - 120

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-521415/1-A
Matrix: Water
Analysis Batch: 521733

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 521415

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/19/19 07:21	12/19/19 14:02	1
Barium	<0.0025		0.0025		mg/L		12/19/19 07:21	12/19/19 14:02	1
Calcium	<0.20		0.20		mg/L		12/19/19 07:21	12/19/19 14:02	1
Cobalt	<0.0010		0.0010		mg/L		12/19/19 07:21	12/19/19 14:02	1
Lead	<0.00050		0.00050		mg/L		12/19/19 07:21	12/19/19 14:02	1
Molybdenum	<0.0050		0.0050		mg/L		12/19/19 07:21	12/19/19 14:02	1
Selenium	<0.0025		0.0025		mg/L		12/19/19 07:21	12/19/19 14:02	1

Lab Sample ID: MB 500-521415/1-A
Matrix: Water
Analysis Batch: 521915

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 521415

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		12/19/19 07:21	12/20/19 11:49	1

Lab Sample ID: LCS 500-521415/2-A
Matrix: Water
Analysis Batch: 521733

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 521415

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0981		mg/L		98	80 - 120
Barium	0.500	0.499		mg/L		100	80 - 120
Calcium	10.0	9.18		mg/L		92	80 - 120
Cobalt	0.500	0.547		mg/L		109	80 - 120
Lead	0.100	0.106		mg/L		106	80 - 120
Molybdenum	1.00	0.992		mg/L		99	80 - 120
Selenium	0.100	0.0994		mg/L		99	80 - 120

Lab Sample ID: LCS 500-521415/2-A
Matrix: Water
Analysis Batch: 521915

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 521415

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.04		mg/L		104	80 - 120

Lab Sample ID: MB 500-521599/1-A
Matrix: Water
Analysis Batch: 521915

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 521599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/19/19 16:45	12/20/19 12:31	1
Barium	<0.0025		0.0025		mg/L		12/19/19 16:45	12/20/19 12:31	1
Boron	<0.050		0.050		mg/L		12/19/19 16:45	12/20/19 12:31	1
Calcium	<0.20		0.20		mg/L		12/19/19 16:45	12/20/19 12:31	1
Cobalt	<0.0010		0.0010		mg/L		12/19/19 16:45	12/20/19 12:31	1
Lead	<0.00050		0.00050		mg/L		12/19/19 16:45	12/20/19 12:31	1
Molybdenum	<0.0050		0.0050		mg/L		12/19/19 16:45	12/20/19 12:31	1
Selenium	<0.0025		0.0025		mg/L		12/19/19 16:45	12/20/19 12:31	1

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

Lab Sample ID: LCS 500-521599/2-A
Matrix: Water
Analysis Batch: 521915

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 521599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0991		mg/L		99	80 - 120
Barium	2.00	2.05		mg/L		103	80 - 120
Boron	1.00	1.04		mg/L		104	80 - 120
Calcium	10.0	9.08		mg/L		91	80 - 120
Cobalt	0.500	0.530		mg/L		106	80 - 120
Lead	0.100	0.109		mg/L		109	80 - 120
Molybdenum	1.00	0.999		mg/L		100	80 - 120
Selenium	0.100	0.105		mg/L		105	80 - 120

Lab Sample ID: MB 500-521655/1-A
Matrix: Water
Analysis Batch: 521915

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/20/19 07:54	12/20/19 17:47	1
Barium	<0.0025		0.0025		mg/L		12/20/19 07:54	12/20/19 17:47	1
Calcium	<0.20		0.20		mg/L		12/20/19 07:54	12/20/19 17:47	1
Cobalt	<0.0010		0.0010		mg/L		12/20/19 07:54	12/20/19 17:47	1
Lead	<0.00050		0.00050		mg/L		12/20/19 07:54	12/20/19 17:47	1
Molybdenum	<0.0050		0.0050		mg/L		12/20/19 07:54	12/20/19 17:47	1
Selenium	<0.0025		0.0025		mg/L		12/20/19 07:54	12/20/19 17:47	1

Lab Sample ID: MB 500-521655/1-A
Matrix: Water
Analysis Batch: 522322

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		12/20/19 07:54	12/23/19 12:30	1

Lab Sample ID: LCS 500-521655/2-A
Matrix: Water
Analysis Batch: 521915

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0986		mg/L		99	80 - 120
Barium	0.500	0.498		mg/L		100	80 - 120
Calcium	10.0	8.89		mg/L		89	80 - 120
Cobalt	0.500	0.534		mg/L		107	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120
Molybdenum	1.00	0.989		mg/L		99	80 - 120
Selenium	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: LCS 500-521655/2-A
Matrix: Water
Analysis Batch: 522322

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.05		mg/L		105	80 - 120

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

Lab Sample ID: 500-175096-7 MS
Matrix: Water
Analysis Batch: 521915

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.035		0.100	0.145		mg/L		110	75 - 125
Barium	0.016		0.500	0.519		mg/L		101	75 - 125
Calcium	15		10.0	23.9		mg/L		86	75 - 125
Cobalt	<0.0010		0.500	0.498		mg/L		100	75 - 125
Lead	<0.00050		0.100	0.103		mg/L		103	75 - 125
Molybdenum	0.40		1.00	1.41		mg/L		101	75 - 125
Selenium	<0.0025		0.100	0.106		mg/L		104	75 - 125

Lab Sample ID: 500-175096-7 MS
Matrix: Water
Analysis Batch: 522322

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5.0		1.00	6.03	4	mg/L		99	75 - 125

Lab Sample ID: 500-175096-7 MSD
Matrix: Water
Analysis Batch: 521915

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.035		0.100	0.155		mg/L		120	75 - 125	7	20
Barium	0.016		0.500	0.529		mg/L		103	75 - 125	2	20
Calcium	15		10.0	25.0		mg/L		97	75 - 125	4	20
Cobalt	<0.0010		0.500	0.502		mg/L		100	75 - 125	1	20
Lead	<0.00050		0.100	0.103		mg/L		103	75 - 125	1	20
Molybdenum	0.40		1.00	1.49		mg/L		109	75 - 125	5	20
Selenium	<0.0025		0.100	0.109		mg/L		106	75 - 125	3	20

Lab Sample ID: 500-175096-7 MSD
Matrix: Water
Analysis Batch: 522322

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	5.0		1.00	6.11	4	mg/L		107	75 - 125	1	20

Lab Sample ID: 500-175096-7 DU
Matrix: Water
Analysis Batch: 521915

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.035		0.0360		mg/L		4	20
Barium	0.016		0.0164		mg/L		3	20
Calcium	15		15.8		mg/L		3	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Molybdenum	0.40		0.407		mg/L		3	20
Selenium	<0.0025		<0.0025		mg/L		NC	20

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

Lab Sample ID: 500-175096-7 DU
Matrix: Water
Analysis Batch: 522322

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 521655

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Boron	5.0			4.99		mg/L				1	20

Lab Sample ID: MB 500-522376/1-A
Matrix: Water
Analysis Batch: 522708

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 522376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/24/19 16:43	12/26/19 15:56	1
Barium	<0.0025		0.0025		mg/L		12/24/19 16:43	12/26/19 15:56	1
Calcium	<0.20		0.20		mg/L		12/24/19 16:43	12/26/19 15:56	1
Cobalt	<0.0010		0.0010		mg/L		12/24/19 16:43	12/26/19 15:56	1
Lead	<0.00050		0.00050		mg/L		12/24/19 16:43	12/26/19 15:56	1
Molybdenum	<0.0050		0.0050		mg/L		12/24/19 16:43	12/26/19 15:56	1
Selenium	<0.0025		0.0025		mg/L		12/24/19 16:43	12/26/19 15:56	1

Lab Sample ID: MB 500-522376/1-A
Matrix: Water
Analysis Batch: 522772

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 522376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0025		0.0025		mg/L		12/24/19 16:43	12/27/19 11:46	1
Boron	<0.050		0.050		mg/L		12/24/19 16:43	12/27/19 11:46	1
Calcium	<0.20		0.20		mg/L		12/24/19 16:43	12/27/19 11:46	1
Cobalt	<0.0010		0.0010		mg/L		12/24/19 16:43	12/27/19 11:46	1
Lead	<0.00050		0.00050		mg/L		12/24/19 16:43	12/27/19 11:46	1
Molybdenum	<0.0050		0.0050		mg/L		12/24/19 16:43	12/27/19 11:46	1

Lab Sample ID: LCS 500-522376/2-A
Matrix: Water
Analysis Batch: 522708

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 522376

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			0.100	0.0929		mg/L		93	80 - 120		
Barium			2.00	2.02		mg/L		101	80 - 120		
Calcium			10.0	9.06		mg/L		91	80 - 120		
Cobalt			0.500	0.507		mg/L		101	80 - 120		
Lead			0.100	0.106		mg/L		106	80 - 120		
Molybdenum			1.00	0.945		mg/L		94	80 - 120		
Selenium			0.100	0.0995		mg/L		99	80 - 120		

Lab Sample ID: LCS 500-522376/2-A
Matrix: Water
Analysis Batch: 522772

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 522376

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Barium			2.00	1.89		mg/L		94	80 - 120		
Boron			1.00	0.966		mg/L		97	80 - 120		
Calcium			10.0	9.05		mg/L		90	80 - 120		
Cobalt			0.500	0.515		mg/L		103	80 - 120		

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

Lab Sample ID: LCS 500-522376/2-A
Matrix: Water
Analysis Batch: 522772

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 522376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	1.00	0.945		mg/L		94	80 - 120

Lab Sample ID: MB 500-522799/1-A
Matrix: Water
Analysis Batch: 523089

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 522799

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/27/19 16:44	12/30/19 12:08	1
Barium	<0.0025		0.0025		mg/L		12/27/19 16:44	12/30/19 12:08	1
Calcium	<0.20		0.20		mg/L		12/27/19 16:44	12/30/19 12:08	1
Cobalt	<0.0010		0.0010		mg/L		12/27/19 16:44	12/30/19 12:08	1
Lead	<0.00050		0.00050		mg/L		12/27/19 16:44	12/30/19 12:08	1
Molybdenum	<0.0050		0.0050		mg/L		12/27/19 16:44	12/30/19 12:08	1
Selenium	<0.0025		0.0025		mg/L		12/27/19 16:44	12/30/19 12:08	1

Lab Sample ID: LCS 500-522799/2-A
Matrix: Water
Analysis Batch: 523089

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 522799

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.101		mg/L		101	80 - 120
Barium	2.00	1.87		mg/L		93	80 - 120
Calcium	10.0	9.24		mg/L		92	80 - 120
Cobalt	0.500	0.525		mg/L		105	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120
Molybdenum	1.00	0.965		mg/L		96	80 - 120
Selenium	0.100	0.100		mg/L		100	80 - 120

Lab Sample ID: MB 500-523446/1-A
Matrix: Water
Analysis Batch: 523677

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 523446

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		01/06/20 07:18	01/06/20 17:33	1
Barium	<0.0025		0.0025		mg/L		01/06/20 07:18	01/06/20 17:33	1
Calcium	<0.20		0.20		mg/L		01/06/20 07:18	01/06/20 17:33	1
Cobalt	<0.0010		0.0010		mg/L		01/06/20 07:18	01/06/20 17:33	1
Lead	<0.00050		0.00050		mg/L		01/06/20 07:18	01/06/20 17:33	1
Molybdenum	<0.0050		0.0050		mg/L		01/06/20 07:18	01/06/20 17:33	1
Selenium	<0.0025		0.0025		mg/L		01/06/20 07:18	01/06/20 17:33	1

Lab Sample ID: MB 500-523446/1-A
Matrix: Water
Analysis Batch: 523733

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 523446

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		01/06/20 07:18	01/07/20 11:58	1

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

Lab Sample ID: LCS 500-523446/2-A
Matrix: Water
Analysis Batch: 523677

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 523446

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.100		mg/L		100	80 - 120
Barium	0.500	0.504		mg/L		101	80 - 120
Calcium	10.0	8.97		mg/L		90	80 - 120
Cobalt	0.500	0.523		mg/L		105	80 - 120
Lead	0.100	0.109		mg/L		109	80 - 120
Molybdenum	1.00	0.985		mg/L		98	80 - 120
Selenium	0.100	0.0996		mg/L		100	80 - 120

Lab Sample ID: LCS 500-523446/2-A
Matrix: Water
Analysis Batch: 523733

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 523446

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.04		mg/L		104	80 - 120

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

Lab Sample ID: MB 500-520703/1
Matrix: Water
Analysis Batch: 520703

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			12/16/19 07:40	1

Lab Sample ID: LCS 500-520703/2
Matrix: Water
Analysis Batch: 520703

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	264		mg/L		106	80 - 120

Lab Sample ID: MB 500-521154/1
Matrix: Water
Analysis Batch: 521154

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			12/18/19 05:51	1

Lab Sample ID: LCS 500-521154/2
Matrix: Water
Analysis Batch: 521154

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

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

Lab Sample ID: 500-175096-3 MS
Matrix: Water
Analysis Batch: 521154

Client Sample ID: G30S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1100		250	1430	4	mg/L		118	75 - 125

Lab Sample ID: 500-175096-3 DU
Matrix: Water
Analysis Batch: 521154

Client Sample ID: G30S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1100		1180		mg/L		4	5

Lab Sample ID: 500-175096-4 DU
Matrix: Water
Analysis Batch: 521154

Client Sample ID: R32S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	960		974		mg/L		1	5

Lab Sample ID: MB 500-521713/1
Matrix: Water
Analysis Batch: 521713

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			12/20/19 08:38	1

Lab Sample ID: LCS 500-521713/2
Matrix: Water
Analysis Batch: 521713

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

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

Lab Sample ID: 500-175096-5 MS
Matrix: Water
Analysis Batch: 521713

Client Sample ID: G31S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1100		250	1300	4	mg/L		81	75 - 125

Lab Sample ID: 500-175096-5 DU
Matrix: Water
Analysis Batch: 521713

Client Sample ID: G31S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1100		1110		mg/L		1	5

Lab Sample ID: 500-175096-6 DU
Matrix: Water
Analysis Batch: 521713

Client Sample ID: G48S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1000		1030		mg/L		2	5

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

Lab Sample ID: MB 500-522616/1
Matrix: Water
Analysis Batch: 522616

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			12/26/19 22:57	1

Lab Sample ID: LCS 500-522616/2
Matrix: Water
Analysis Batch: 522616

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	272		mg/L		109	80 - 120

Lab Sample ID: 500-175096-9 MS
Matrix: GW
Analysis Batch: 522616

Client Sample ID: G46S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000		250	1300	4	mg/L		110	75 - 125

Lab Sample ID: 500-175096-9 DU
Matrix: GW
Analysis Batch: 522616

Client Sample ID: G46S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1000		1010		mg/L		1	5

Lab Sample ID: 500-175096-10 DU
Matrix: GW
Analysis Batch: 522616

Client Sample ID: R08S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	820		836		mg/L		2	5

Lab Sample ID: MB 500-522961/1
Matrix: Water
Analysis Batch: 522961

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			12/30/19 08:44	1

Lab Sample ID: LCS 500-522961/2
Matrix: Water
Analysis Batch: 522961

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	256		mg/L		102	80 - 120

Lab Sample ID: 500-175096-15 MS
Matrix: Water
Analysis Batch: 522961

Client Sample ID: T02S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000		250	1260	4	mg/L		99	75 - 125

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

Lab Sample ID: 500-175096-15 DU
Matrix: Water
Analysis Batch: 522961

Client Sample ID: T02S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1000		984		mg/L		3	5

Lab Sample ID: MB 500-523422/1
Matrix: Water
Analysis Batch: 523422

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			01/06/20 03:19	1

Lab Sample ID: LCS 500-523422/2
Matrix: Water
Analysis Batch: 523422

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	254		mg/L		102	80 - 120

Lab Sample ID: 500-175096-18 MS
Matrix: Water
Analysis Batch: 523422

Client Sample ID: T09S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	940		250	1200		mg/L		104	75 - 125

Lab Sample ID: 500-175096-18 DU
Matrix: Water
Analysis Batch: 523422

Client Sample ID: T09S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	940		946		mg/L		1	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-521937/12
Matrix: Water
Analysis Batch: 521937

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			12/21/19 16:06	1

Lab Sample ID: LCS 500-521937/13
Matrix: Water
Analysis Batch: 521937

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	50.1		mg/L		100	85 - 115

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

Lab Sample ID: 500-175096-5 MS
Matrix: Water
Analysis Batch: 521937

Client Sample ID: G31S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	190	F1	50.0	225	F1	mg/L		68	75 - 125		

Lab Sample ID: 500-175096-5 MSD
Matrix: Water
Analysis Batch: 521937

Client Sample ID: G31S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	190	F1	50.0	235		mg/L		88	75 - 125	4	20

Lab Sample ID: MB 500-523397/12
Matrix: Water
Analysis Batch: 523397

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			01/03/20 16:27	1

Lab Sample ID: LCS 500-523397/13
Matrix: Water
Analysis Batch: 523397

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	50.0	52.6		mg/L		105	85 - 115		

Lab Sample ID: 500-175096-13 MS
Matrix: Water
Analysis Batch: 523397

Client Sample ID: T01S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	100		50.0	140		mg/L		75	75 - 125		

Lab Sample ID: 500-175096-13 MSD
Matrix: Water
Analysis Batch: 523397

Client Sample ID: T01S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100		50.0	141		mg/L		77	75 - 125	1	20

Lab Sample ID: 500-175096-15 MS
Matrix: Water
Analysis Batch: 523397

Client Sample ID: T02S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	96		50.0	135		mg/L		78	75 - 125		

Lab Sample ID: 500-175096-15 MSD
Matrix: Water
Analysis Batch: 523397

Client Sample ID: T02S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	96		50.0	134		mg/L		75	75 - 125	1	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-521061/3
Matrix: Water
Analysis Batch: 521061

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			12/17/19 10:18	1

Lab Sample ID: LCS 500-521061/4
Matrix: Water
Analysis Batch: 521061

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	10.1		mg/L		101	80 - 120

Lab Sample ID: MB 500-523784/3
Matrix: Water
Analysis Batch: 523784

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			01/07/20 13:16	1

Lab Sample ID: LCS 500-523784/4
Matrix: Water
Analysis Batch: 523784

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	10.6		mg/L		106	80 - 120

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-471445/6
Matrix: Water
Analysis Batch: 471445

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			12/23/19 09:27	1

Lab Sample ID: LCS 400-471445/37
Matrix: Water
Analysis Batch: 471445

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	14.8		mg/L		98	90 - 110

Lab Sample ID: MRL 400-471445/3
Matrix: Water
Analysis Batch: 471445

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		59	50 - 150

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

Lab Sample ID: MB 400-471466/5
Matrix: Water
Analysis Batch: 471466

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			12/23/19 12:49	1

Lab Sample ID: LCS 400-471466/6
Matrix: Water
Analysis Batch: 471466

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	13.5		mg/L		90	90 - 110

Lab Sample ID: MRL 400-471466/3
Matrix: Water
Analysis Batch: 471466

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		65	50 - 150

Lab Sample ID: 500-175096-8 MS
Matrix: Water
Analysis Batch: 471466

Client Sample ID: G45S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	120		10.0	116	4	mg/L		10	77 - 128

Lab Sample ID: 500-175096-8 MSD
Matrix: Water
Analysis Batch: 471466

Client Sample ID: G45S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	120		10.0	116	4	mg/L		5	77 - 128	0	5

Lab Sample ID: MB 400-472105/6
Matrix: Water
Analysis Batch: 472105

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			12/27/19 17:41	1

Lab Sample ID: LCS 400-472105/7
Matrix: Water
Analysis Batch: 472105

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	13.5		mg/L		90	90 - 110

Lab Sample ID: MRL 400-472105/3
Matrix: Water
Analysis Batch: 472105

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		75	50 - 150

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-472162/5
Matrix: Water
Analysis Batch: 472162

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			12/28/19 07:55	1

Lab Sample ID: LCS 400-472162/15
Matrix: Water
Analysis Batch: 472162

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	15.0		mg/L		100	90 - 110

Lab Sample ID: MRL 400-472162/3
Matrix: Water
Analysis Batch: 472162

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		56	50 - 150

Lab Sample ID: MB 400-473163/5
Matrix: Water
Analysis Batch: 473163

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			01/06/20 23:48	1

Lab Sample ID: LCS 400-473163/52
Matrix: Water
Analysis Batch: 473163

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	14.2		mg/L		95	90 - 110

Lab Sample ID: 500-175096-13 MS
Matrix: Water
Analysis Batch: 473163

Client Sample ID: T01S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	340		10.0	340	4	mg/L		-33	77 - 128

Lab Sample ID: 500-175096-13 MSD
Matrix: Water
Analysis Batch: 473163

Client Sample ID: T01S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	340		10.0	341		mg/L		-16	77 - 128	1	5

Lab Sample ID: MB 400-473946/22
Matrix: Water
Analysis Batch: 473946

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			01/14/20 10:07	1

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: LCS 400-473946/5
Matrix: Water
Analysis Batch: 473946

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	15.8		mg/L		105	90 - 110

Lab Sample ID: MRL 400-473946/20
Matrix: Water
Analysis Batch: 473946

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	5.54		mg/L		111	50 - 150

Chain of Custody Record

387587 eurofins | Environment Testing TestAmerica

Address: _____

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

TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Joliet #9 (Quarry) CCR	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			500-175096

500-175096 COC

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TDS, Fl, Cl, SO4	Radium 228	Radium 226	Combined 226/228	Total Metals - As, B, Ba, Ca, Pb, Li, Mg, S	Sample Specific Notes:
1	G335	12/13/19	1257		W	5			-	-	-	-	-	
2	DUP	12/13/19	1257		W	5			-	-	-	-	-	DUP of G335

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:

3.6 48

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	TAL	12/13/19 @1535			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Ellen Scott	Company: TA-CHI	Date/Time: 12/13/19 1535

Chain of Custody Record

404311 eurofins | Environment Testing TestAmerica

Address: _____

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

TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Joliet #9 CCR	☐ 1 week			Job / SDG No.: 500-175096
Site:	☐ 2 days			
P O #	☐ 1 day			

500-175096 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Radium 226	Radium 228	Combined 226/228	Total Metals As, Ba, Co, Pb, Li, Mo, S	TDS, F, Cl, SO4
3 G305	12/17/19	0933		W	5			✓	✓	✓	✓	✓
4 R325	12/17/19	1212		W	5			✓	✓	✓	✓	✓

Sample Specific Notes:

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: 4.3 Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL	12/17/19 @ 1438			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL CHT	12/17/19 1438

Chain of Custody Record

404304 eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Ohio MW5

TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL.	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Joliet #9 CCR	☐ 1 week			
Site: 4219 CW	☐ 2 days			Job / SDG No.: 500-175096
P O #	☐ 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)	Radium 226	Radium 228	Combined 226/228	Total metals As, B, Ba, Ca	TDS, Fl, Cl, SO4
G315	12/18/19	1039		W	5			1	1	1	1	1
G485	12/18/19	1251		W	5			1	1	1	1	1

500-175096 COC

Sample Specific Notes:

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: 5.9 Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL	12/18/19 @ 1450			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 12/19/19 0650

Chain of Custody Record

404120 eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL.	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Joliet #9 CCR	☐ 1 week			
Site: 4219 CW	☐ 2 days			Job / SDG No.: 500-175096
P O #	☐ 1 day			

500-175096 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Radium 226	Radium 228	Combined 226/228	Ba, B, Ca, Co, Fe, Li, Mn, S, Tl, Mo, Mn, Mo, Ni, K, Na, Sr, Tl, V, Zn	TDS, Fl, Cl, SO4	Sample Specific Notes:
8 G475	12/19/19	1020		W	5			/	/	/	/	/	
G455	12/19/19	1316		W	5			/	/	/	/	/	

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: 4.2 Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL	12/19/19 1607			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA-CHE	12/19/19 1607

Chain of Custody Record

404112

Environment Testi
TestAmerica

Address: _____

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

500-175096 COC

TAL-821

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:
Address:	**Analysis Turnaround Time**		_____ of _____ COCs
City/State/Zip: Joliet, IL.	☐ CALENDAR DAYS ☐ WORKING DAYS		Sampler:
Phone:	TAT if different from Below _____		**For Lab Use Only:**
Fax:	☐ 2 weeks		Walk-in Client:
Project Name: Joliet #9 CCR	☐ 1 week		Lab Sampling:
Site: 4019 CU	☐ 2 days		Job / SDG No.: 500-175096
P O #	☐ 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)	Radium 226	Radium 228	Combined 226/228	Total Metals As, B, Ba, Ca, Pb, Li, Mo, S	TDS, Fl, Cl, SO4	Sample Specific Notes:
9	G465	12/23/19	0925		W	5			/	/	/	/	/	
10	R085	12/23/19	1025		W	5			/	/	/	/	/	
11	G205	12/23/19	1115		W	5			/	/	/	/	/	
12	G445	12/23/19	1350		W	5			/	/	/	/	/	

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:

1.3 → 2.3, 2.0

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.: 3

	Company	Date/Time		Company	Date/Time
Relinquished by:	THE	12/23/19 1520	Received by:	TA	12/24/19 0520
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Chain of Custody Record

404310

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Ra, S

TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:
Address:	**Analysis Turnaround Time**		
City/State/Zip: Joliet, IL	☐ CALENDAR DAYS ☐ WORKING DAYS		
Phone:	TAT if different from Below _____		
Fax:	☐ 2 weeks		
Project Name: Joliet #9 CCR	☐ 1 week		
Site: 4819 GW	☐ 2 days		
P O #	☐ 1 day		

500-175096 COC

COC No: _____ of _____ COCs

Sampler:

For Lab Use Only:
Walk-in Client:
Lab Sampling:

Job / SDG No.: 500-175096

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Radium 226	Radium 228	Combined 226/228	Total Metals As,B,Ba,Ca,Co,Li,Mo,S	TDS, Fl, Cl, SO4	Sample Specific Notes:
13	TOIS	12/26/19		0847	W	5			/	/	/	/	/	
14	TOYS	12/26/19		1302	W	5			/	/	/	/	/	

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:

4.4 48hr

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
SL	TAL	12/26/19 @ 1605		TA	12/26/19 1605
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Chain of Custody Record

404305 eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: mo's

TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:
Address:	Analysis Turnaround Time		
City/State/Zip: Joliet, IL	☐ CALENDAR DAYS ☐ WORKING DAYS		
Phone:	TAT if different from Below _____		
Fax:	☐ 2 weeks		
Project Name: Joliet #9 CCR	☐ 1 week		
Site: 409 CW	☐ 2 days.		
P O #	☐ 1 day		

500-175096 COC

COC No: _____ of _____ COCs

Sampler:

For Lab Use Only:
Walk-in Client:
Lab Sampling:

Job / SDG No.: 500-175096

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Radium 226	Radium 228	Combined 226/228	Total Metals (As, B, Ba, Ca, Co, Li, Mo, S)	TDS, Fl, Cl, SO4
15 TO25	12/27/19	0854		W	5			-	-	-	-	-
16 TO85	12/27/19	1107		W	5			-	-	-	-	-
17 TO35	12/27/19	1333		W	5			-	-	-	-	-

Sample Specific Notes:

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:

4.2 48 gt.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	T&L	12/27/19 1440		TA	12/27/19 1440
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Chain of Custody Record

404306 eurofins | Environment Testing TestAmerica

Address: _____

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

TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	**Analysis Turnaround Time**			Sampler:
City/State/Zip: Joliet, IL.	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Joliet #9 CCR	☐ 1 week			
Site: 4019 GW	☐ 2 days			Job / SDG No.: 500-175096
P O #	☐ 1 day			

500-175096 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Radium 226	Radium 228	Combined 226/228	Total Metals As, B, Ba, Ca, Co, Li, Mo, S	TDS, Fl, Cl, SO4	Sample Specific Notes:
T095	12/30/19	0826		W	5			1	1	1	1	1	
T055	12/30/19	1012		W	5			1	1	1	1	1	

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:

5.3 48hr

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
SJ	THC	12/30/19 1210			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Ashley Scott	TA-CHT	12/30/19 1210

Chain of Custody Record

387644

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Address: _____

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

TAL-8210

Client Contact	Project Manager: Eric Lang	Site Contact:	Date:	COC No:
Company Name: Midwest Generation EME LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address:	Analysis Turnaround Time			Sampler:
City/State/Zip: Joliet, IL	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Joliet #9 CCR	☐ 1 week			
Site: 4019 GW	☐ 2 days			Job / SDG No.: 500-175096
P O #	☐ 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)	Radium 226	Radium 228	Combined 226/228	Total Metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	TDS, F, Cl, SO4	Sample Specific Notes:
TO65	12/31/19	0930		GW	5			1	1	1	1	1	

500-175096 COC

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:

2.9 49gf.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
SL	TAL	12/31/19 1200			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Ellen Scott	TAL CHI	12/31/19 1200

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-129637.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-175096-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 12/26/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 (Quarry) CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Preservation Codes:

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

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
G33S (500-175096-1)	12/13/19	12:57 Central		Water			X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
DUP (500-175096-2)	12/13/19	12:57 Central		Water			X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Stephanie Hernandez	12-13-19 16:00	TA		12.14.19 0855	ETAST
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-129942.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-175096-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 1/24/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 (Quarry) CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
G46S (500-175096-9)	12/23/19	09:25 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
R08S (500-175096-10)	12/23/19	10:25 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G20S (500-175096-11)	12/23/19	11:15 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G44S (500-175096-12)	12/23/19	13:50 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance to Eurofins TestAmerica.

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

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Stephanie Hernandez	12.26.19 1500	TA		12.27.19 8:15	ETASTL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-130114.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-175096-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 1/15/2020			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 (Quarry) CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
T06S (500-175096-20)	12/31/19	09:30 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance to Eurofins TestAmerica.

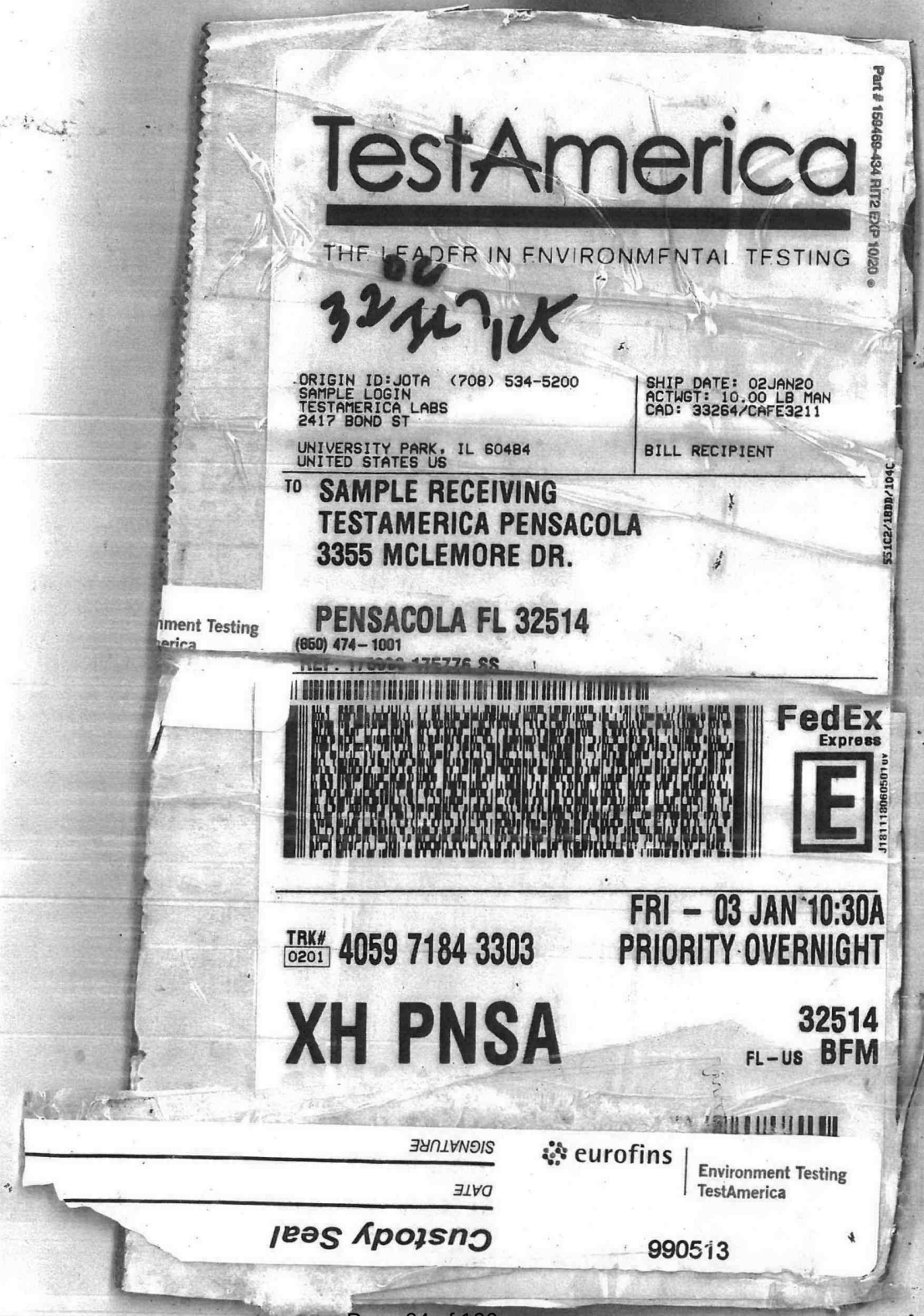
Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Stephanie Hernandez	01.02.20 1300	TA	Broadway	01.03.20 907	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.2° IR7

Ver: 01/16/2019


TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
ORIGIN ID:JOTA (708) 534-5200
SAMPLE LOGIN
TESTAMERICA LABS
2417 BOND ST
UNIVERSITY PARK, IL 60484
UNITED STATES US
SHIP DATE: 02JAN20
ACTWGT: 10.00 LB MAN
CAD: 33264/CAFE3211
BILL RECIPIENT
TO SAMPLE RECEIVING
TESTAMERICA PENSACOLA
3355 MCLEMORE DR.
PENSACOLA FL 32514
(850) 474-1001
FedEx
Express
FRI - 03 JAN 10:30A
PRIORITY OVERNIGHT
TRK# 0201 4059 7184 3303
XH PNSA
32514
FL-US BFM
eurofins
Environment Testing
TestAmerica
990513
Custody Seal
DATE
SIGNATURE

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-129636.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-175096-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 12/30/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 (Quarry) CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
G33S (500-175096-1)	12/13/19	12:57 Central		Water			X	1	
DUP (500-175096-2)	12/13/19	12:57 Central		Water			X	1	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Stephanie Hernandez	12-13-19 16:00	TA			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12-14-19 8:28	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.6 & IR

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-129698.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-175096-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 1/6/2020			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 (Quarry) CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
G30S (500-175096-3)	12/17/19	09:33 Central		Water			X	1	
R32S (500-175096-4)	12/17/19	12:12 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance to Eurofins TestAmerica.

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Stephanie Hernandez	12-17-19 16:00	TA	Eodum	12-18-19 947	TAPen
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.9°C IR8

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-129784.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-175096-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 12/27/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 (Quarry) CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
		Preservation Code:							
G31S (500-175096-5)	12/18/19	10:39 Central		Water			X	1	
G48S (500-175096-6)	12/18/19	12:51 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance to Eurofins TestAmerica.

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	12-19-19 1515	TA	D Jaquaway	12-20-19 932	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.4 C IR7

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-129794.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-175096-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 1/6/2020			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 (Quarry) CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
G47S (500-175096-7)	12/19/19	10:20 Central		Water			X	1	
G45S (500-175096-8)	12/19/19	13:16 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance to Eurofins TestAmerica.

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Stephanie Hernandez	12-19-19 1600	TA	M Madaway	12.20.19 932	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.4°C IR7

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-129941.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-175096-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 1/9/2020			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 (Quarry) CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
G46S (500-175096-9)	12/23/19	09:25 Central		Water			X	1	
R08S (500-175096-10)	12/23/19	10:25 Central		Water			X	1	
G20S (500-175096-11)	12/23/19	11:15 Central		Water			X	1	
G44S (500-175096-12)	12/23/19	13:50 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance to Eurofins TestAmerica.

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Stephanie Hernandez	12-26-19 1500	TA			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12-27-19 0855	Company TAPEN

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.2°C IR-7

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-130009.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-175096-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 1/14/2020			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #9 (Quarry) CCR	Project #: 50011504			
Site: NRG Midwest Generation LSQ Joliet #9 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
T09S (500-175096-18)	12/30/19	08:26 Central		Water			X	1	
T05S (500-175096-19)	12/30/19	10:12 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 complicance to Eurofins TestAmerica.

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	12/30/19 1500	TA	Eodum	12-31-19 842	TAEN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.5°C IR7

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-175096-1

Login Number: 175096
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6,4.3,5.9,4.2,1.3,2.0,4.4, 4.2,5.3,2.9
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-175096-1

Login Number: 175096
List Number: 2
Creator: Treadaway, Kristen N

List Source: Eurofins TestAmerica, Pensacola
List Creation: 12/14/19 12:45 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	3.6°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-175096-1

Login Number: 175096
List Number: 5
Creator: Odum, Edward L

List Source: Eurofins TestAmerica, Pensacola
List Creation: 12/18/19 02:14 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	0.9°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-175096-1

Login Number: 175096
List Number: 7
Creator: Gore, Beija K

List Source: Eurofins TestAmerica, Pensacola
List Creation: 12/20/19 04:26 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	987798
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	1.4 °C IR 7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-175096-1

Login Number: 175096
List Number: 9
Creator: Conrady, Hank W

List Source: Eurofins TestAmerica, Pensacola
List Creation: 12/27/19 02:55 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-175096-1

Login Number: 175096
List Number: 11
Creator: Odum, Edward L

List Source: Eurofins TestAmerica, Pensacola
List Creation: 12/28/19 11:52 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	1.3°C IR7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-175096-1

Login Number: 175096
List Number: 13
Creator: Odum, Edward L

List Source: Eurofins TestAmerica, Pensacola
List Creation: 12/31/19 11:44 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	1.5°C IR7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-175096-1

Login Number: 175096
List Number: 14
Creator: Brown, Nathan

List Source: Eurofins TestAmerica, Pensacola
List Creation: 01/03/20 01:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	3.2°C IR7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G33S

Lab Sample ID: 500-175096-1
Matrix: Water
Date Collected: 12/13/19 12:57
Date Received: 12/13/19 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	521635	12/20/19 01:44	JEF	TAL CHI
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	521733	12/19/19 15:43	FXG	TAL CHI
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		5	521915	12/20/19 11:57	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	520703	12/16/19 08:34	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	521937	12/21/19 16:17	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	521061	12/17/19 11:37	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	471445	12/23/19 10:43	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/13/19 12:57	JVB	TAL CHI

Client Sample ID: DUP

Lab Sample ID: 500-175096-2
Matrix: Water
Date Collected: 12/13/19 12:57
Date Received: 12/13/19 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	521635	12/20/19 01:49	JEF	TAL CHI
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	521733	12/19/19 15:47	FXG	TAL CHI
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		5	521915	12/20/19 12:01	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	520703	12/16/19 08:36	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	521937	12/21/19 16:18	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	521061	12/17/19 11:42	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	471445	12/23/19 10:43	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/13/19 12:57	JVB	TAL CHI

Client Sample ID: G30S

Lab Sample ID: 500-175096-3
Matrix: Water
Date Collected: 12/17/19 09:33
Date Received: 12/17/19 14:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	521635	12/20/19 01:53	JEF	TAL CHI
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	521733	12/19/19 15:51	FXG	TAL CHI
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	521915	12/20/19 12:04	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	521154	12/18/19 05:56	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	521937	12/21/19 16:57	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 13:37	MS	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G30S
Date Collected: 12/17/19 09:33
Date Received: 12/17/19 14:38

Lab Sample ID: 500-175096-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		20	471445	12/23/19 10:43	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/17/19 09:33	JVB	TAL CHI

Client Sample ID: R32S
Date Collected: 12/17/19 12:12
Date Received: 12/17/19 14:38

Lab Sample ID: 500-175096-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	522048	12/20/19 17:10	EEN	TAL CHI
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	521733	12/19/19 15:54	FXG	TAL CHI
Total Recoverable	Prep	3005A			521415	12/19/19 07:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	521915	12/20/19 12:08	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	521154	12/18/19 06:04	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	521937	12/21/19 16:58	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 13:42	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	471445	12/23/19 10:47	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/17/19 12:12	JVB	TAL CHI

Client Sample ID: G31S
Date Collected: 12/18/19 10:39
Date Received: 12/18/19 14:50

Lab Sample ID: 500-175096-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			521599	12/19/19 16:45	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	522048	12/20/19 17:37	EEN	TAL CHI
Total Recoverable	Prep	3005A			521599	12/19/19 16:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	521915	12/20/19 14:12	FXG	TAL CHI
Total Recoverable	Prep	3005A			521599	12/19/19 16:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	522322	12/23/19 12:23	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	521713	12/20/19 08:43	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	521937	12/21/19 16:58	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 13:49	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	471445	12/23/19 10:47	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/18/19 10:39	JVB	TAL CHI

Client Sample ID: G48S
Date Collected: 12/18/19 12:51
Date Received: 12/18/19 14:50

Lab Sample ID: 500-175096-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			521599	12/19/19 16:45	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	522048	12/20/19 17:42	EEN	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G48S

Lab Sample ID: 500-175096-6

Date Collected: 12/18/19 12:51

Matrix: Water

Date Received: 12/18/19 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			521599	12/19/19 16:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	521915	12/20/19 14:16	FXG	TAL CHI
Total Recoverable	Prep	3005A			521599	12/19/19 16:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	522322	12/23/19 12:26	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	521713	12/20/19 08:50	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	521937	12/21/19 17:00	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 13:55	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	471445	12/23/19 10:47	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/18/19 12:51	JVB	TAL CHI

Client Sample ID: G47S

Lab Sample ID: 500-175096-7

Date Collected: 12/19/19 10:20

Matrix: Water

Date Received: 12/19/19 16:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			521655	12/20/19 07:54	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	522048	12/20/19 17:56	EEN	TAL CHI
Total Recoverable	Prep	3005A			521655	12/20/19 07:54	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	521915	12/20/19 17:54	FXG	TAL CHI
Total Recoverable	Prep	3005A			521655	12/20/19 07:54	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	522322	12/23/19 12:38	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	521713	12/20/19 08:56	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	521937	12/21/19 17:02	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 14:12	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	471445	12/23/19 10:43	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/19/19 10:20	JVB	TAL CHI

Client Sample ID: G45S

Lab Sample ID: 500-175096-8

Date Collected: 12/19/19 13:16

Matrix: Water

Date Received: 12/19/19 16:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			521655	12/20/19 07:54	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	522048	12/20/19 18:17	EEN	TAL CHI
Total Recoverable	Prep	3005A			521655	12/20/19 07:54	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	521915	12/20/19 18:13	FXG	TAL CHI
Total Recoverable	Prep	3005A			521655	12/20/19 07:54	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	522322	12/23/19 12:57	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	521713	12/20/19 08:58	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	521937	12/21/19 17:02	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 14:16	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	471466	12/23/19 13:20	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/19/19 13:16	JVB	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: G46S

Lab Sample ID: 500-175096-9
Matrix: GW
Date Collected: 12/23/19 09:25
Date Received: 12/23/19 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	522538	12/26/19 09:38	JEF	TAL CHI
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	522708	12/26/19 17:20	FXG	TAL CHI
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	522772	12/27/19 11:53	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	522616	12/26/19 23:02	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	523397	01/03/20 17:28	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 14:20	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	472105	12/27/19 18:52	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/23/19 09:25	JVB	TAL CHI

Client Sample ID: R08S

Lab Sample ID: 500-175096-10
Matrix: GW
Date Collected: 12/23/19 10:25
Date Received: 12/23/19 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	522538	12/26/19 09:42	JEF	TAL CHI
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	522708	12/26/19 17:24	FXG	TAL CHI
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	522772	12/27/19 11:57	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	522616	12/26/19 23:09	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	523397	01/03/20 17:29	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 14:23	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	472105	12/27/19 18:31	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/23/19 10:25	JVB	TAL CHI

Client Sample ID: G20S

Lab Sample ID: 500-175096-11
Matrix: GW
Date Collected: 12/23/19 11:15
Date Received: 12/23/19 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	522538	12/26/19 09:46	JEF	TAL CHI
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	522708	12/26/19 17:28	FXG	TAL CHI
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	522772	12/27/19 12:01	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	522616	12/26/19 23:15	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	523397	01/03/20 16:33	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 14:30	MS	TAL CHI

Client Sample ID: G20S

Lab Sample ID: 500-175096-11

Date Collected: 12/23/19 11:15

Matrix: GW

Date Received: 12/23/19 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		5	472105	12/27/19 18:33	HES	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/23/19 11:15	JVB	TAL CHI

Client Sample ID: G44S

Lab Sample ID: 500-175096-12

Date Collected: 12/23/19 13:50

Matrix: GW

Date Received: 12/23/19 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	522538	12/26/19 09:50	JEF	TAL CHI
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	522772	12/27/19 12:04	FXG	TAL CHI
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	522772	12/27/19 13:37	FXG	TAL CHI
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	523089	12/30/19 13:47	FXG	TAL CHI
Total Recoverable	Prep	3005A			522376	12/24/19 16:43	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	523081	12/30/19 12:30	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	522616	12/26/19 23:17	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	523397	01/03/20 16:34	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 14:36	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	472162	12/28/19 09:12	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/23/19 13:50	JVB	TAL CHI

Client Sample ID: T01S

Lab Sample ID: 500-175096-13

Date Collected: 12/26/19 08:47

Matrix: Water

Date Received: 12/26/19 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	523133	12/31/19 05:53	JEF	TAL CHI
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	523089	12/30/19 12:46	FXG	TAL CHI
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	523516	12/31/19 15:20	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	522616	12/26/19 23:20	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	523397	01/03/20 17:33	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 14:41	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	473163	01/07/20 00:33	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/26/19 08:47	JVB	TAL CHI

Client Sample ID: T04S

Lab Sample ID: 500-175096-14

Date Collected: 12/26/19 13:02

Matrix: Water

Date Received: 12/26/19 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	523133	12/31/19 05:57	JEF	TAL CHI
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	523089	12/30/19 12:50	FXG	TAL CHI
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	523516	12/31/19 15:23	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	522616	12/26/19 23:22	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	523397	01/03/20 16:40	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 14:45	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	473163	01/07/20 00:57	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/26/19 13:02	JVB	TAL CHI

Client Sample ID: T02S

Lab Sample ID: 500-175096-15

Date Collected: 12/27/19 08:54

Matrix: Water

Date Received: 12/27/19 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	523133	12/31/19 06:02	JEF	TAL CHI
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	523089	12/30/19 12:54	FXG	TAL CHI
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	523516	12/31/19 15:27	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	522961	12/30/19 08:48	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	523397	01/03/20 17:36	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 14:49	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	473163	01/07/20 00:18	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/27/19 08:54	JVB	TAL CHI

Client Sample ID: T08S

Lab Sample ID: 500-175096-16

Date Collected: 12/27/19 11:07

Matrix: Water

Date Received: 12/27/19 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	523133	12/31/19 06:06	JEF	TAL CHI
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	523089	12/30/19 12:58	FXG	TAL CHI
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	523516	12/31/19 15:31	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	522961	12/30/19 08:56	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	523397	01/03/20 17:38	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 14:54	MS	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: T08S
Date Collected: 12/27/19 11:07
Date Received: 12/27/19 14:40

Lab Sample ID: 500-175096-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		20	473163	01/07/20 01:07	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/27/19 11:07	JVB	TAL CHI

Client Sample ID: T03S
Date Collected: 12/27/19 13:33
Date Received: 12/27/19 14:40

Lab Sample ID: 500-175096-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	523133	12/31/19 06:11	JEF	TAL CHI
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	523089	12/30/19 13:02	FXG	TAL CHI
Total Recoverable	Prep	3005A			522799	12/27/19 16:44	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	523516	12/31/19 15:35	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	522961	12/30/19 08:58	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	523397	01/03/20 17:39	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 15:15	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	473163	01/07/20 01:07	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/27/19 13:33	JVB	TAL CHI

Client Sample ID: T09S
Date Collected: 12/30/19 08:26
Date Received: 12/30/19 12:10

Lab Sample ID: 500-175096-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			523446	01/06/20 07:18	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	523614	01/07/20 04:46	JEF	TAL CHI
Total Recoverable	Prep	3005A			523446	01/06/20 07:18	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	523677	01/06/20 18:37	FXG	TAL CHI
Total Recoverable	Prep	3005A			523446	01/06/20 07:18	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	523733	01/07/20 12:06	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	523422	01/06/20 03:24	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	523397	01/03/20 17:43	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 15:21	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	473946	01/14/20 09:53	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/30/19 08:26	JVB	TAL CHI

Client Sample ID: T05S
Date Collected: 12/30/19 10:12
Date Received: 12/30/19 12:10

Lab Sample ID: 500-175096-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			523446	01/06/20 07:18	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	523614	01/07/20 04:50	JEF	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR

Job ID: 500-175096-1

Client Sample ID: T05S

Lab Sample ID: 500-175096-19

Date Collected: 12/30/19 10:12

Matrix: Water

Date Received: 12/30/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			523446	01/06/20 07:18	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	523677	01/06/20 18:41	FXG	TAL CHI
Total Recoverable	Prep	3005A			523446	01/06/20 07:18	LMN	TAL CHI
Total Recoverable	Analysis	6020A		100	523733	01/07/20 12:10	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	523422	01/06/20 03:32	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	523397	01/03/20 17:44	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 15:25	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	473163	01/07/20 09:10	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/30/19 10:12	JVB	TAL CHI

Client Sample ID: T06S

Lab Sample ID: 500-175096-20

Date Collected: 12/31/19 09:30

Matrix: Water

Date Received: 12/31/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			523446	01/06/20 07:18	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	523614	01/07/20 04:55	JEF	TAL CHI
Total Recoverable	Prep	3005A			523446	01/06/20 07:18	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	523677	01/06/20 18:44	FXG	TAL CHI
Total Recoverable	Prep	3005A			523446	01/06/20 07:18	LMN	TAL CHI
Total Recoverable	Analysis	6020A		5	523733	01/07/20 12:14	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	523422	01/06/20 03:35	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	523397	01/03/20 17:45	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	523784	01/07/20 15:28	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	473163	01/07/20 09:10	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	524727	12/31/19 09:30	JVB	TAL CHI

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

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G33S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-1

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/13/19 Start Purge: 1235 (2400 Hr. Clock) End Purge: 1257

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.57

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 1.73 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.66 (ft./msl)
Water Level 26.97 (ft.)
Ground Water Elev. 508.69 (ft./msl)
Well Bottom Elevation *452.72 (ft./msl)

	1st	2nd	Final	
pH	7.61	7.59	7.59	(std.)
SC	622	625	625	(umhos/cm)
Temp.	12.53	12.51	12.51	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Gray, Slight Turbidity, No Odor
Weather Conditions: 43°F, Partly Cloudy, S winds e 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 26.97 - 1.73 = 25.24 (ft.)
Levels were taken on 12/13/19 @ 1230.

Updated: (12-11-2018)

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G33S Dup
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175090-2

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: _____ Start Purge: _____ (2400 Hr. Clock) End Purge: _____

Water Volume in Casing (gallons): N/A Volume Purged (gallons): _____

MEASUREMENTS

Well Diameter 2.0 (inches) 1st 2nd *Final*

Stick Up 1.73 (ft) pH _____ _____ _____ _____ (std.)

Ref. Measuring Pt. TIC SC _____ _____ _____ _____ (umhos/cm)

Well Elevation *535.66 (ft./msl) Temp._____ _____ _____ _____ (°C)

Water Level _____ (ft.) Well Stabilization / Recharge Grid

Ground Water Elev. _____ (ft./msl)

Well Bottom Elevation *452.72 (ft./msl)

COMMENTS

Sample Appearance/Odor: _____

Weather Conditions: _____

Other: *Reference Measurement

Depth To Water from L.S. =

Levels were taken on @ .

* DUP of G33S

Updated: (12-13-2019)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G30S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175016-3

Type Sample: (circle one) Ground Water | Surface Water | Leachate | Other: _____

Equipment Used:
Purging: Bladder Pump — Dedicated (Y/N)
Sampling: Bladder Pump — Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/17/19 Start Purge: 0915 (2400 Hr. Clock) End Purge: 0933

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.23

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.31 (ft)
Ref. Measuring Pt. TIC
Well Elevation *524.70 (ft./msl)
Water Level 1.42 (ft.)
Ground Water Elev. 523.28 (ft./msl)
Well Bottom Elevation *462.58 (ft./msl)

	1st	2nd	Final	
pH	8.15	8.15	8.15	(std.)
SC	1,464	1459	1459	(umhos/cm)
Temp.	4.72	4.76	4.76	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 23°F, Partly Cloudy, W winds e 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 1.42 - 2.31 = -0.89 (ft.)
Levels were taken on 12/17/19 @ 0910.

(Updated 10-102018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: R32S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175916-4

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/17/19 Start Purge: 1150 (2400 Hr. Clock) End Purge: 1212

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 1.14

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.03 (ft)

Ref. Measuring Pt. TIC

Well Elevation *536.99 (ft./msl)

Water Level 18.93 (ft.)

Ground Water Elev. 518.06 (ft./msl)

Well Bottom Elevation *457.84 (ft./msl)

	1st	2nd	Final	
pH	7.68	7.69	7.69	(std.)
SC	947	947	947	(umhos/cm)
Temp.	10.90	10.86	10.86	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 23°F, Cloudy, SW winds @ 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 18.93 - 2.03 = 16.90 (ft.)

Levels were taken on 12/17/19 @ 1145.

(Updated 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G31S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-5

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/18/19 Start Purge: 1020 (2400 Hr. Clock) End Purge: 1039

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.86

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.58 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.78 (ft./msl)
Water Level 27.58 (ft.)
Ground Water Elev. 508.20 (ft./msl)
Well Bottom Elevation *453.36 (ft./msl)

	1st	2nd	Final	
pH	7.47	7.48	7.48	(std.)
SC	1590	1570	1570	(umhos/cm)
Temp.	11.87	11.64	11.64	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 16°F, Fair, NW winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 27.58 - 2.58 = 25.00 (ft.)
Levels were taken on 12/18/19 @ 1015.

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G48S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-1

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/18/19 Start Purge: 1230 (2400 Hr. Clock) End Purge: 1251

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.95

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.45 (ft)
Ref. Measuring Pt. TIC
Well Elevation *620.78 (ft./msl)
Water Level 96.95 (ft.)
Ground Water Elev. 523.83 (ft./msl)
Well Bottom Elevation *468.32 (ft./msl)

	1st	2nd	Final	
pH	8.64	8.69	8.69	(std.)
SC	1336	1338	1338	(umhos/cm)
Temp.	7.96	8.01	8.01	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 18°F, Sunny, NW wind 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 96.95 - 2.45 = 94.50 (ft.)
Levels were taken on 12/18/19 @ 1215.

(Updated 10-10-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G47S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175010-7

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/19/19 Start Purge: 1005 (2400 Hr. Clock) End Purge: 1020

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.48

MEASUREMENTS

Well Diameter 4.0 (inches)

Stick Up 2.50 (ft)

Ref. Measuring Pt. TIC

Well Elevation *612.10 (ft./msl)

Water Level 90.76 (ft.)

Ground Water Elev. 521.34 (ft./msl)

Well Bottom Elevation *459.84 (ft./msl)

	1st	2nd	Final	
pH	8.72	8.72	8.72	(std.)
SC	1480	1490	1490	(umhos/cm)
Temp.	10.24	10.13	10.13	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 29°F, Sunny, SW winds @ 10-15 mph

Other: *Reference Measurement

Depth To Water from L.S. = 90.76 - 2.50 = 88.26 (ft.)

Levels were taken on 12/19/19 @ 0950.

(Updated 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G45S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-8

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/19/19 Start Purge: 1300 (2400 Hr. Clock) End Purge: 1316

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 1.03

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.97 (ft)

Ref. Measuring Pt. TIC

Well Elevation *603.31 (ft./msl)

Water Level 61.18 (ft.)

Ground Water Elev. ~~542.72~~ 542.13 (ft./msl) 01/10/20

Well Bottom Elevation *471.05 (ft./msl)

	1st	2nd	Final	
pH	7.43	7.44	7.44	(std.)
SC	1057	1055	1055	(umhos/cm)
Temp.	12.18	12.19	12.19	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor

Weather Conditions: 35°F, Sunny, SW winds 10-15 mph

Other: *Reference Measurement

Depth To Water from L.S. = 61.18 - 2.97 = 58.21 (ft)

Levels were taken on 12/19/19 @ 1255

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G46S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-9

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/23/19 Start Purge: 0905 (2400 Hr. Clock) End Purge: 0925

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.90

MEASUREMENTS

Well Diameter 4.0 (inches)

Stick Up 2.70 (ft)

Ref. Measuring Pt. TIC

Well Elevation *601.32 (ft./msl)

Water Level 99.38 (ft.)

Ground Water Elev. 502.05 501.94 (ft./msl)

Well Bottom Elevation *453.62 (ft./msl)

	1st	2nd	Final	
pH	7.57	7.58	7.58	(std.)
SC	1193	1197	1197	(umhos/cm)
Temp.	12.47	12.48	12.40	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Tan, Slight Turbidity, No Odor

Weather Conditions: 41°F, Sunny, SW winds 0-5 mph

Other: *Reference Measurement

Depth To Water from L.S. = 99.38 - 2.70 = 96.68 (ft.)

Levels were taken on 12/23/19 @ 0900.

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: R08S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-1D

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/23/19 Start Purge: 1010 (2400 Hr. Clock) End Purge: 1025

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.77

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.55 (ft)
Ref. Measuring Pt. TIC
Well Elevation *578.62 (ft./msl)
Water Level 67.20 (ft.)
Ground Water Elev. 511.42 (ft./msl)
Well Bottom Elevation *453.08 (ft./msl)

	1st	2nd	Final	
pH	7.85	7.82	7.82	(std.)
SC	928	954	954	(umhos/cm)
Temp.	12.00	11.99	11.99	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 46° F, Sunny, SW winds @ 5-10 mph

Other: *Reference Measurement (Well ID updated 11-25-15)
Depth To Water from L.S. = 67.20 - 2.55 = 64.65 (ft)
Levels were taken on 12/23/19 @ 1005.

(Updated 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G20S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-11

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/23/19 Start Purge: 1055 (2400 Hr. Clock) End Purge: 1115

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.13

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.78 (ft)

Ref. Measuring Pt. TIC

Well Elevation *580.33 (ft./msl)

Water Level 41.46 (ft.)

Ground Water Elev. 538.87 (ft./msl)

Well Bottom Elevation *442.28 (ft./msl)

	1st	2nd	Final	
pH	7.81	7.82	7.82	(std.)
SC	581	585	585	(umhos/cm)
Temp.	13.46	13.43	13.43	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 49°F, Sunny, SW winds 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 41.46 - 2.78 = 38.68 (ft.)

Levels were taken on 12/23/19 @ 1045.

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G44S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-12

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/23/19 Start Purge: 1335 (2400 Hr. Clock) End Purge: 1350

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.48

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.18 (ft)

Ref. Measuring Pt. TIC

Well Elevation *586.69 (ft./msl)

Water Level 81.05 (ft.)

Ground Water Elev. 505.64 (ft./msl)

Well Bottom Elevation *455.11 (ft./msl)

	1st	2nd	Final	
pH	7.24	7.24	7.24	(std.)
SC	931	930	930	(umhos/cm)
Temp.	11.57	11.56	11.56	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 51 °F, Sunny, W winds 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 81.05 - 2.18 = 78.87 (ft.)

Levels were taken on 12/23/19 @ 1330.

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T01S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-13

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/26/19 Start Purge: 0825 (2400 Hr. Clock) End Purge: 0847

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.28

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.48 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 621.78 (ft./msl)
Water Level 112.83 (ft.)
Ground Water Elev. 508.95 (ft./msl)
Well Bottom Elevation * 451.46 (ft./msl)

	1st	2nd	Final	
pH	7.86	7.86	7.86	(std.)
SC	1201	1186	1186	(umhos/cm)
Temp.	11.32	11.29	11.29	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Tan, High Turbidity, Slight Odor
Weather Conditions: 53°F, Sunny, SW winds @ 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 112.83-2.48 = 110.35 (ft.)
Levels were taken on 12/26/19 @ 0805.
* Total Depth = 170.00

(Updated 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T04S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-14

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/26/19 Start Purge: 1240 (2400 Hr. Clock) End Purge: 1302

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.71

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.42 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 631.35 (ft./msl)

Water Level 152.89 (ft.)

Ground Water Elev. 478.46 (ft./msl)

Well Bottom Elevation * 458.07 (ft./msl)

	1st	2nd	Final	
pH	7.38	7.37	7.37	(std.)
SC	705	707	707	(umhos/cm)
Temp.	15.74	15.76	15.76	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Gray, Moderate Turbidity, Slight Odor

Weather Conditions: 62°F, Partly Cloudy, SW winds @ 10-15 mph

Other: *Reference Measurement

Depth To Water from L.S. = 152.89 - 2.42 = 150.47 (ft.)

Levels were taken on 12/26/19 @ 1225.

* Total Deth = 173.00

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

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TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T02S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-15

Type Sample: (circle one) Ground Water Surface Water Leachate Other:_____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/27/19 Start Purge: 0835 (2400 Hr. Clock) End Purge: 0854

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.61

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.33 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 626.16 (ft./msl)
Water Level 129.79 (ft.)
Ground Water Elev. 496.37 (ft./msl)
Well Bottom Elevation * 453.40 (ft./msl)

	1st	2nd	Final	
pH	8.02	8.03	8.03	(std.)
SC	1,177	1178	1178	(umhos/cm)
Temp.	5.66	5.67	5.67	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 35°F, Cloudy, W winds 10-15 mph

Other: *Reference Measurement
Depth To Water from L.S. = 129.79 - 2.33 = 127.46 (ft.)
Levels were taken on 12/27/19 @ 0815 .
* Total Depth = 172.75

(Updated: 12-11-2018))

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T08S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-1.10

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/27/19 Start Purge: 1045 (2400 Hr. Clock) End Purge: 1107

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.57

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.38 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 627.39 (ft./msl)

Water Level 125.19 (ft.)

Ground Water Elev. 502.20 (ft./msl)

Well Bottom Elevation * 447.38 (ft./msl)

	1st	2nd	Final	
pH	8.02	8.01	8.01	(std.)
SC	1069	1070	1070	(umhos/cm)
Temp.	5.35	5.33	5.33	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Slight Turbidity, No Odor

Weather Conditions: 35°F, Cloudy, W winds @ 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 125.19 - 2.38 = 122.81 (ft.)

Levels were taken on 12/27/19 @ 1025.

* Total Deth = 180.00

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T03S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-17

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/27/19 Start Purge: 1315 (2400 Hr. Clock) End Purge: 1333

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.46

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 3.08 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 629.89 (ft./msl)

Water Level 134.30 (ft.)

Ground Water Elev. 495.59 (ft./msl)

Well Bottom Elevation * 456.70 (ft./msl)

	1st	2nd	Final	
pH	7.58	7.57	7.57	(std.)
SC	1,046	1,037	1,037	(umhos/cm)
Temp.	10.81	10.80	10.80	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Slight Turbidity, No Odor

Weather Conditions: 35°F, Cloudy, W winds @ 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 134.30 - 3.08 = 131.22 (ft.)

Levels were taken on 12/27/19 @ 1305

* Total Depth = 172.95

(Updated 10-10-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T09S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175086-18

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/30/19 Start Purge: 0810 (2400 Hr. Clock) End Purge: 0826

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.52

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.40 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 603.74 (ft./msl)

Water Level 101.25 (ft.)

Ground Water Elev. 502.49 (ft./msl)

Well Bottom Elevation * 444.80 (ft./msl)

	1st	2nd	Final	
pH	7.68	7.68	7.68	(std.)
SC	1,080	1,085	1,085	(umhos/cm)
Temp.	7.51	7.47	7.47	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 34°F, Cloudy, SW winds 10-15 mph

Other: *Reference Measurement (updated 02/19/14)

Depth To Water from L.S. = 101.25 - 2.40 = 98.85 (ft.)

Levels were taken on 12/30/19 @ 0750

* Total Depth: 158.59

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T05S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175090-19

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/30/19 Start Purge: 0955 (2400 Hr. Clock) End Purge: 1012

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.55

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.40 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 623.45 (ft./msl)

Water Level 116.64 (ft.)

Ground Water Elev. 506.81 (ft./msl)

Well Bottom Elevation * 448.35 (ft./msl)

	1st	2nd	Final	
pH	10.32	10.35	10.35	(std.)
SC	2040	2040	2040	(umhos/cm)
Temp.	7.41	7.36	7.36	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 33° F, Cloudy, SW winds @ 10-15 mph

Other: *Reference Measurement

Depth To Water from L.S. = 116.64 - 2.40 = 114.24 (ft.)

Levels were taken on 12/30/19 @ 0940.

* Total Deth = 175.00

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing TestAmerica

TestAmerica Chicago
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T06S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-175096-20

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 12/31/19 Start Purge: 0910 (2400 Hr. Clock) End Purge: 0930

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.39

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.30 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 621.02 (ft./msl)
Water Level 110.47 (ft.)
Ground Water Elev. 510.55 (ft./msl)
Well Bottom Elevation * 447.94 (ft./msl)

	1st	2nd	Final	
pH	5.05	5.01	5.01	(std.)
SC	667	668	668	(umhos/cm)
Temp.	7.86	7.83	7.83	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 27°F, Cloudy, W winds 15-20 mph

Other: *Reference Measurement
Depth To Water from L.S. = 110.47 − 2.30 = 108.17 (ft.)
Levels were taken on 12/31/19 @ 0850
* Total Deth = 173.00

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1