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ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

CCR COMPLIANCE
ANNUAL GROUNDWATER MONITORING and CORRECTIVE ACTION REPORT - 2020

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

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January 31, 2021

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

OVERVIEW

Groundwater monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94 and 257.95 Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule dated April 17, 2015 (CCR Rule) and subsequent amendments, have been completed for the ash 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. It is also noted that monitoring well T04S, which was located on Vulcan Quarry property and was previously being sampled as part of the expanded assessment monitoring network, was abandoned circa May 2020 by Vulcan due to expansion of their mining operations.

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

- Section 257.90(e)(6)(i) – At the start of the current monitoring period, the subject CCR unit was operating under the assessment monitoring program outlined in Section 257.95.

- Section 257.90(e)(6)(ii) – At the end of the current monitoring period, the subject CCR unit is continuing to operate under the assessment monitoring program outlined in Section 257.95.

- Section 257.90(e)(6)(iii) – The following statistically significant increases (SSIs) above established background for the Appendix III detection monitoring constituents were noted during this monitoring period:

  CCR Wells
  - G45S – chloride (June only), fluoride (December only).
  - T03S – boron (June only), calcium (December only), chloride (December only), fluoride.
  - R08S – boron, calcium, pH, sulfate.

- G20S –boron, fluoride, pH (June only).
- G30S – boron, chloride, fluoride, pH, sulfate, TDS.
- R32S – boron, calcium, sulfate.
- G44S – boron, calcium.
- G46S – boron, pH, sulfate, TDS.
- G47S – boron, fluoride, pH, sulfate, TDS.
- G48S – boron, fluoride, pH, sulfate.

Expanded Assessment Wells

- G31S – boron, calcium (June only), chloride (June only), sulfate, TDS (June only).
- G33S – fluoride, pH (June only).
- T01S – boron, fluoride, pH (June only), sulfate.
- T02S – boron, fluoride, pH, sulfate.
- T05S – boron, fluoride, pH, sulfate, TDS.
- T06S – fluoride, pH (June only).
- T08S – boron, fluoride, pH, sulfate.
- T09S – boron, fluoride, sulfate (December only).

The initial statistical evaluation of Appendix III constituents determined that there were SSIs in downgradient monitoring wells relative to established background for various Appendix III parameters at various downgradient monitoring locations. The monitoring program was transitioned to assessment monitoring under 257.95 in January 2018.

- Section 257.90(e)(6)(iv) – There were confirmed statistically significant levels (SSLs) above groundwater protection standards for the Appendix IV assessment monitoring constituents for this unit recorded during this monitoring period. Various wells showed concentrations of three Appendix IV parameters above the established GWPSs. Specifically, these were:

  - Molybdenum (CCR wells T03S, R08S, R32S, G44S, G46S, G47S, G48S and expanded network wells G31S, T01S, T02S, T05S, T08S, T09S).
  - Lithium (CCR wells R08S, G20S [December only], R32S, G46S, G47S and expanded network wells G31S and T09S).
  - Arsenic (CCR wells G45S, G46S, G47S, G48S and expanded network wells T01S [December only], T02S [June only], T05S, T08S).

  The assessment of corrective measures was initiated in March 2019 and completed on May 31, 2019. A public meeting to present the results of the corrective measures study was held on August 27, 2019.

- Section 257.90(e)(6)(v) – Remedy selection pursuant to Section 257.97 is in process; however, was not completed during this reporting period.

- Section 257.90(e)(6)(vi) – Remedial activities pursuant to Section 257.98 were not initiated during this reporting period.

1.0 INTRODUCTION

The groundwater sampling for the 2020 semi-annual assessment monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94 and 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 current expanded assessment network includes wells G31S, G33S, T01S, T02S, 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, initiated in 2010 and expanded in 2012, which intercepts southward migration of groundwater from the LSQ. It is also noted that monitoring well T04S, which was located on Vulcan Quarry property and was previously being sampled as part of the expanded assessment monitoring network, was abandoned circa May 2020 by Vulcan due to expansion of their mining operations.

This fourth annual report covers the work performed relative to CCR groundwater monitoring during the calendar year 2020. It does not duplicate information or activities reported in previous annual submittals. It is prepared in accordance with Section 257.90(e)(1-6) and summarizes the sampling procedures used, provides an evaluation of groundwater flow conditions, summarizes the analytical data generated, 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, 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 were 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. The duplicate samples from the June and December 2020 sampling events were from monitoring wells R32S and T09S, respectively.

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 2020 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 developed for refining the definition of the extent of impacts in accordance with Section 257.95(g)(1), as necessary.

4.0 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 three Appendix IV parameters above the established GWPSs. Specifically, these were molybdenum (CCR wells T03S, R08S, R32S, G44S, G46S, G47S, G48S and expanded network wells G31S, T01S, T02S, T05S, T08S, T09S), lithium (CCR wells R08S, G20S, R32S, G46S, G47S and expanded network wells G31S and T09S) and arsenic (CCR wells G46S, G47S, G48S and expanded network wells T01S, T02S, T05S, T08S).

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.

5.0 REFERENCES

- Federal Register, Environmental Protection Agency, 40 CFR Parts 257 and 261, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule. Vol. 80, No. 74, Friday April 17, 2015.

- 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.

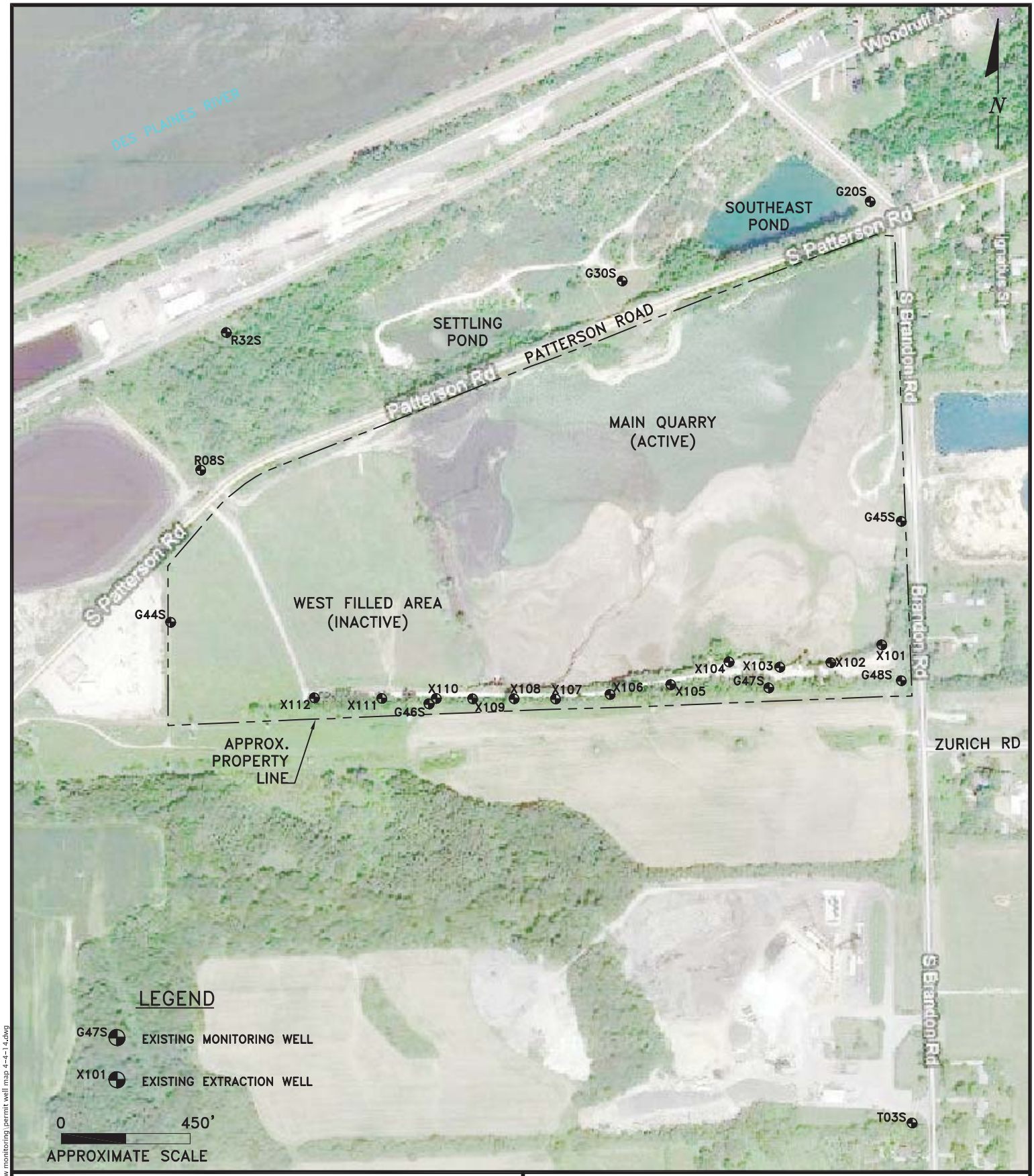
- KPRG and Associates, Inc., Statistical Evaluation Summary CCR Groundwater Monitoring Joliet #9 Generating Station. January 12, 2018.

- 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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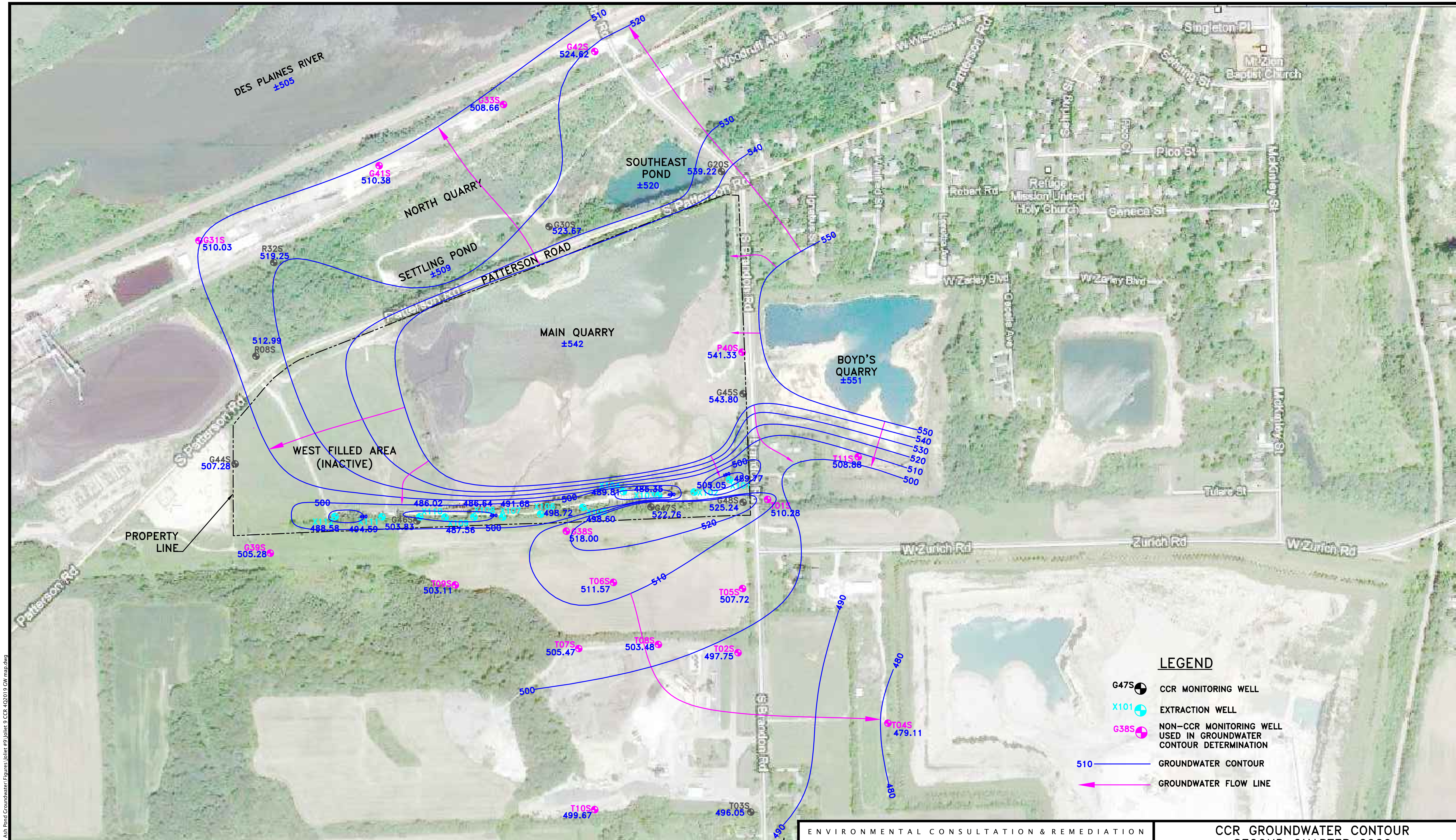
CCR MONITORING WELL SITE MAP

LINCOLN STONE QUARRY
JOLIET, ILLINOIS

Scale: 1" = 450'	Date: January 2, 2018
KPRG Project No. 21406.12	FIGURE 1

W:\c\projects\midwest generation\lincoln quarry gw monitoring\permit well map 4-4-14.dwg


DES PLAINES RIVER
±505
NORTH QUARRY
SETTLING POND
±509
SOUTHEAST POND
±520
PATTERSON ROAD
MAIN QUARRY
±542
BOYD'S QUARRY
±551
WEST FILLED AREA
(INACTIVE)
PROPERTY LINE
G42S 524.62
G33S 508.66
G41S 510.38
G31S 510.03
R32S 519.25
G30S 523.67
G20S 539.22
R08S 512.99
P40S 541.33
G45S 543.80
G44S 507.28
T11S 508.88
G48S 525.24
G47S 522.76
G46S 503.83
T01S 510.28
G38S 518.00
G39S 505.28
T09S 503.11
T06S 511.57
T05S 507.72
T07S 505.47
T08S 503.48
T02S 497.75
T04S 479.11
T10S 499.67
T03S 496.05
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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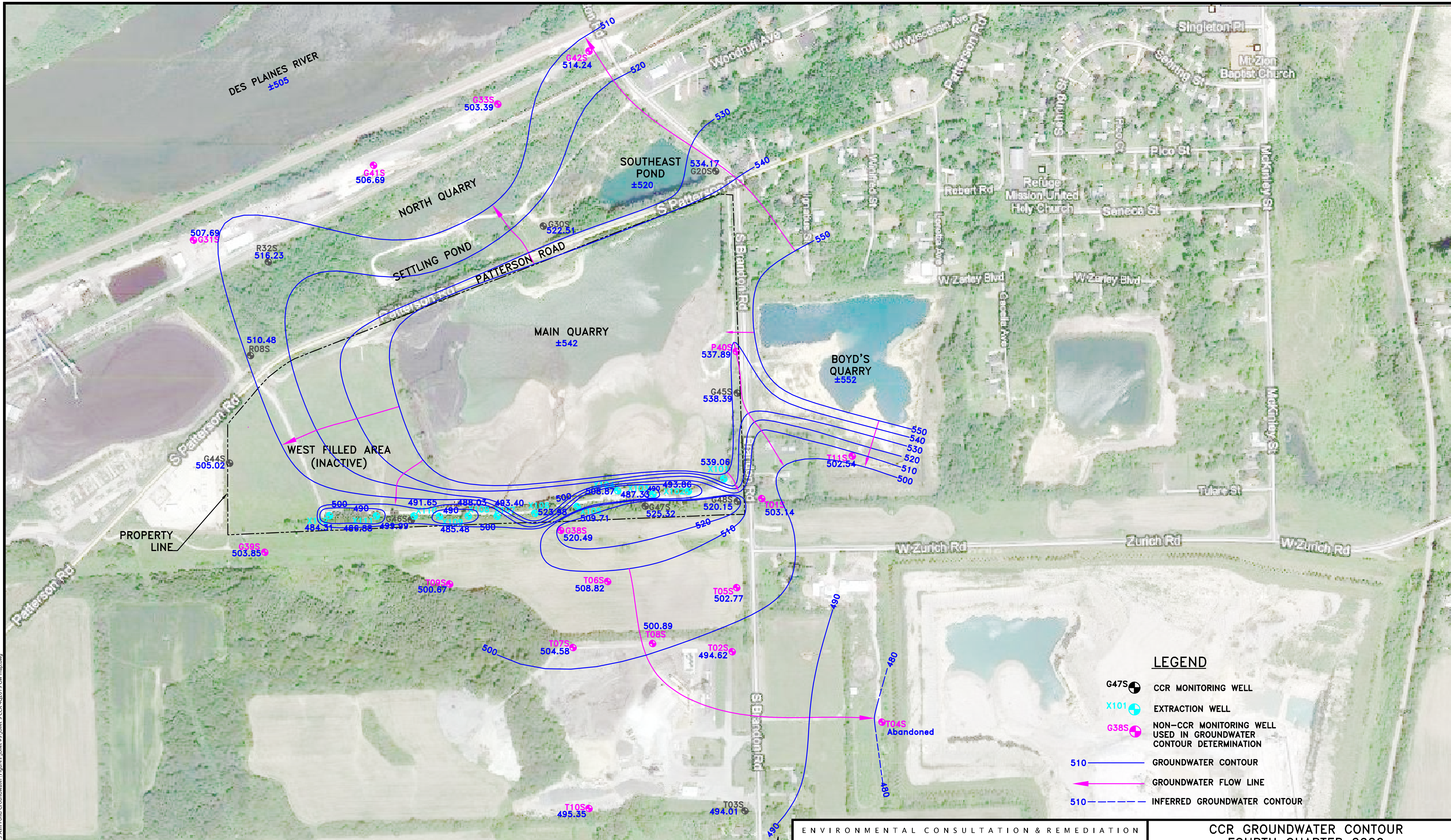
CCR GROUNDWATER CONTOUR
SECOND QUARTER 2020

LINCOLN STONE QUARRY
JOLIET, ILLINOIS

Scale: 1" = 450'	Date: July 8, 2020
KPRG Project No. 11306	FIGURE 2

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



DES PLAINES RIVER
±505
NORTH QUARRY
SETTLING POND
SOUTHEAST POND
±520
MAIN QUARRY
±542
BOYD'S QUARRY
±552
WEST FILLED AREA
(INACTIVE)
PATTERSON ROAD
PROPERTY LINE
G42S 514.24
G33S 503.39
G41S 506.69
507.69 G31S
R32S 516.23
534.17 G20S
G30S 522.51
510.48 R08S
P40S 537.89
G45S 538.39
G44S 505.02
539.06
T11S 502.54
G48S 520.15
T01S 503.14
G47S 525.32
G38S 520.49
G39S 503.85
T09S 500.67
T06S 508.82
T05S 502.77
500.89 T08S
T07S 504.58
T02S 494.62
T04S Abandoned
T10S 495.35
T03S 494.01
LEGEND
G47S CCR MONITORING WELL
X101 EXTRACTION WELL
G38S NON-CCR MONITORING WELL USED IN GROUNDWATER CONTOUR DETERMINATION
510 GROUNDWATER CONTOUR
GROUNDWATER FLOW LINE
510 INFERRED GROUNDWATER CONTOUR

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

0 450'
APPROXIMATE SCALE

N

E N V I R O N M E N T A L   C O N S U L T A T I O N & R E M E D I A T I O N

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CCR GROUNDWATER CONTOUR
FOURTH QUARTER 2020

LINCOLN STONE QUARRY
JOLIET, ILLINOIS

Scale: 1" = 450' | Date: January 15, 2021

KPRG Project No. 11306 | FIGURE 3

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
	Apr-2020	578.62	65.63	512.99
	Oct-2020	578.62	68.14	510.48
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
	Apr-2020	580.91	41.69	539.22
	Oct-2020	580.91	46.74	534.17
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
	Apr-2020	524.70	1.03	523.67
	Oct-2020	524.70	2.19	522.51
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
	Apr-2020	536.99	17.74	519.25
	Oct-2020	536.99	20.76	516.23

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
	Apr-2020	586.53	79.25	507.28
	Oct-2020	586.53	81.51	505.02
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
	Apr-2020	603.90	60.10	543.80
	Oct-2020	603.90	65.51	538.39
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
	Apr-2020	601.43	100.19	501.24
	Oct-2020	601.43	101.44	499.99
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
	Apr-2020	612.10	89.34	522.76
	Oct-2020	612.10	86.78	525.32

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
	Apr-2020	620.78	95.54	525.24
	Oct-2020	620.78	100.63	520.15
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	132.92	496.97
	Apr-2020	629.89	133.84	496.05
	Oct-2020	629.89	135.88	494.01
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
	Apr-2020	535.78	25.75	510.03
	Oct-2020	535.78	28.09	507.69
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
	Apr-2020	535.66	27.00	508.66
	Oct-2020	535.66	32.27	503.39
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
	Apr-2020	621.78	111.50	510.28
	Oct-2020	621.78	118.64	503.14
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
	Apr-2020	626.16	128.41	497.75
	Oct-2020	626.16	131.54	494.62
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
	Apr-2020	631.35	152.24	479.11
	Oct-2020	ABD	ABD	ABD
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
	Apr-2020	623.45	115.73	507.72
	Oct-2020	623.45	120.68	502.77
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
	Apr-2020	621.02	109.45	511.57
	Oct-2020	621.02	112.20	508.82
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
	Apr-2020	627.39	123.91	503.48
	Oct-2020	627.39	126.50	500.89
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
	Apr-2020	603.74	100.63	503.11
	Oct-2020	603.74	103.07	500.67

MSL - Mean Sea Level
TOC - Top of Casing
ABD - Abandoned. Vulcan property well removed by Vulcan as part of mine expansion.
[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
5/2020	Northerly and Westerly	1.38E-05	0.0376	0.05	0.90
10/2020	Northerly and Westerly	1.38E-05	0.0311	0.05	0.74

* 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 2020 - 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	6/26/2020	A
		12/11/2020	A
T03S (Upgradient)	2	6/23/2020	A
		12/15/2020	A
R08S (Downgradient)	2	6/26/2020	A
		12/14/2020	A
G20S (Downgradient)	2	6/24/2020	A
		12/14/2020	A
G30S (Downgradient)	2	6/25/2020	A
		12/7/2020	A
R32S (Downgradient)	2	6/29/2020	A
		12/16/2020	A
G44S (Downgradient)	2	6/29/2020	A
		12/15/2020	A
G46S (Downgradient)	2	6/29/2020	A
		12/15/2020	A
G47S (Downgradient)	2	6/30/2020	A
		12/7/2020	A
G48S (Downgradient)	2	6/26/2020	A
		12/7/2020	A
G31S (Downgradient)	2	6/30/2020	A
		12/9/2020	A
G33S (Downgradient)	2	6/24/2020	A
		12/10/2020	A
T01S (Downgradient)	2	6/25/2020	A
		12/14/2020	A
T02S (Downgradient)	2	6/23/2020	A
		12/19/2020	A
T04S (Downgradient)	2	6/23/2020	ABD
		12/9/2020	ABD
T05S (Downgradient)	2	6/22/2020	A
		12/8/2020	A
T06S (Downgradient)	2	6/22/2020	A
		12/14/2020	A
T08S (Downgradient)	2	6/23/2020	A
		12/9/2020	A
T09S (Downgradient)	2	6/22/2020	A
		12/8/2020	A

ABD - Abandoned. Vulcan property well removed by Vulcan as part of mine expansion.

Table 4. Appendix III Groundwater Analytical Results through 2020- Midwest Generation, LLC, Joliet Station #9, Joliet, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
	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
G45S	**Pred. Limit***	**1.031**	**133.2**	**206.7**	**0.35**	**7.61-7.03**	**360**	**1,007**
up-gradient	*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
	6/26/2020	0.62	130	**220**	0.33	7.21	240	970
	12/11/2020	0.70	120	180	**0.38**	7.16	220	760
	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
T03S	**Pred. Limit***	**1.85**	**129**	**134**	**0.26**	**7.55-6.93**	**292**	**1,030**
up-gradient	*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
	6/23/2020	**2.3**	97	74	**0.33**	7.29	240	770
	12/15/2020	1.4	**140**	F1 **170**	**0.27**	7.01	280	960
	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
R08S	**Pred. Limit**	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
down-gradient	*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
	6/26/2020	**7.9**	**140**	83	0.15	**8.32**	**370**	750
	12/14/2020	**8.0**	**130**	88	0.18	**8.15**	**400**	700
	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
G20S	**Pred. Limit**	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
down-gradient	*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
	6/24/2020	**1.3**	58	13	**0.79**	**7.81**	63	360
	12/11/2020	**1.4**	61	14	**0.89**	7.41	69	390
	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
G30S	**Pred. Limit**	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
down-gradient	*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**
	6/25/2020	**4.9**	57	**220**	**1.1**	**8.33**	**410**	**1,100**
	12/7/2020	**5.3**	57	**220**	**1.2**	**7.83**	**450**	**1,100**
	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
R32S	**Pred. Limit**	**1.01**	**126****	**203**	**0.35**	**7.52-7.04****	**360****	**955**
down-gradient	*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
	6/29/2020	**6.0**	**130**	71	0.28	7.47	**400**	790
	12/16/2020	**6.1**	**150**	F1 66	0.34	7.43	**430**	840

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 2020- 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
	6/29/2020	**1.4**	**130**	52	0.21	7.3	160	670
	12/15/2020	**1.7**	**140**	52	0.25	7.17	180	650
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**	**7.68**	**470**	**1,000**
	6/29/2020	**13**	96	74	0.34	**8.06**	**510**	**980**
	12/15/2020	**10**	120	73	0.35	**7.74**	**540**	**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**
	6/30/2020	**5.2**	16	120	**0.59**	**9.04**	F1 **440**	**1,000**
	12/7/2020	**7.6**	11	120	**1.1**	**9.13**	**500**	**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**
	6/26/2020	**7.10**	16	110	**1.0**	**9.20**	**400**	940
	12/7/2020	**6.00**	29	110	**1.1**	**8.4**	**410**	890

Notes:

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

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

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

Pred. Limit - Prediction Limit

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

** - Based on pooled background from G45S/T03S.

All others based on G45S as background.

Bold - Potential statistically significant increase.

Table 5. Appendix IV Groundwater Analytical Results through 2020 - 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	2.89	< 0.010	NA
	6/26/2020	NA	0.011	0.049	NA	NA	NA	< 0.001	0.33	< 0.0005	0.039	NA	0.0088	3.1	< 0.0025	NA
	12/11/2020	NA	0.011	0.042	NA	NA	NA	< 0.001	0.38	^+< 0.0005	0.038	NA	0.012	DNYA	< 0.0025	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**	1.38	< 0.0100	NA
	6/23/2020	NA	0.0024	0.093	NA	NA	NA	< 0.001	0.33	< 0.0005	0.025	NA	**0.23**	1.65	< 0.0025	NA
	12/15/2020	NA	0.0013	0.11	NA	NA	NA	0.0015	0.27	< 0.0005	0.031	NA	**0.14**	DNYA	< 0.0025	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**	1.31	0.0130	NA
	6/26/2020	NA	0.0011	0.043	NA	NA	NA	< 0.001	0.15	< 0.0005	**0.14**	NA	**0.36**	1.68	0.017	NA
	12/14/2020	NA	0.0015	0.04	NA	NA	NA	< 0.001	0.18	< 0.0005	**0.14**	NA	**0.38**	DNYA	0.0081	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	0.0018	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	1.74	< 0.0100	NA
	6/24/2020	NA	< 0.010	0.045	NA	NA	NA	< 0.001	0.79	< 0.0005	0.038	NA	0.019	2.07	< 0.0025	NA
	12/14/2020	NA	< 0.001	0.043	NA	NA	NA	< 0.001	0.89	^+< 0.0005	**0.042**	NA	0.022	DNYA	< 0.0025	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	1.620	0.01	NA
	6/25/2020	NA	0.0053	0.042	NA	NA	NA	< 0.001	1.1	< 0.0005	0.019	NA	0.02	2.19	< 0.0025	NA
	12/7/2020	NA	0.0044	0.043	NA	NA	NA	< 0.001	1.2	< 0.0005	0.024	NA	0.018	DNYA	< 0.0025	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**	2.370	< 0.0100	NA
	6/29/2020	NA	0.0021	0.038	NA	NA	NA	< 0.001	0.28	< 0.0005	**0.11**	NA	**0.64**	3.92	< 0.0025	NA
	12/16/2020	NA	0.0025	0.038	NA	NA	NA	< 0.001	0.34	^+< 0.0005	**0.11**	NA	**0.75**	DNYA	F1 < 0.0025	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.

DNYA - Data Not Yet Available.
^+ - Continuing calibration verification outside limits. High bias.

Table 5. Appendix IV Groundwater Analytical Results through 2020 - 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**	1.01	< 0.01	NA
	6/29/2020	NA	< 0.001	0.06	NA	NA	NA	< 0.001	0.21	< 0.0005	0.024	NA	**0.15**	1.860	< 0.0025	NA
	12/15/2020	NA	< 0.001	0.062	NA	NA	NA	< 0.001	0.25	< 0.0005	0.03	NA	**0.28**	DNYA	< 0.0025	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**	1.3	< 0.0100	NA
	6/29/2020	NA	**0.075**	0.05	NA	NA	NA	< 0.001	0.34	< 0.0050	**0.23**	NA	**1.7**	2.780	< 0.0025	NA
	12/15/2020	NA	**0.27**	0.075	NA	NA	NA	< 0.001	0.35	< 0.00085	**0.21**	NA	**1.5**	DNYA	< 0.0025	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**	1.02	< 0.0100	NA
	6/30/2020	NA	**0.037**	0.015	NA	NA	NA	< 0.001	0.59	< 0.0050	**0.052**	NA	**0.46**	1.240	0.004	NA
	12/7/2020	NA	**0.066**	0.012	NA	NA	NA	< 0.001	1.1	< 0.0005	**0.047**	NA	**0.62**	DNYA	< 0.003	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**	1.24	< 0.01	NA
	6/26/2020	NA	**0.022**	0.017	NA	NA	NA	< 0.001	1.0	< 0.005	0.021	NA	**0.54**	0.971	< 0.0025	NA
	12/7/2020	NA	**0.016**	0.02	NA	NA	NA	< 0.001	1.1	< 0.0005	0.026	NA	**0.41**	DNYA	< 0.0025	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.
DNYA - Data Not Yet Available.
^+ - Continuing calibration verification outside limits. High bias.

Table 6. Appendix III Expanded Network Groundwater Analytical Results through 2020

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**
	6/30/2020	**4.5**	**140**	**230**	0.26	7.26	**390**	**1,100**
	12/9/2020	**4.5**	120	180	0.29	7.29	**400**	890
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
	6/24/2020	0.97	42	4.2	**0.97**	**7.59**	51	370
	12/10/2020	1.00	51	12	**1.1**	7.41	74	360
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
	6/25/2020	**4.0**	52	100	**1.1**	**7.75**	**390**	900
	12/14/2020	**3.8**	48	120	**1.3**	7.44	**400**	870
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**
	6/23/2020	**4.5**	74	F1 88	**0.59**	7.78	**370**	920
	12/9/2020	**4.9**	64	97	**0.55**	**7.70**	370	740
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
	6/23/2020	ABD	ABD	ABD	ABD	ABD	ABD	ABD
	12/9/2020	ABD	ABD	ABD	ABD	ABD	ABD	ABD
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**
	6/22/2020	**12**	3.5	150	**1.8**	**10.71**	**560**	**1,600**
	12/8/2020	**14**	1.5	140	**2.0**	**10.35**	**610**	**1,400**
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	0.8	95	15	**0.47**	5.01	76	540
	6/22/2020	0.73	88	13	**0.45**	**7.69**	95	460
	12/14/2020	0.69	82	13	**0.51**	7.51	100	450
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
	6/23/2020	**6.7**	26	94	**0.67**	**9.12**	**390**	880
	12/9/2020	**9.1**	16	100	**0.91**	**8.35**	**460**	840
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
	6/22/2020	**3.0**	100	82	**0.39**	7.5	300	790
	12/8/2020	**5.7**	110	84	**0.46**	7.51	**410**	890

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.

ABD- Abandoned. Vulcan property well removed by Vulcan as part of mining expansion.

Table 7. Appendix IV Expanded Network Groundwater Analytical Results through 2020

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**	4.06	< 0.0025	NA
	6/30/2020	NA	0.0036	0.047	NA	NA	NA	< 0.001	0.26	< 0.0005	**0.10**	NA	**0.65**	3.80	< 0.0025	NA
	12/9/2020	NA	0.0034	0.080	NA	NA	NA	< 0.0010	0.29	< 0.00050	**0.10**	NA	**0.57**	DNYA	< 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	0.00064	0.041	NA	< 0.005	1.94	< 0.0025	NA
	6/24/2020	NA	0.0018	0.058	NA	NA	NA	< 0.001	0.97	0.0013	0.040	NA	< 0.005	< 0.787	< 0.0025	NA
	12/10/2020	NA	0.0016	0.046	NA	NA	NA	< 0.001	1.1	0.00058	0.041	NA	< 0.0050	DNYA	< 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**	1.94	< 0.0025	NA
	6/25/2020	NA	0.0086	0.047	NA	NA	NA	0.0010	1.1	0.00057	< 0.010	NA	**0.32**	1.90	< 0.0025	NA
	12/14/2020	NA	**0.011**	0.040	NA	NA	NA	< 0.0010	1.3	< 0.00050	0.011	NA	**0.33**	DNYA	< 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**	1.21	< 0.0025	NA
	6/23/2020	NA	**0.014**	0.075	NA	NA	NA	0.0037	0.59	0.0012	0.034	NA	**0.33**	2.07	< 0.0025	NA
	12/9/2020	NA	0.0060	0.091	NA	NA	NA	< 0.0010	0.55	< 0.00050	0.040	NA	**0.33**	DNYA	< 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	1.16	< 0.0025	NA
	6/23/2020	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD
	12/9/2020	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD	ABD
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**	< 0.482	0.0049	NA
	6/22/2020	NA	**0.13**	0.010	NA	NA	NA	< 0.0010	1.8	< 0.00050	0.017	NA	**0.96**	< 1.01	0.0038	NA
	12/8/2020	NA	**0.13**	0.010	NA	NA	NA	< 0.0010	2.0	< 0.00050	0.021	NA	**1.2**	DNYA	0.0048	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	1.55	< 0.0025	NA
	6/22/2020	NA	< 0.001	0.035	NA	NA	NA	< 0.001	0.45	< 0.0005	0.026	NA	0.006	1.66	< 0.0025	NA
	12/14/2020	NA	< 0.001	0.031	NA	NA	NA	< 0.001	0.51	< 0.0005	0.028	NA	0.011	DNYA	< 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**	0.620	< 0.0025	NA
	6/23/2020	NA	**0.016**	0.032	NA	NA	NA	< 0.001	0.67	< 0.0005	0.033	NA	**0.62**	0.620	< 0.0025	NA
	12/9/2020	NA	**0.022**	0.023	NA	NA	NA	< 0.001	0.91	< 0.0005	0.032	NA	**0.68**	DNYA	< 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	0.00064	**0.082**	NA	**0.75**	2.42	< 0.0025	NA
	6/22/2020	NA	0.0027	0.08	NA	NA	NA	< 0.001	0.39	0.0017	**0.052**	NA	**0.52**	3.04	< 0.0025	NA
	12/8/2020	NA	0.0022	0.08	NA	NA	NA	< 0.001	0.46	0.00061	**0.07**	NA	**0.89**	DNYA	< 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.

DNYA - Data not yet avaiable.

GWPS - Groundwater Protection Standard

ABD - Abandoned. Vulcan property well removed by Vulcan as part of mine expansion.

APPENDIX A
Analytical Data Packages

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 500-183935-1
Client Project/Site: Joliet #9 (Quarry) CCR

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

Attn: Richard Gnat

Robin M Kintz

Authorized for release by:
7/7/2020 3:08:12 PM
Robin Kintz, Project Manager II
(708)534-5200
robin.kintz@testamericainc.com

Designee for

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

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

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

Table of Contents

Job ID: 500-183935-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-183935-1

Comments
No additional comments.

Receipt
The samples were received on 6/22/2020 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 6.6º C, 6.7º C, 7.1º C, 8.5º C, 9.1º C, 9.1º C and 9.5º C.

Metals
Method 6020A: The internal standard Terbium (Tb) was used to report the elements Lead and Thallium in batch 500-549752. This was due to the LCS being spiked with the trace digestion spike which contains Bismuth.

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 in the Definitions/Glossary page.

Method Summary

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

Job ID: 500-183935-1

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 CF
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL CHI
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 CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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

Sample Summary

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

Job ID: 500-183935-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-183935-1	T09S	Water	06/22/20 10:08	06/22/20 15:40	
500-183935-2	T06S	Water	06/22/20 11:48	06/22/20 15:40	
500-183935-3	T05S	Water	06/22/20 13:37	06/22/20 15:40	
500-183935-4	T02S	Water	06/23/20 09:24	06/23/20 15:10	
500-183935-5	T08S	Water	06/23/20 11:51	06/23/20 15:10	
500-183935-6	T03S	Water	06/23/20 13:53	06/23/20 15:10	
500-183935-7	G20S	Water	06/24/20 10:20	06/24/20 15:20	
500-183935-8	G33S	Water	06/24/20 13:54	06/24/20 15:20	
500-183935-9	T01S	Water	06/25/20 09:17	06/25/20 15:10	
500-183935-10	G30S	Water	06/25/20 13:03	06/25/20 15:10	
500-183935-11	T04S	Water	06/26/20 09:15	06/26/20 14:30	
500-183935-12	R08S	Water	06/26/20 09:40	06/26/20 14:30	
500-183935-13	G45S	Water	06/26/20 10:51	06/26/20 14:30	
500-183935-14	G48S	Water	06/26/20 12:40	06/26/20 14:30	
500-183935-15	G46S	Water	06/29/20 09:37	06/29/20 14:30	
500-183935-16	G44S	Water	06/29/20 10:51	06/29/20 14:30	
500-183935-17	R32S	Water	06/29/20 13:14	06/29/20 14:30	
500-183935-18	R32S DUP	Water	06/29/20 13:14	06/29/20 14:30	
500-183935-19	G47S	Water	06/30/20 09:30	06/30/20 12:20	
500-183935-20	G31S	Water	06/30/20 11:03	06/30/20 12:20	

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

Job ID: 500-183935-1

Client Sample ID: T09S

Date Collected: 06/22/20 10:08
Date Received: 06/22/20 15:40

Lab Sample ID: 500-183935-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.052		0.010		mg/L		06/23/20 07:09	06/26/20 09:50	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		06/23/20 07:09	06/23/20 14:30	1
Barium	0.080		0.0025		mg/L		06/23/20 07:09	06/23/20 14:30	1
Boron	3.0		0.050		mg/L		06/23/20 07:09	06/23/20 14:30	1
Calcium	100		0.20		mg/L		06/23/20 07:09	06/23/20 14:30	1
Cobalt	<0.0010		0.0010		mg/L		06/23/20 07:09	06/23/20 14:30	1
Lead	0.0017		0.00050		mg/L		06/23/20 07:09	06/23/20 14:30	1
Molybdenum	0.52		0.0050		mg/L		06/23/20 07:09	06/23/20 14:30	1
Selenium	<0.0025		0.0025		mg/L		06/23/20 07:09	06/23/20 14:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	790		30		mg/L			06/24/20 14:27	1
Chloride	82		10		mg/L			06/30/20 20:55	5
Fluoride	0.39		0.10		mg/L			07/03/20 11:33	1
Sulfate	300		100		mg/L			06/25/20 11:56	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	98.30				ft			06/22/20 10:08	1
Depth to Water (ft from MP)	100.70				ft			06/22/20 10:08	1
Elevation of well (ft from MP)	603.74				ft			06/22/20 10:08	1
Field pH	7.50				SU			06/22/20 10:08	1
Field Temperature	60.3				Degrees F			06/22/20 10:08	1
Ground Water Elevation	503.04				ft			06/22/20 10:08	1
Specific Conductance	1178				umhos/cm			06/22/20 10:08	1
Well bottom elevation	444.80				ft			06/22/20 10:08	1

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

Job ID: 500-183935-1

Client Sample ID: T06S

Date Collected: 06/22/20 11:48
Date Received: 06/22/20 15:40

Lab Sample ID: 500-183935-2

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		06/23/20 07:09	06/26/20 09:54	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		06/23/20 07:09	06/23/20 14:32	1
Barium	0.035		0.0025		mg/L		06/23/20 07:09	06/23/20 14:32	1
Boron	0.73		0.050		mg/L		06/23/20 07:09	06/23/20 14:32	1
Calcium	88		0.20		mg/L		06/23/20 07:09	06/23/20 14:32	1
Cobalt	<0.0010		0.0010		mg/L		06/23/20 07:09	06/23/20 14:32	1
Lead	<0.00050		0.00050		mg/L		06/23/20 07:09	06/23/20 14:32	1
Molybdenum	0.0060		0.0050		mg/L		06/23/20 07:09	06/23/20 14:32	1
Selenium	<0.0025		0.0025		mg/L		06/23/20 07:09	06/23/20 14:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	460		30		mg/L			06/24/20 14:27	1
Chloride	13		2.0		mg/L			06/30/20 20:56	1
Fluoride	0.45		0.10		mg/L			07/03/20 11:41	1
Sulfate	95		25		mg/L			06/25/20 11:57	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	108.81				ft			06/22/20 11:48	1
Depth to Water (ft from MP)	111.11				ft			06/22/20 11:48	1
Elevation of well (ft from MP)	621.02				ft			06/22/20 11:48	1
Field pH	7.69				SU			06/22/20 11:48	1
Field Temperature	78.8				Degrees F			06/22/20 11:48	1
Ground Water Elevation	509.91				ft			06/22/20 11:48	1
Specific Conductance	779				umhos/cm			06/22/20 11:48	1
Well bottom elevation	447.94				ft			06/22/20 11:48	1

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

Job ID: 500-183935-1

Client Sample ID: T05S

Date Collected: 06/22/20 13:37
Date Received: 06/22/20 15:40

Lab Sample ID: 500-183935-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.017		0.010		mg/L		06/23/20 07:09	06/26/20 09:58	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		06/23/20 07:09	06/23/20 14:34	1
Barium	0.010		0.0025		mg/L		06/23/20 07:09	06/23/20 14:34	1
Boron	12		5.0		mg/L		06/23/20 07:09	06/24/20 11:37	100
Calcium	3.5		0.20		mg/L		06/23/20 07:09	06/23/20 14:34	1
Cobalt	<0.0010		0.0010		mg/L		06/23/20 07:09	06/23/20 14:34	1
Lead	<0.00050		0.00050		mg/L		06/23/20 07:09	06/23/20 14:34	1
Molybdenum	0.96		0.0050		mg/L		06/23/20 07:09	06/23/20 14:34	1
Selenium	0.0038		0.0025		mg/L		06/23/20 07:09	06/23/20 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1600		150		mg/L			06/24/20 14:27	1
Chloride	150		10		mg/L			06/30/20 21:00	5
Fluoride	1.8		0.10		mg/L			07/03/20 11:44	1
Sulfate	560		100		mg/L			06/25/20 11:57	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	112.84				ft			06/22/20 13:37	1
Depth to Water (ft from MP)	115.24				ft			06/22/20 13:37	1
Elevation of well (ft from MP)	623.45				ft			06/22/20 13:37	1
Field pH	10.71				SU			06/22/20 13:37	1
Field Temperature	66.6				Degrees F			06/22/20 13:37	1
Ground Water Elevation	508.21				ft			06/22/20 13:37	1
Specific Conductance	2420				umhos/cm			06/22/20 13:37	1
Well bottom elevation	448.35				ft			06/22/20 13:37	1

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

Job ID: 500-183935-1

Client Sample ID: T02S

Date Collected: 06/23/20 09:24
Date Received: 06/23/20 15:10

Lab Sample ID: 500-183935-4

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		06/23/20 17:50	06/26/20 10:10	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		06/23/20 17:50	06/25/20 12:11	1
Barium	0.075		0.0025		mg/L		06/23/20 17:50	06/24/20 13:48	1
Boron	4.5		0.50		mg/L		06/23/20 17:50	06/26/20 10:17	10
Calcium	74		0.20		mg/L		06/23/20 17:50	06/24/20 13:48	1
Cobalt	0.0037		0.0010		mg/L		06/23/20 17:50	06/24/20 13:48	1
Lead	0.0012		0.00050		mg/L		06/23/20 17:50	06/24/20 13:48	1
Molybdenum	0.33		0.0050		mg/L		06/23/20 17:50	06/24/20 13:48	1
Selenium	<0.0025		0.0025		mg/L		06/23/20 17:50	06/24/20 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	920		30		mg/L			06/24/20 14:27	1
Chloride	88	F1	10		mg/L			06/30/20 21:00	5
Fluoride	0.59		0.10		mg/L			07/03/20 11:47	1
Sulfate	370		100		mg/L			06/25/20 11:57	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	124.53				ft			06/23/20 09:24	1
Depth to Water (ft from MP)	126.86				ft			06/23/20 09:24	1
Elevation of well (ft from MP)	626.16				ft			06/23/20 09:24	1
Field pH	7.78				SU			06/23/20 09:24	1
Field Temperature	69.1				Degrees F			06/23/20 09:24	1
Ground Water Elevation	499.30				ft			06/23/20 09:24	1
Specific Conductance	1350				umhos/cm			06/23/20 09:24	1
Well bottom elevation	453.40				ft			06/23/20 09:24	1

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

Job ID: 500-183935-1

Client Sample ID: T08S

Date Collected: 06/23/20 11:51
Date Received: 06/23/20 15:10

Lab Sample ID: 500-183935-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.033		0.010		mg/L		06/23/20 17:50	06/26/20 10:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.016		0.0010		mg/L		06/23/20 17:50	06/25/20 12:12	1
Barium	0.032		0.0025		mg/L		06/23/20 17:50	06/24/20 13:52	1
Boron	6.7		1.0		mg/L		06/23/20 17:50	06/26/20 10:20	20
Calcium	26		0.20		mg/L		06/23/20 17:50	06/24/20 13:52	1
Cobalt	<0.0010		0.0010		mg/L		06/23/20 17:50	06/24/20 13:52	1
Lead	<0.00050		0.00050		mg/L		06/23/20 17:50	06/24/20 13:52	1
Molybdenum	0.62		0.0050		mg/L		06/23/20 17:50	06/24/20 13:52	1
Selenium	<0.0025		0.0025		mg/L		06/23/20 17:50	06/24/20 13:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	880		30		mg/L			06/24/20 14:27	1
Chloride	94		10		mg/L			06/30/20 21:03	5
Fluoride	0.67		0.10		mg/L			07/03/20 11:50	1
Sulfate	390		100		mg/L			06/25/20 11:58	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	120.33				ft			06/23/20 11:51	1
Depth to Water (ft from MP)	122.71				ft			06/23/20 11:51	1
Elevation of well (ft from MP)	627.39				ft			06/23/20 11:51	1
Field pH	9.12				SU			06/23/20 11:51	1
Field Temperature	75.0				Degrees F			06/23/20 11:51	1
Ground Water Elevation	504.68				ft			06/23/20 11:51	1
Specific Conductance	1345				umhos/cm			06/23/20 11:51	1
Well bottom elevation	447.38				ft			06/23/20 11:51	1

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

Job ID: 500-183935-1

Client Sample ID: T03S

Date Collected: 06/23/20 13:53
Date Received: 06/23/20 15:10

Lab Sample ID: 500-183935-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.025		0.010		mg/L		06/23/20 17:50	06/26/20 10:43	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		06/23/20 17:50	06/25/20 12:28	1
Barium	0.093		0.0025		mg/L		06/23/20 17:50	06/24/20 14:10	1
Boron	2.3		0.50		mg/L		06/23/20 17:50	06/26/20 10:39	10
Calcium	97		0.20		mg/L		06/23/20 17:50	06/24/20 14:10	1
Cobalt	<0.0010		0.0010		mg/L		06/23/20 17:50	06/24/20 14:10	1
Lead	<0.00050		0.00050		mg/L		06/23/20 17:50	06/24/20 14:10	1
Molybdenum	0.23		0.0050		mg/L		06/23/20 17:50	06/24/20 14:10	1
Selenium	<0.0025		0.0025		mg/L		06/23/20 17:50	06/24/20 14:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	770		30		mg/L			06/24/20 14:27	1
Chloride	74		10		mg/L			06/30/20 21:04	5
Fluoride	0.33		0.10		mg/L			07/03/20 11:53	1
Sulfate	240		100		mg/L			06/25/20 11:58	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	128.19				ft			06/23/20 13:53	1
Depth to Water (ft from MP)	131.27				ft			06/23/20 13:53	1
Elevation of well (ft from MP)	629.89				ft			06/23/20 13:53	1
Field pH	7.29				SU			06/23/20 13:53	1
Field Temperature	57.4				Degrees F			06/23/20 13:53	1
Ground Water Elevation	498.62				ft			06/23/20 13:53	1
Specific Conductance	1220				umhos/cm			06/23/20 13:53	1
Well bottom elevation	456.70				ft			06/23/20 13:53	1

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

Job ID: 500-183935-1

Client Sample ID: G20S

Date Collected: 06/24/20 10:20
Date Received: 06/24/20 15:20

Lab Sample ID: 500-183935-7

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		06/25/20 06:38	06/26/20 10:55	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		06/25/20 06:38	06/26/20 13:55	1
Barium	**0.045**		0.0025		mg/L		06/25/20 06:38	06/26/20 13:55	1
Boron	**1.3**		0.050		mg/L		06/25/20 06:38	06/26/20 13:55	1
Calcium	**58**		0.20		mg/L		06/25/20 06:38	06/26/20 13:55	1
Cobalt	<0.0010		0.0010		mg/L		06/25/20 06:38	06/26/20 13:55	1
Lead	<0.00050		0.00050		mg/L		06/25/20 06:38	06/26/20 13:55	1
Molybdenum	**0.019**		0.0050		mg/L		06/25/20 06:38	06/26/20 13:55	1
Selenium	<0.0025		0.0025		mg/L		06/25/20 06:38	06/26/20 13:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**360**		30		mg/L			06/26/20 09:06	1
Chloride	**13**		2.0		mg/L			06/30/20 21:05	1
Fluoride	**0.79**		0.10		mg/L			07/03/20 12:09	1
Sulfate	**63**		25		mg/L			06/30/20 12:53	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**36.95**				ft			06/24/20 10:20	1
Depth to Water (ft from MP)	**39.73**				ft			06/24/20 10:20	1
Elevation of well (ft from MP)	**580.33**				ft			06/24/20 10:20	1
Field pH	**7.81**				SU			06/24/20 10:20	1
Field Temperature	**75.7**				Degrees F			06/24/20 10:20	1
Ground Water Elevation	**540.60**				ft			06/24/20 10:20	1
Specific Conductance	**699**				umhos/cm			06/24/20 10:20	1
Well bottom elevation	**442.28**				ft			06/24/20 10:20	1

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

Job ID: 500-183935-1

Client Sample ID: G33S

Date Collected: 06/24/20 13:54
Date Received: 06/24/20 15:20

Lab Sample ID: 500-183935-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.040		0.010		mg/L		06/25/20 06:38	06/26/20 10:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0018		0.0010		mg/L		06/25/20 06:38	06/26/20 13:59	1
Barium	0.058		0.0025		mg/L		06/25/20 06:38	06/26/20 13:59	1
Boron	0.97		0.050		mg/L		06/25/20 06:38	06/26/20 13:59	1
Calcium	42		0.20		mg/L		06/25/20 06:38	06/26/20 13:59	1
Cobalt	<0.0010		0.0010		mg/L		06/25/20 06:38	06/26/20 13:59	1
Lead	0.0013		0.00050		mg/L		06/25/20 06:38	06/26/20 13:59	1
Molybdenum	<0.0050		0.0050		mg/L		06/25/20 06:38	06/26/20 13:59	1
Selenium	<0.0025		0.0025		mg/L		06/25/20 06:38	06/26/20 13:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		30		mg/L			06/26/20 09:06	1
Chloride	4.2		2.0		mg/L			06/30/20 21:05	1
Fluoride	0.97		0.10		mg/L			07/03/20 12:12	1
Sulfate	51		25		mg/L			06/30/20 12:54	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	26.48				ft			06/24/20 13:54	1
Depth to Water (ft from MP)	28.21				ft			06/24/20 13:54	1
Elevation of well (ft from MP)	535.66				ft			06/24/20 13:54	1
Field pH	7.59				SU			06/24/20 13:54	1
Field Temperature	65.7				Degrees F			06/24/20 13:54	1
Ground Water Elevation	507.45				ft			06/24/20 13:54	1
Specific Conductance	631				umhos/cm			06/24/20 13:54	1
Well bottom elevation	452.72				ft			06/24/20 13:54	1

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

Job ID: 500-183935-1

Client Sample ID: T01S

Date Collected: 06/25/20 09:17
Date Received: 06/25/20 15:10

Lab Sample ID: 500-183935-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/25/20 17:52	06/26/20 11:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0086**		0.0010		mg/L		06/25/20 17:52	06/26/20 15:36	1
Barium	**0.047**		0.0025		mg/L		06/25/20 17:52	06/26/20 15:36	1
Boron	**4.0**		0.050		mg/L		06/25/20 17:52	06/26/20 15:36	1
Calcium	**52**		0.20		mg/L		06/25/20 17:52	06/26/20 15:36	1
Cobalt	**0.0010**		0.0010		mg/L		06/25/20 17:52	06/26/20 15:36	1
Lead	**0.00057**		0.00050		mg/L		06/25/20 17:52	06/26/20 15:36	1
Molybdenum	**0.32**		0.0050		mg/L		06/25/20 17:52	06/26/20 15:36	1
Selenium	<0.0025		0.0025		mg/L		06/25/20 17:52	06/26/20 15:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**900**		30		mg/L			06/30/20 10:00	1
Chloride	**100**		10		mg/L			06/30/20 21:06	5
Fluoride	**1.1**		0.10		mg/L			07/03/20 12:16	1
Sulfate	**390**		100		mg/L			06/30/20 12:54	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**109.33**				ft			06/25/20 09:17	1
Depth to Water (ft from MP)	**111.81**				ft			06/25/20 09:17	1
Elevation of well (ft from MP)	**621.78**				ft			06/25/20 09:17	1
Field pH	**7.75**				SU			06/25/20 09:17	1
Field Temperature	**72.0**				Degrees F			06/25/20 09:17	1
Ground Water Elevation	**509.97**				ft			06/25/20 09:17	1
Specific Conductance	**1433**				umhos/cm			06/25/20 09:17	1
Well bottom elevation	**451.46**				ft			06/25/20 09:17	1

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

Job ID: 500-183935-1

Client Sample ID: G30S

Date Collected: 06/25/20 13:03
Date Received: 06/25/20 15:10

Lab Sample ID: 500-183935-10

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		06/25/20 17:52	06/26/20 11:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0053		0.0010		mg/L		06/25/20 17:52	06/26/20 15:39	1
Barium	0.042		0.0025		mg/L		06/25/20 17:52	06/26/20 15:39	1
Boron	4.9		0.050		mg/L		06/25/20 17:52	06/26/20 15:39	1
Calcium	57		0.20		mg/L		06/25/20 17:52	06/26/20 15:39	1
Cobalt	<0.0010		0.0010		mg/L		06/25/20 17:52	06/26/20 15:39	1
Lead	<0.00050		0.00050		mg/L		06/25/20 17:52	06/26/20 15:39	1
Molybdenum	0.020		0.0050		mg/L		06/25/20 17:52	06/26/20 15:39	1
Selenium	<0.0025		0.0025		mg/L		06/25/20 17:52	06/26/20 15:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		30		mg/L			06/30/20 10:00	1
Chloride	220		10		mg/L			06/30/20 21:08	5
Fluoride	1.1		0.10		mg/L			07/03/20 12:19	1
Sulfate	410		100		mg/L			06/30/20 12:54	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	-1.03				ft			06/25/20 13:03	1
Depth to Water (ft from MP)	1.28				ft			06/25/20 13:03	1
Elevation of well (ft from MP)	524.70				ft			06/25/20 13:03	1
Field pH	8.33				SU			06/25/20 13:03	1
Field Temperature	60.8				Degrees F			06/25/20 13:03	1
Ground Water Elevation	523.42				ft			06/25/20 13:03	1
Specific Conductance	1830				umhos/cm			06/25/20 13:03	1
Well bottom elevation	462.58				ft			06/25/20 13:03	1

Client Sample Results

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

Job ID: 500-183935-1

Client Sample ID: T04S

Date Collected: 06/26/20 09:15
Date Received: 06/26/20 14:30

Lab Sample ID: 500-183935-11

Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	0				ft			06/26/20 09:15	1
Depth to Water (ft from MP)	0				ft			06/26/20 09:15	1
Elevation of well (ft from MP)	631.35				ft			06/26/20 09:15	1
Field pH	0				SU			06/26/20 09:15	1
Field Temperature	0				Degrees F			06/26/20 09:15	1
Ground Water Elevation	0				ft			06/26/20 09:15	1
Specific Conductance	0				umhos/cm			06/26/20 09:15	1
Well bottom elevation	458.07				ft			06/26/20 09:15	1

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

Job ID: 500-183935-1

Client Sample ID: R08S

Date Collected: 06/26/20 09:40
Date Received: 06/26/20 14:30

Lab Sample ID: 500-183935-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.14		0.010		mg/L		07/01/20 06:35	07/01/20 23:08	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		07/01/20 06:35	07/01/20 13:26	1
Barium	0.043		0.0025		mg/L		07/01/20 06:35	07/01/20 13:26	1
Boron	7.9		1.0		mg/L		07/01/20 06:35	07/02/20 12:25	20
Calcium	140		0.20		mg/L		07/01/20 06:35	07/01/20 13:26	1
Cobalt	<0.0010		0.0010		mg/L		07/01/20 06:35	07/01/20 13:26	1
Lead	<0.00050		0.00050		mg/L		07/01/20 06:35	07/01/20 13:26	1
Molybdenum	0.36		0.0050		mg/L		07/01/20 06:35	07/01/20 13:26	1
Selenium	0.017		0.0025		mg/L		07/01/20 06:35	07/01/20 13:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	750		30		mg/L			06/30/20 10:00	1
Chloride	83		10		mg/L			06/30/20 21:08	5
Fluoride	0.15		0.10		mg/L			07/03/20 12:22	1
Sulfate	370		100		mg/L			06/30/20 12:55	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	63.14				ft			06/26/20 09:40	1
Depth to Water (ft from MP)	65.69				ft			06/26/20 09:40	1
Elevation of well (ft from MP)	578.62				ft			06/26/20 09:40	1
Field pH	8.32				SU			06/26/20 09:40	1
Field Temperature	57.7				Degrees F			06/26/20 09:40	1
Ground Water Elevation	512.93				ft			06/26/20 09:40	1
Specific Conductance	1107				umhos/cm			06/26/20 09:40	1
Well bottom elevation	453.08				ft			06/26/20 09:40	1

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

Job ID: 500-183935-1

Client Sample ID: G45S

Date Collected: 06/26/20 10:51
Date Received: 06/26/20 14:30

Lab Sample ID: 500-183935-13

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.039		0.010		mg/L		07/01/20 06:35	07/01/20 23:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.011		0.0010		mg/L		07/01/20 06:35	07/01/20 13:30	1
Barium	0.049		0.0025		mg/L		07/01/20 06:35	07/01/20 13:30	1
Boron	0.62		0.050		mg/L		07/01/20 06:35	07/02/20 12:29	1
Calcium	130		0.20		mg/L		07/01/20 06:35	07/01/20 13:30	1
Cobalt	<0.0010		0.0010		mg/L		07/01/20 06:35	07/01/20 13:30	1
Lead	<0.00050		0.00050		mg/L		07/01/20 06:35	07/01/20 13:30	1
Molybdenum	0.0088		0.0050		mg/L		07/01/20 06:35	07/01/20 13:30	1
Selenium	<0.0025		0.0025		mg/L		07/01/20 06:35	07/01/20 13:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	970		30		mg/L			06/30/20 10:00	1
Chloride	220		10		mg/L			06/30/20 23:41	5
Fluoride	0.33		0.10		mg/L			07/03/20 12:25	1
Sulfate	240		25		mg/L			06/30/20 12:55	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	58.15				ft			06/26/20 10:51	1
Depth to Water (ft from MP)	61.12				ft			06/26/20 10:51	1
Elevation of well (ft from MP)	603.31				ft			06/26/20 10:51	1
Field pH	7.21				SU			06/26/20 10:51	1
Field Temperature	58.8				Degrees F			06/26/20 10:51	1
Ground Water Elevation	542.19				ft			06/26/20 10:51	1
Specific Conductance	1590				umhos/cm			06/26/20 10:51	1
Well bottom elevation	471.05				ft			06/26/20 10:51	1

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

Job ID: 500-183935-1

Client Sample ID: G48S

Date Collected: 06/26/20 12:40
Date Received: 06/26/20 14:30

Lab Sample ID: 500-183935-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.021		0.010		mg/L		07/01/20 06:35	07/01/20 23:16	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		07/01/20 06:35	07/01/20 13:33	1
Barium	0.017		0.0025		mg/L		07/01/20 06:35	07/01/20 13:33	1
Boron	7.1		1.0		mg/L		07/01/20 06:35	07/02/20 12:33	20
Calcium	16		0.20		mg/L		07/01/20 06:35	07/01/20 13:33	1
Cobalt	<0.0010		0.0010		mg/L		07/01/20 06:35	07/01/20 13:33	1
Lead	<0.00050		0.00050		mg/L		07/01/20 06:35	07/01/20 13:33	1
Molybdenum	0.54		0.0050		mg/L		07/01/20 06:35	07/01/20 13:33	1
Selenium	<0.0025		0.0025		mg/L		07/01/20 06:35	07/01/20 13:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	940		30		mg/L			06/30/20 10:00	1
Chloride	110		10		mg/L			06/30/20 23:42	5
Fluoride	1.0		0.10		mg/L			07/03/20 12:30	1
Sulfate	400		100		mg/L			06/30/20 13:26	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	94.39				ft			06/26/20 12:40	1
Depth to Water (ft from MP)	96.84				ft			06/26/20 12:40	1
Elevation of well (ft from MP)	620.78				ft			06/26/20 12:40	1
Field pH	9.20				SU			06/26/20 12:40	1
Field Temperature	59.5				Degrees F			06/26/20 12:40	1
Ground Water Elevation	523.94				ft			06/26/20 12:40	1
Specific Conductance	1560				umhos/cm			06/26/20 12:40	1
Well bottom elevation	468.32				ft			06/26/20 12:40	1

Client Sample Results

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

Job ID: 500-183935-1

Client Sample ID: G46S

Date Collected: 06/29/20 09:37
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.23		0.010		mg/L		07/01/20 06:35	07/01/20 23:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.075		0.0010		mg/L		07/01/20 06:35	07/01/20 13:37	1
Barium	0.050		0.0025		mg/L		07/01/20 06:35	07/01/20 13:37	1
Boron	13		5.0		mg/L		07/01/20 06:35	07/02/20 12:37	100
Calcium	96		0.20		mg/L		07/01/20 06:35	07/01/20 13:37	1
Cobalt	<0.0010		0.0010		mg/L		07/01/20 06:35	07/01/20 13:37	1
Lead	<0.00050		0.00050		mg/L		07/01/20 06:35	07/01/20 13:37	1
Molybdenum	1.7		0.0050		mg/L		07/01/20 06:35	07/01/20 13:37	1
Selenium	<0.0025		0.0025		mg/L		07/01/20 06:35	07/01/20 13:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	980		30		mg/L			07/01/20 14:35	1
Chloride	74		50		mg/L			07/07/20 00:32	25
Fluoride	0.34		0.10		mg/L			07/03/20 12:33	1
Sulfate	510		100		mg/L			06/30/20 13:26	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	97.41				ft			06/29/20 09:37	1
Depth to Water (ft from MP)	100.11				ft			06/29/20 09:37	1
Elevation of well (ft from MP)	601.32				ft			06/29/20 09:37	1
Field pH	8.06				SU			06/29/20 09:37	1
Field Temperature	61.5				Degrees F			06/29/20 09:37	1
Ground Water Elevation	501.21				ft			06/29/20 09:37	1
Specific Conductance	1494				umhos/cm			06/29/20 09:37	1
Well bottom elevation	453.62				ft			06/29/20 09:37	1

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

Job ID: 500-183935-1

Client Sample ID: G44S

Date Collected: 06/29/20 10:51
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-16

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.024		0.010		mg/L		07/01/20 06:35	07/01/20 23:24	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		07/01/20 06:35	07/01/20 13:41	1
Barium	0.060		0.0025		mg/L		07/01/20 06:35	07/01/20 13:41	1
Boron	1.4		0.25		mg/L		07/01/20 06:35	07/02/20 12:40	5
Calcium	130		0.20		mg/L		07/01/20 06:35	07/01/20 13:41	1
Cobalt	<0.0010		0.0010		mg/L		07/01/20 06:35	07/01/20 13:41	1
Lead	<0.00050		0.00050		mg/L		07/01/20 06:35	07/01/20 13:41	1
Molybdenum	0.15		0.0050		mg/L		07/01/20 06:35	07/01/20 13:41	1
Selenium	<0.0025		0.0025		mg/L		07/01/20 06:35	07/01/20 13:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	670		30		mg/L			07/01/20 14:35	1
Chloride	52		2.0		mg/L			06/30/20 22:20	1
Fluoride	0.21		0.10		mg/L			07/03/20 12:36	1
Sulfate	160		25		mg/L			06/30/20 13:27	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	75.60				ft			06/29/20 10:51	1
Depth to Water (ft from MP)	77.78				ft			06/29/20 10:51	1
Elevation of well (ft from MP)	586.69				ft			06/29/20 10:51	1
Field pH	7.30				SU			06/29/20 10:51	1
Field Temperature	70.9				Degrees F			06/29/20 10:51	1
Ground Water Elevation	508.91				ft			06/29/20 10:51	1
Specific Conductance	1055				umhos/cm			06/29/20 10:51	1
Well bottom elevation	455.11				ft			06/29/20 10:51	1

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

Job ID: 500-183935-1

Client Sample ID: R32S

Date Collected: 06/29/20 13:14
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-17

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		07/01/20 06:35	07/01/20 23:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0021		0.0010		mg/L		07/01/20 06:35	07/01/20 13:44	1
Barium	0.038		0.0025		mg/L		07/01/20 06:35	07/01/20 13:44	1
Boron	6.0		1.0		mg/L		07/01/20 06:35	07/02/20 12:44	20
Calcium	130		0.20		mg/L		07/01/20 06:35	07/01/20 13:44	1
Cobalt	<0.0010		0.0010		mg/L		07/01/20 06:35	07/01/20 13:44	1
Lead	<0.00050		0.00050		mg/L		07/01/20 06:35	07/01/20 13:44	1
Molybdenum	0.64		0.0050		mg/L		07/01/20 06:35	07/01/20 13:44	1
Selenium	<0.0025		0.0025		mg/L		07/01/20 06:35	07/01/20 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	790		30		mg/L			07/01/20 14:35	1
Chloride	71		10		mg/L			06/30/20 23:45	5
Fluoride	0.28		0.10		mg/L			07/03/20 12:39	1
Sulfate	400		100		mg/L			06/30/20 13:27	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	15.82				ft			06/29/20 13:14	1
Depth to Water (ft from MP)	17.85				ft			06/29/20 13:14	1
Elevation of well (ft from MP)	536.99				ft			06/29/20 13:14	1
Field pH	7.47				SU			06/29/20 13:14	1
Field Temperature	54.5				Degrees F			06/29/20 13:14	1
Ground Water Elevation	519.14				ft			06/29/20 13:14	1
Specific Conductance	1070				umhos/cm			06/29/20 13:14	1
Well bottom elevation	457.84				ft			06/29/20 13:14	1

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

Job ID: 500-183935-1

Client Sample ID: R32S DUP

Date Collected: 06/29/20 13:14
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-18

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.10		0.010		mg/L		07/01/20 06:35	07/01/20 23:33	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		07/01/20 06:35	07/01/20 13:48	1
Barium	0.038		0.0025		mg/L		07/01/20 06:35	07/01/20 13:48	1
Boron	5.8		1.0		mg/L		07/01/20 06:35	07/02/20 12:48	20
Calcium	130		0.20		mg/L		07/01/20 06:35	07/01/20 13:48	1
Cobalt	<0.0010		0.0010		mg/L		07/01/20 06:35	07/01/20 13:48	1
Lead	<0.00050		0.00050		mg/L		07/01/20 06:35	07/01/20 13:48	1
Molybdenum	0.63		0.0050		mg/L		07/01/20 06:35	07/01/20 13:48	1
Selenium	<0.0025		0.0025		mg/L		07/01/20 06:35	07/01/20 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	850		30		mg/L			07/01/20 14:35	1
Chloride	79		10		mg/L			06/30/20 23:46	5
Fluoride	0.28		0.10		mg/L			07/03/20 12:52	1
Sulfate	430		100		mg/L			06/30/20 13:27	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	15.82				ft			06/29/20 13:14	1
Depth to Water (ft from MP)	17.85				ft			06/29/20 13:14	1
Elevation of well (ft from MP)	536.99				ft			06/29/20 13:14	1
Field pH	7.47				SU			06/29/20 13:14	1
Field Temperature	54.5				Degrees F			06/29/20 13:14	1
Ground Water Elevation	519.14				ft			06/29/20 13:14	1
Specific Conductance	1070				umhos/cm			06/29/20 13:14	1
Well bottom elevation	457.84				ft			06/29/20 13:14	1

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

Job ID: 500-183935-1

Client Sample ID: G47S

Date Collected: 06/30/20 09:30
Date Received: 06/30/20 12:20

Lab Sample ID: 500-183935-19

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.052		0.010		mg/L		06/30/20 17:40	07/01/20 12:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.037		0.0010		mg/L		06/30/20 17:40	07/01/20 12:11	1
Barium	0.015		0.0025		mg/L		06/30/20 17:40	07/01/20 12:11	1
Boron	5.2		1.0		mg/L		06/30/20 17:40	07/02/20 13:06	20
Calcium	16		0.20		mg/L		06/30/20 17:40	07/01/20 12:11	1
Cobalt	<0.0010		0.0010		mg/L		06/30/20 17:40	07/01/20 12:11	1
Lead	<0.00050		0.00050		mg/L		06/30/20 17:40	07/01/20 12:11	1
Molybdenum	0.46		0.0050		mg/L		06/30/20 17:40	07/01/20 12:11	1
Selenium	0.0040		0.0025		mg/L		06/30/20 17:40	07/01/20 12:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		30		mg/L			07/01/20 14:35	1
Chloride	120		10		mg/L			06/30/20 23:46	5
Fluoride	0.59		0.10		mg/L			07/03/20 12:57	1
Sulfate	440	F1	100		mg/L			06/30/20 15:24	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	87.39				ft			06/30/20 09:30	1
Depth to Water (ft from MP)	89.89				ft			06/30/20 09:30	1
Elevation of well (ft from MP)	612.10				ft			06/30/20 09:30	1
Field pH	9.04				SU			06/30/20 09:30	1
Field Temperature	63.5				Degrees F			06/30/20 09:30	1
Ground Water Elevation	522.21				ft			06/30/20 09:30	1
Specific Conductance	1730				umhos/cm			06/30/20 09:30	1
Well bottom elevation	459.84				ft			06/30/20 09:30	1

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

Job ID: 500-183935-1

Client Sample ID: G31S

Date Collected: 06/30/20 11:03
Date Received: 06/30/20 12:20

Lab Sample ID: 500-183935-20

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.10		0.010		mg/L		06/30/20 17:40	07/01/20 12:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0036		0.0010		mg/L		06/30/20 17:40	07/01/20 12:30	1
Barium	0.047		0.0025		mg/L		06/30/20 17:40	07/01/20 12:30	1
Boron	4.5		1.0		mg/L		06/30/20 17:40	07/02/20 13:25	20
Calcium	140		0.20		mg/L		06/30/20 17:40	07/01/20 12:30	1
Cobalt	<0.0010		0.0010		mg/L		06/30/20 17:40	07/01/20 12:30	1
Lead	<0.00050		0.00050		mg/L		06/30/20 17:40	07/01/20 12:30	1
Molybdenum	0.65		0.0050		mg/L		06/30/20 17:40	07/01/20 12:30	1
Selenium	<0.0025		0.0025		mg/L		06/30/20 17:40	07/01/20 12:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		30		mg/L			07/01/20 14:35	1
Chloride	230		10		mg/L			06/30/20 23:47	5
Fluoride	0.26		0.10		mg/L			07/03/20 13:00	1
Sulfate	390		100		mg/L			06/30/20 15:25	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	23.62				ft			06/30/20 11:03	1
Depth to Water (ft from MP)	26.20				ft			06/30/20 11:03	1
Elevation of well (ft from MP)	535.78				ft			06/30/20 11:03	1
Field pH	7.26				SU			06/30/20 11:03	1
Field Temperature	62.6				Degrees F			06/30/20 11:03	1
Ground Water Elevation	509.58				ft			06/30/20 11:03	1
Specific Conductance	2430				umhos/cm			06/30/20 11:03	1
Well bottom elevation	453.36				ft			06/30/20 11:03	1

Definitions/Glossary

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

Job ID: 500-183935-1

Qualifiers

Metals

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

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control 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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Prep Batch: 548849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-1	T09S	Total Recoverable	Water	3005A	
500-183935-2	T06S	Total Recoverable	Water	3005A	
500-183935-3	T05S	Total Recoverable	Water	3005A	
MB 500-548849/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-548849/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 548978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-4	T02S	Total Recoverable	Water	3005A	
500-183935-5	T08S	Total Recoverable	Water	3005A	
500-183935-6	T03S	Total Recoverable	Water	3005A	
MB 500-548978/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-548978/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-183935-5 MS	T08S	Total Recoverable	Water	3005A	
500-183935-5 MSD	T08S	Total Recoverable	Water	3005A	
500-183935-5 DU	T08S	Total Recoverable	Water	3005A	

Analysis Batch: 549124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-1	T09S	Total Recoverable	Water	6020A	548849
500-183935-2	T06S	Total Recoverable	Water	6020A	548849
500-183935-3	T05S	Total Recoverable	Water	6020A	548849
MB 500-548849/1-A	Method Blank	Total Recoverable	Water	6020A	548849
LCS 500-548849/2-A	Lab Control Sample	Total Recoverable	Water	6020A	548849

Prep Batch: 549276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-7	G20S	Total Recoverable	Water	3005A	
500-183935-8	G33S	Total Recoverable	Water	3005A	
MB 500-549276/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-549276/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 549354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-3	T05S	Total Recoverable	Water	6020A	548849
500-183935-4	T02S	Total Recoverable	Water	6020A	548978
500-183935-5	T08S	Total Recoverable	Water	6020A	548978
500-183935-6	T03S	Total Recoverable	Water	6020A	548978
MB 500-548978/1-A	Method Blank	Total Recoverable	Water	6020A	548978
LCS 500-548978/2-A	Lab Control Sample	Total Recoverable	Water	6020A	548978
500-183935-5 MS	T08S	Total Recoverable	Water	6020A	548978
500-183935-5 MSD	T08S	Total Recoverable	Water	6020A	548978
500-183935-5 DU	T08S	Total Recoverable	Water	6020A	548978

Prep Batch: 549425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-9	T01S	Total Recoverable	Water	3005A	
500-183935-10	G30S	Total Recoverable	Water	3005A	
MB 500-549425/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-549425/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals

Analysis Batch: 549550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-4	T02S	Total Recoverable	Water	6020A	548978
500-183935-5	T08S	Total Recoverable	Water	6020A	548978
500-183935-6	T03S	Total Recoverable	Water	6020A	548978
MB 500-548978/1-A	Method Blank	Total Recoverable	Water	6020A	548978
LCS 500-548978/2-A	Lab Control Sample	Total Recoverable	Water	6020A	548978
500-183935-5 MS	T08S	Total Recoverable	Water	6020A	548978
500-183935-5 MSD	T08S	Total Recoverable	Water	6020A	548978
500-183935-5 DU	T08S	Total Recoverable	Water	6020A	548978

Analysis Batch: 549609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-4	T02S	Total Recoverable	Water	6020A	548978
500-183935-5	T08S	Total Recoverable	Water	6020A	548978
500-183935-6	T03S	Total Recoverable	Water	6020A	548978
MB 500-548978/1-A	Method Blank	Total Recoverable	Water	6020A	548978
LCS 500-548978/2-A	Lab Control Sample	Total Recoverable	Water	6020A	548978
500-183935-5 MS	T08S	Total Recoverable	Water	6020A	548978
500-183935-5 MSD	T08S	Total Recoverable	Water	6020A	548978
500-183935-5 DU	T08S	Total Recoverable	Water	6020A	548978

Analysis Batch: 549617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-1	T09S	Total Recoverable	Water	6010C	548849
500-183935-2	T06S	Total Recoverable	Water	6010C	548849
500-183935-3	T05S	Total Recoverable	Water	6010C	548849
500-183935-4	T02S	Total Recoverable	Water	6010C	548978
500-183935-5	T08S	Total Recoverable	Water	6010C	548978
500-183935-6	T03S	Total Recoverable	Water	6010C	548978
500-183935-7	G20S	Total Recoverable	Water	6010C	549276
500-183935-8	G33S	Total Recoverable	Water	6010C	549276
500-183935-9	T01S	Total Recoverable	Water	6010C	549425
500-183935-10	G30S	Total Recoverable	Water	6010C	549425
MB 500-548849/1-A	Method Blank	Total Recoverable	Water	6010C	548849
MB 500-548978/1-A	Method Blank	Total Recoverable	Water	6010C	548978
MB 500-549276/1-A	Method Blank	Total Recoverable	Water	6010C	549276
MB 500-549425/1-A	Method Blank	Total Recoverable	Water	6010C	549425
LCS 500-548849/2-A	Lab Control Sample	Total Recoverable	Water	6010C	548849
LCS 500-548978/2-A	Lab Control Sample	Total Recoverable	Water	6010C	548978
LCS 500-549276/2-A	Lab Control Sample	Total Recoverable	Water	6010C	549276
LCS 500-549425/2-A	Lab Control Sample	Total Recoverable	Water	6010C	549425
500-183935-5 MS	T08S	Total Recoverable	Water	6010C	548978
500-183935-5 MSD	T08S	Total Recoverable	Water	6010C	548978
500-183935-5 DU	T08S	Total Recoverable	Water	6010C	548978

Analysis Batch: 549752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-7	G20S	Total Recoverable	Water	6020A	549276
500-183935-8	G33S	Total Recoverable	Water	6020A	549276
500-183935-9	T01S	Total Recoverable	Water	6020A	549425
500-183935-10	G30S	Total Recoverable	Water	6020A	549425
MB 500-549276/1-A	Method Blank	Total Recoverable	Water	6020A	549276

Metals (Continued)

Analysis Batch: 549752 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-549425/1-A	Method Blank	Total Recoverable	Water	6020A	549425
LCS 500-549276/2-A	Lab Control Sample	Total Recoverable	Water	6020A	549276
LCS 500-549425/2-A	Lab Control Sample	Total Recoverable	Water	6020A	549425

Prep Batch: 550154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-19	G47S	Total Recoverable	Water	3005A	
500-183935-20	G31S	Total Recoverable	Water	3005A	
MB 500-550154/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-550154/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-183935-19 MS	G47S	Total Recoverable	Water	3005A	
500-183935-19 MSD	G47S	Total Recoverable	Water	3005A	
500-183935-19 DU	G47S	Total Recoverable	Water	3005A	

Prep Batch: 550246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-12	R08S	Total Recoverable	Water	3005A	
500-183935-13	G45S	Total Recoverable	Water	3005A	
500-183935-14	G48S	Total Recoverable	Water	3005A	
500-183935-15	G46S	Total Recoverable	Water	3005A	
500-183935-16	G44S	Total Recoverable	Water	3005A	
500-183935-17	R32S	Total Recoverable	Water	3005A	
500-183935-18	R32S DUP	Total Recoverable	Water	3005A	
MB 500-550246/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-550246/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 500-550246/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Analysis Batch: 550354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-19	G47S	Total Recoverable	Water	6010C	550154
500-183935-20	G31S	Total Recoverable	Water	6010C	550154
MB 500-550154/1-A	Method Blank	Total Recoverable	Water	6010C	550154
LCS 500-550154/2-A	Lab Control Sample	Total Recoverable	Water	6010C	550154
500-183935-19 MS	G47S	Total Recoverable	Water	6010C	550154
500-183935-19 MSD	G47S	Total Recoverable	Water	6010C	550154
500-183935-19 DU	G47S	Total Recoverable	Water	6010C	550154

Analysis Batch: 550449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-12	R08S	Total Recoverable	Water	6010C	550246
500-183935-13	G45S	Total Recoverable	Water	6010C	550246
500-183935-14	G48S	Total Recoverable	Water	6010C	550246
500-183935-15	G46S	Total Recoverable	Water	6010C	550246
500-183935-16	G44S	Total Recoverable	Water	6010C	550246
500-183935-17	R32S	Total Recoverable	Water	6010C	550246
500-183935-18	R32S DUP	Total Recoverable	Water	6010C	550246
MB 500-550246/1-A	Method Blank	Total Recoverable	Water	6010C	550246
LCS 500-550246/2-A	Lab Control Sample	Total Recoverable	Water	6010C	550246
LCSD 500-550246/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010C	550246

Metals

Analysis Batch: 550542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-12	R08S	Total Recoverable	Water	6020A	550246
500-183935-13	G45S	Total Recoverable	Water	6020A	550246
500-183935-14	G48S	Total Recoverable	Water	6020A	550246
500-183935-15	G46S	Total Recoverable	Water	6020A	550246
500-183935-16	G44S	Total Recoverable	Water	6020A	550246
500-183935-17	R32S	Total Recoverable	Water	6020A	550246
500-183935-18	R32S DUP	Total Recoverable	Water	6020A	550246
500-183935-19	G47S	Total Recoverable	Water	6020A	550154
500-183935-20	G31S	Total Recoverable	Water	6020A	550154
MB 500-550154/1-A	Method Blank	Total Recoverable	Water	6020A	550154
MB 500-550246/1-A	Method Blank	Total Recoverable	Water	6020A	550246
LCS 500-550154/2-A	Lab Control Sample	Total Recoverable	Water	6020A	550154
LCS 500-550246/2-A	Lab Control Sample	Total Recoverable	Water	6020A	550246
LCSD 500-550246/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020A	550246
500-183935-19 MS	G47S	Total Recoverable	Water	6020A	550154
500-183935-19 MSD	G47S	Total Recoverable	Water	6020A	550154
500-183935-19 DU	G47S	Total Recoverable	Water	6020A	550154

Analysis Batch: 550587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-12	R08S	Total Recoverable	Water	6020A	550246
500-183935-13	G45S	Total Recoverable	Water	6020A	550246
500-183935-14	G48S	Total Recoverable	Water	6020A	550246
500-183935-15	G46S	Total Recoverable	Water	6020A	550246
500-183935-16	G44S	Total Recoverable	Water	6020A	550246
500-183935-17	R32S	Total Recoverable	Water	6020A	550246
500-183935-18	R32S DUP	Total Recoverable	Water	6020A	550246
500-183935-19	G47S	Total Recoverable	Water	6020A	550154
500-183935-20	G31S	Total Recoverable	Water	6020A	550154
MB 500-550154/1-A	Method Blank	Total Recoverable	Water	6020A	550154
MB 500-550246/1-A	Method Blank	Total Recoverable	Water	6020A	550246
LCS 500-550154/2-A	Lab Control Sample	Total Recoverable	Water	6020A	550154
LCS 500-550246/2-A	Lab Control Sample	Total Recoverable	Water	6020A	550246
LCSD 500-550246/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020A	550246
500-183935-19 MS	G47S	Total Recoverable	Water	6020A	550154
500-183935-19 MSD	G47S	Total Recoverable	Water	6020A	550154
500-183935-19 DU	G47S	Total Recoverable	Water	6020A	550154

General Chemistry

Analysis Batch: 283171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-1	T09S	Total/NA	Water	SM 2540C	
500-183935-2	T06S	Total/NA	Water	SM 2540C	
500-183935-3	T05S	Total/NA	Water	SM 2540C	
500-183935-4	T02S	Total/NA	Water	SM 2540C	
500-183935-5	T08S	Total/NA	Water	SM 2540C	
500-183935-6	T03S	Total/NA	Water	SM 2540C	
MB 310-283171/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-283171/2	Lab Control Sample	Total/NA	Water	SM 2540C	

General Chemistry

Analysis Batch: 283379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-7	G20S	Total/NA	Water	SM 2540C	
500-183935-8	G33S	Total/NA	Water	SM 2540C	
MB 310-283379/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-283379/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 283716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-9	T01S	Total/NA	Water	SM 2540C	
500-183935-10	G30S	Total/NA	Water	SM 2540C	
500-183935-12	R08S	Total/NA	Water	SM 2540C	
500-183935-13	G45S	Total/NA	Water	SM 2540C	
500-183935-14	G48S	Total/NA	Water	SM 2540C	
MB 310-283716/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-283716/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 283903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-15	G46S	Total/NA	Water	SM 2540C	
500-183935-16	G44S	Total/NA	Water	SM 2540C	
500-183935-17	R32S	Total/NA	Water	SM 2540C	
500-183935-18	R32S DUP	Total/NA	Water	SM 2540C	
500-183935-19	G47S	Total/NA	Water	SM 2540C	
500-183935-20	G31S	Total/NA	Water	SM 2540C	
MB 310-283903/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-283903/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 549372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-1	T09S	Total/NA	Water	SM 4500 SO4 E	
500-183935-2	T06S	Total/NA	Water	SM 4500 SO4 E	
500-183935-3	T05S	Total/NA	Water	SM 4500 SO4 E	
500-183935-4	T02S	Total/NA	Water	SM 4500 SO4 E	
500-183935-5	T08S	Total/NA	Water	SM 4500 SO4 E	
500-183935-6	T03S	Total/NA	Water	SM 4500 SO4 E	
MB 500-549372/15	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-549372/16	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 550123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-7	G20S	Total/NA	Water	SM 4500 SO4 E	
500-183935-8	G33S	Total/NA	Water	SM 4500 SO4 E	
500-183935-9	T01S	Total/NA	Water	SM 4500 SO4 E	
500-183935-10	G30S	Total/NA	Water	SM 4500 SO4 E	
500-183935-12	R08S	Total/NA	Water	SM 4500 SO4 E	
500-183935-13	G45S	Total/NA	Water	SM 4500 SO4 E	
500-183935-14	G48S	Total/NA	Water	SM 4500 SO4 E	
500-183935-15	G46S	Total/NA	Water	SM 4500 SO4 E	
500-183935-16	G44S	Total/NA	Water	SM 4500 SO4 E	
500-183935-17	R32S	Total/NA	Water	SM 4500 SO4 E	
500-183935-18	R32S DUP	Total/NA	Water	SM 4500 SO4 E	
MB 500-550123/15	Method Blank	Total/NA	Water	SM 4500 SO4 E	

General Chemistry (Continued)

Analysis Batch: 550123 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-550123/16	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-183935-7 MS	G20S	Total/NA	Water	SM 4500 SO4 E	
500-183935-7 MSD	G20S	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 550142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-19	G47S	Total/NA	Water	SM 4500 SO4 E	
500-183935-20	G31S	Total/NA	Water	SM 4500 SO4 E	
MB 500-550142/15	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-550142/16	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-183935-19 MS	G47S	Total/NA	Water	SM 4500 SO4 E	
500-183935-19 MSD	G47S	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 550210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-1	T09S	Total/NA	Water	SM 4500 Cl- E	
500-183935-2	T06S	Total/NA	Water	SM 4500 Cl- E	
500-183935-3	T05S	Total/NA	Water	SM 4500 Cl- E	
500-183935-4	T02S	Total/NA	Water	SM 4500 Cl- E	
500-183935-5	T08S	Total/NA	Water	SM 4500 Cl- E	
500-183935-6	T03S	Total/NA	Water	SM 4500 Cl- E	
500-183935-7	G20S	Total/NA	Water	SM 4500 Cl- E	
500-183935-8	G33S	Total/NA	Water	SM 4500 Cl- E	
500-183935-9	T01S	Total/NA	Water	SM 4500 Cl- E	
500-183935-10	G30S	Total/NA	Water	SM 4500 Cl- E	
500-183935-12	R08S	Total/NA	Water	SM 4500 Cl- E	
MB 500-550210/50	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-550210/85	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-183935-4 MS	T02S	Total/NA	Water	SM 4500 Cl- E	
500-183935-4 MSD	T02S	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 550220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-13	G45S	Total/NA	Water	SM 4500 Cl- E	
500-183935-14	G48S	Total/NA	Water	SM 4500 Cl- E	
500-183935-16	G44S	Total/NA	Water	SM 4500 Cl- E	
500-183935-17	R32S	Total/NA	Water	SM 4500 Cl- E	
500-183935-18	R32S DUP	Total/NA	Water	SM 4500 Cl- E	
500-183935-19	G47S	Total/NA	Water	SM 4500 Cl- E	
500-183935-20	G31S	Total/NA	Water	SM 4500 Cl- E	
MB 500-550220/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-550220/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-183935-13 MS	G45S	Total/NA	Water	SM 4500 Cl- E	
500-183935-13 MSD	G45S	Total/NA	Water	SM 4500 Cl- E	
500-183935-14 MS	G48S	Total/NA	Water	SM 4500 Cl- E	
500-183935-14 MSD	G48S	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 550744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-1	T09S	Total/NA	Water	SM 4500 F C	
500-183935-2	T06S	Total/NA	Water	SM 4500 F C	

General Chemistry (Continued)

Analysis Batch: 550744 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-3	T05S	Total/NA	Water	SM 4500 F C	
500-183935-4	T02S	Total/NA	Water	SM 4500 F C	
500-183935-5	T08S	Total/NA	Water	SM 4500 F C	
500-183935-6	T03S	Total/NA	Water	SM 4500 F C	
500-183935-7	G20S	Total/NA	Water	SM 4500 F C	
500-183935-8	G33S	Total/NA	Water	SM 4500 F C	
500-183935-9	T01S	Total/NA	Water	SM 4500 F C	
500-183935-10	G30S	Total/NA	Water	SM 4500 F C	
500-183935-12	R08S	Total/NA	Water	SM 4500 F C	
500-183935-13	G45S	Total/NA	Water	SM 4500 F C	
500-183935-14	G48S	Total/NA	Water	SM 4500 F C	
500-183935-15	G46S	Total/NA	Water	SM 4500 F C	
500-183935-16	G44S	Total/NA	Water	SM 4500 F C	
500-183935-17	R32S	Total/NA	Water	SM 4500 F C	
500-183935-18	R32S DUP	Total/NA	Water	SM 4500 F C	
500-183935-19	G47S	Total/NA	Water	SM 4500 F C	
500-183935-20	G31S	Total/NA	Water	SM 4500 F C	
MB 500-550744/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-550744/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-183935-1 MS	T09S	Total/NA	Water	SM 4500 F C	
500-183935-1 MSD	T09S	Total/NA	Water	SM 4500 F C	

Analysis Batch: 550893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-15	G46S	Total/NA	Water	SM 4500 Cl- E	
MB 500-550893/145	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-550893/146	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Field Service / Mobile Lab

Analysis Batch: 550377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-1	T09S	Total/NA	Water	Field Sampling	
500-183935-2	T06S	Total/NA	Water	Field Sampling	
500-183935-3	T05S	Total/NA	Water	Field Sampling	
500-183935-4	T02S	Total/NA	Water	Field Sampling	
500-183935-5	T08S	Total/NA	Water	Field Sampling	
500-183935-6	T03S	Total/NA	Water	Field Sampling	
500-183935-7	G20S	Total/NA	Water	Field Sampling	
500-183935-8	G33S	Total/NA	Water	Field Sampling	
500-183935-9	T01S	Total/NA	Water	Field Sampling	
500-183935-10	G30S	Total/NA	Water	Field Sampling	
500-183935-11	T04S	Total/NA	Water	Field Sampling	
500-183935-12	R08S	Total/NA	Water	Field Sampling	
500-183935-13	G45S	Total/NA	Water	Field Sampling	
500-183935-14	G48S	Total/NA	Water	Field Sampling	
500-183935-15	G46S	Total/NA	Water	Field Sampling	
500-183935-16	G44S	Total/NA	Water	Field Sampling	
500-183935-17	R32S	Total/NA	Water	Field Sampling	
500-183935-18	R32S DUP	Total/NA	Water	Field Sampling	
500-183935-19	G47S	Total/NA	Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 550377 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-20	G31S	Total/NA	Water	Field Sampling	

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-548849/1-A
Matrix: Water
Analysis Batch: 549617

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/23/20 07:09	06/26/20 09:34	1

Lab Sample ID: LCS 500-548849/2-A
Matrix: Water
Analysis Batch: 549617

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548849

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

Lab Sample ID: MB 500-548978/1-A
Matrix: Water
Analysis Batch: 549617

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/23/20 17:50	06/26/20 10:02	1

Lab Sample ID: LCS 500-548978/2-A
Matrix: Water
Analysis Batch: 549617

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548978

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

Lab Sample ID: 500-183935-5 MS
Matrix: Water
Analysis Batch: 549617

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.033		0.100	0.136		mg/L		104	75 - 125

Lab Sample ID: 500-183935-5 MSD
Matrix: Water
Analysis Batch: 549617

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.033		0.100	0.139		mg/L		106	75 - 125	2	20

Lab Sample ID: 500-183935-5 DU
Matrix: Water
Analysis Batch: 549617

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lithium	0.033		0.0315		mg/L		4	20

Lab Sample ID: MB 500-549276/1-A
Matrix: Water
Analysis Batch: 549617

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 549276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/25/20 06:38	06/26/20 10:47	1

Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 500-549276/2-A
Matrix: Water
Analysis Batch: 549617

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 549276

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

Lab Sample ID: MB 500-549425/1-A
Matrix: Water
Analysis Batch: 549617

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 549425

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/25/20 17:52	06/26/20 11:03	1

Lab Sample ID: LCS 500-549425/2-A
Matrix: Water
Analysis Batch: 549617

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 549425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.495		mg/L		99	80 - 120

Lab Sample ID: MB 500-550154/1-A
Matrix: Water
Analysis Batch: 550354

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		06/30/20 17:40	07/01/20 11:45	1

Lab Sample ID: LCS 500-550154/2-A
Matrix: Water
Analysis Batch: 550354

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.510		mg/L		102	80 - 120

Lab Sample ID: 500-183935-19 MS
Matrix: Water
Analysis Batch: 550354

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.052		0.500	0.571		mg/L		104	75 - 125

Lab Sample ID: 500-183935-19 MSD
Matrix: Water
Analysis Batch: 550354

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.052		0.500	0.570		mg/L		104	75 - 125	0	20

Lab Sample ID: 500-183935-19 DU
Matrix: Water
Analysis Batch: 550354

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lithium	0.052		0.0539		mg/L		3	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-550246/1-A
Matrix: Water
Analysis Batch: 550449

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 550246

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		07/01/20 06:35	07/01/20 22:48	1

Lab Sample ID: LCS 500-550246/2-A
Matrix: Water
Analysis Batch: 550449

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 550246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.517		mg/L		103	80 - 120

Lab Sample ID: LCSD 500-550246/3-A
Matrix: Water
Analysis Batch: 550449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 550246

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.500	0.527		mg/L		105	80 - 120	2	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-548849/1-A
Matrix: Water
Analysis Batch: 549124

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/23/20 07:09	06/23/20 14:24	1
Barium	<0.0025		0.0025		mg/L		06/23/20 07:09	06/23/20 14:24	1
Boron	<0.050		0.050		mg/L		06/23/20 07:09	06/23/20 14:24	1
Calcium	<0.20		0.20		mg/L		06/23/20 07:09	06/23/20 14:24	1
Cobalt	<0.0010		0.0010		mg/L		06/23/20 07:09	06/23/20 14:24	1
Lead	<0.00050		0.00050		mg/L		06/23/20 07:09	06/23/20 14:24	1
Molybdenum	<0.0050		0.0050		mg/L		06/23/20 07:09	06/23/20 14:24	1
Selenium	<0.0025		0.0025		mg/L		06/23/20 07:09	06/23/20 14:24	1

Lab Sample ID: LCS 500-548849/2-A
Matrix: Water
Analysis Batch: 549124

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548849

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.101		mg/L		101	80 - 120
Barium	0.500	0.518		mg/L		104	80 - 120
Boron	1.00	1.02		mg/L		102	80 - 120
Calcium	10.0	11.1		mg/L		111	80 - 120
Cobalt	0.500	0.516		mg/L		103	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Molybdenum	1.00	0.948		mg/L		95	80 - 120
Selenium	0.100	0.107		mg/L		107	80 - 120

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

Lab Sample ID: MB 500-548978/1-A
Matrix: Water
Analysis Batch: 549354

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0025		0.0025		mg/L		06/23/20 17:50	06/24/20 13:40	1
Calcium	<0.20		0.20		mg/L		06/23/20 17:50	06/24/20 13:40	1
Cobalt	<0.0010		0.0010		mg/L		06/23/20 17:50	06/24/20 13:40	1
Lead	<0.00050		0.00050		mg/L		06/23/20 17:50	06/24/20 13:40	1
Molybdenum	<0.0050		0.0050		mg/L		06/23/20 17:50	06/24/20 13:40	1
Selenium	<0.0025		0.0025		mg/L		06/23/20 17:50	06/24/20 13:40	1

Lab Sample ID: MB 500-548978/1-A
Matrix: Water
Analysis Batch: 549550

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/23/20 17:50	06/25/20 12:07	1

Lab Sample ID: MB 500-548978/1-A
Matrix: Water
Analysis Batch: 549609

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		06/23/20 17:50	06/26/20 10:09	1

Lab Sample ID: LCS 500-548978/2-A
Matrix: Water
Analysis Batch: 549354

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.500	0.533		mg/L		107	80 - 120
Calcium	10.0	10.1		mg/L		101	80 - 120
Cobalt	0.500	0.514		mg/L		103	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120
Molybdenum	1.00	1.00		mg/L		100	80 - 120
Selenium	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: LCS 500-548978/2-A
Matrix: Water
Analysis Batch: 549550

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0987		mg/L		99	80 - 120

Lab Sample ID: LCS 500-548978/2-A
Matrix: Water
Analysis Batch: 549609

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.00		mg/L		100	80 - 120

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

Lab Sample ID: 500-183935-5 MS
Matrix: Water
Analysis Batch: 549354

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.032		0.500	0.560		mg/L		106	75 - 125
Calcium	26		10.0	35.5		mg/L		92	75 - 125
Cobalt	<0.0010		0.500	0.495		mg/L		99	75 - 125
Lead	<0.00050		0.100	0.105		mg/L		105	75 - 125
Molybdenum	0.62		1.00	1.65		mg/L		102	75 - 125
Selenium	<0.0025		0.100	0.108		mg/L		107	75 - 125

Lab Sample ID: 500-183935-5 MS
Matrix: Water
Analysis Batch: 549550

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.016		0.100	0.114		mg/L		98	75 - 125

Lab Sample ID: 500-183935-5 MS
Matrix: Water
Analysis Batch: 549609

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	6.7		1.00	7.73	4	mg/L		100	75 - 125

Lab Sample ID: 500-183935-5 MSD
Matrix: Water
Analysis Batch: 549354

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	0.032		0.500	0.564		mg/L		107	75 - 125	1	20
Calcium	26		10.0	35.5		mg/L		93	75 - 125	0	20
Cobalt	<0.0010		0.500	0.505		mg/L		101	75 - 125	2	20
Lead	<0.00050		0.100	0.108		mg/L		108	75 - 125	3	20
Molybdenum	0.62		1.00	1.66		mg/L		104	75 - 125	1	20
Selenium	<0.0025		0.100	0.110		mg/L		109	75 - 125	1	20

Lab Sample ID: 500-183935-5 MSD
Matrix: Water
Analysis Batch: 549550

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.016		0.100	0.120		mg/L		104	75 - 125	5	20

Lab Sample ID: 500-183935-5 MSD
Matrix: Water
Analysis Batch: 549609

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	6.7		1.00	7.66	4	mg/L		93	75 - 125	1	20

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

Lab Sample ID: 500-183935-5 DU
Matrix: Water
Analysis Batch: 549354

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Barium	0.032		0.0316		mg/L		0	20
Calcium	26		26.4		mg/L		0.4	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Molybdenum	0.62		0.627		mg/L		0.4	20
Selenium	<0.0025		<0.0025		mg/L		NC	20

Lab Sample ID: 500-183935-5 DU
Matrix: Water
Analysis Batch: 549550

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.016		0.0159		mg/L		2	20

Lab Sample ID: 500-183935-5 DU
Matrix: Water
Analysis Batch: 549609

Client Sample ID: T08S
Prep Type: Total Recoverable
Prep Batch: 548978

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	6.7		6.58		mg/L		2	20

Lab Sample ID: MB 500-549276/1-A
Matrix: Water
Analysis Batch: 549752

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 549276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/25/20 06:38	06/26/20 13:29	1
Barium	<0.0025		0.0025		mg/L		06/25/20 06:38	06/26/20 13:29	1
Boron	<0.050		0.050		mg/L		06/25/20 06:38	06/26/20 13:29	1
Calcium	<0.20		0.20		mg/L		06/25/20 06:38	06/26/20 13:29	1
Cobalt	<0.0010		0.0010		mg/L		06/25/20 06:38	06/26/20 13:29	1
Lead	<0.00050		0.00050		mg/L		06/25/20 06:38	06/26/20 13:29	1
Molybdenum	<0.0050		0.0050		mg/L		06/25/20 06:38	06/26/20 13:29	1
Selenium	<0.0025		0.0025		mg/L		06/25/20 06:38	06/26/20 13:29	1

Lab Sample ID: LCS 500-549276/2-A
Matrix: Water
Analysis Batch: 549752

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 549276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0993		mg/L		99	80 - 120
Barium	0.500	0.512		mg/L		102	80 - 120
Boron	1.00	1.02		mg/L		102	80 - 120
Calcium	10.0	10.4		mg/L		104	80 - 120
Cobalt	0.500	0.513		mg/L		103	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	0.103		mg/L		103	80 - 120

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

Lab Sample ID: MB 500-549425/1-A
Matrix: Water
Analysis Batch: 549752

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 549425

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/25/20 17:52	06/26/20 14:17	1
Barium	<0.0025		0.0025		mg/L		06/25/20 17:52	06/26/20 14:17	1
Boron	<0.050		0.050		mg/L		06/25/20 17:52	06/26/20 14:17	1
Calcium	<0.20		0.20		mg/L		06/25/20 17:52	06/26/20 14:17	1
Cobalt	<0.0010		0.0010		mg/L		06/25/20 17:52	06/26/20 14:17	1
Lead	<0.00050		0.00050		mg/L		06/25/20 17:52	06/26/20 14:17	1
Molybdenum	<0.0050		0.0050		mg/L		06/25/20 17:52	06/26/20 14:17	1
Selenium	<0.0025		0.0025		mg/L		06/25/20 17:52	06/26/20 14:17	1

Lab Sample ID: LCS 500-549425/2-A
Matrix: Water
Analysis Batch: 549752

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 549425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0946		mg/L		95	80 - 120
Barium	2.00	1.93		mg/L		96	80 - 120
Boron	1.00	0.988		mg/L		99	80 - 120
Calcium	10.0	10.1		mg/L		101	80 - 120
Cobalt	0.500	0.506		mg/L		101	80 - 120
Lead	0.100	0.106		mg/L		106	80 - 120
Molybdenum	1.00	0.963		mg/L		96	80 - 120
Selenium	0.100	0.0993		mg/L		99	80 - 120

Lab Sample ID: MB 500-550154/1-A
Matrix: Water
Analysis Batch: 550542

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		06/30/20 17:40	07/01/20 12:04	1
Barium	<0.0025		0.0025		mg/L		06/30/20 17:40	07/01/20 12:04	1
Boron	<0.050	^	0.050		mg/L		06/30/20 17:40	07/01/20 12:04	1
Calcium	<0.20		0.20		mg/L		06/30/20 17:40	07/01/20 12:04	1
Cobalt	<0.0010		0.0010		mg/L		06/30/20 17:40	07/01/20 12:04	1
Lead	<0.00050		0.00050		mg/L		06/30/20 17:40	07/01/20 12:04	1
Molybdenum	<0.0050		0.0050		mg/L		06/30/20 17:40	07/01/20 12:04	1
Selenium	<0.0025		0.0025		mg/L		06/30/20 17:40	07/01/20 12:04	1

Lab Sample ID: MB 500-550154/1-A
Matrix: Water
Analysis Batch: 550587

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		06/30/20 17:40	07/02/20 12:59	1

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

Lab Sample ID: LCS 500-550154/2-A
Matrix: Water
Analysis Batch: 550542

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0940		mg/L		94	80 - 120
Barium	2.00	1.95		mg/L		97	80 - 120
Calcium	10.0	9.82		mg/L		98	80 - 120
Cobalt	0.500	0.511		mg/L		102	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120
Molybdenum	1.00	0.981		mg/L		98	80 - 120
Selenium	0.100	0.0985		mg/L		99	80 - 120

Lab Sample ID: LCS 500-550154/2-A
Matrix: Water
Analysis Batch: 550587

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.05		mg/L		105	80 - 120

Lab Sample ID: 500-183935-19 MS
Matrix: Water
Analysis Batch: 550542

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.037		0.100	0.133		mg/L		96	75 - 125
Barium	0.015		2.00	1.95		mg/L		97	75 - 125
Calcium	16		10.0	23.6		mg/L		81	75 - 125
Cobalt	<0.0010		0.500	0.489		mg/L		98	75 - 125
Lead	<0.00050		0.100	0.102		mg/L		102	75 - 125
Molybdenum	0.46		1.00	1.42		mg/L		96	75 - 125
Selenium	0.0040		0.100	0.107		mg/L		103	75 - 125

Lab Sample ID: 500-183935-19 MS
Matrix: Water
Analysis Batch: 550587

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5.2		1.00	6.44	4	mg/L		122	75 - 125

Lab Sample ID: 500-183935-19 MSD
Matrix: Water
Analysis Batch: 550542

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.037		0.100	0.134		mg/L		97	75 - 125	1	20
Barium	0.015		2.00	1.97		mg/L		98	75 - 125	1	20
Calcium	16		10.0	23.2		mg/L		77	75 - 125	2	20
Cobalt	<0.0010		0.500	0.491		mg/L		98	75 - 125	1	20
Lead	<0.00050		0.100	0.103		mg/L		103	75 - 125	1	20
Molybdenum	0.46		1.00	1.43		mg/L		97	75 - 125	1	20
Selenium	0.0040		0.100	0.109		mg/L		105	75 - 125	1	20

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

Lab Sample ID: 500-183935-19 MSD
Matrix: Water
Analysis Batch: 550587

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	5.2		1.00	6.36	4	mg/L		114	75 - 125	1	20

Lab Sample ID: 500-183935-19 DU
Matrix: Water
Analysis Batch: 550542

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.037		0.0338		mg/L		8	20
Barium	0.015		0.0136		mg/L		10	20
Calcium	16		14.4		mg/L		8	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Molybdenum	0.46		0.415		mg/L		9	20
Selenium	0.0040		0.00341		mg/L		16	20

Lab Sample ID: 500-183935-19 DU
Matrix: Water
Analysis Batch: 550587

Client Sample ID: G47S
Prep Type: Total Recoverable
Prep Batch: 550154

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	5.2		5.34		mg/L		2	20

Lab Sample ID: MB 500-550246/1-A
Matrix: Water
Analysis Batch: 550542

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 550246

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		07/01/20 06:35	07/01/20 13:11	1
Barium	<0.0025		0.0025		mg/L		07/01/20 06:35	07/01/20 13:11	1
Calcium	<0.20		0.20		mg/L		07/01/20 06:35	07/01/20 13:11	1
Cobalt	<0.0010		0.0010		mg/L		07/01/20 06:35	07/01/20 13:11	1
Lead	<0.00050		0.00050		mg/L		07/01/20 06:35	07/01/20 13:11	1
Molybdenum	<0.0050		0.0050		mg/L		07/01/20 06:35	07/01/20 13:11	1
Selenium	<0.0025		0.0025		mg/L		07/01/20 06:35	07/01/20 13:11	1

Lab Sample ID: MB 500-550246/1-A
Matrix: Water
Analysis Batch: 550587

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 550246

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		07/01/20 06:35	07/02/20 12:14	1

Lab Sample ID: LCS 500-550246/2-A
Matrix: Water
Analysis Batch: 550542

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 550246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0944		mg/L		94	80 - 120
Barium	2.00	1.92		mg/L		96	80 - 120
Calcium	10.0	9.94		mg/L		99	80 - 120

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

Lab Sample ID: LCS 500-550246/2-A
Matrix: Water
Analysis Batch: 550542

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 550246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.500	0.505		mg/L		101	80 - 120
Lead	0.100	0.105		mg/L		105	80 - 120
Molybdenum	1.00	0.983		mg/L		98	80 - 120
Selenium	0.100	0.0994		mg/L		99	80 - 120

Lab Sample ID: LCS 500-550246/2-A
Matrix: Water
Analysis Batch: 550587

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 550246

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: LCSD 500-550246/3-A
Matrix: Water
Analysis Batch: 550542

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 550246

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.100	0.0976		mg/L		98	80 - 120	3	20
Barium	2.00	2.00		mg/L		100	80 - 120	4	20
Calcium	10.0	10.1		mg/L		101	80 - 120	2	20
Cobalt	0.500	0.524		mg/L		105	80 - 120	4	20
Lead	0.100	0.109		mg/L		109	80 - 120	3	20
Molybdenum	1.00	1.02		mg/L		102	80 - 120	4	20
Selenium	0.100	0.103		mg/L		103	80 - 120	3	20

Lab Sample ID: LCSD 500-550246/3-A
Matrix: Water
Analysis Batch: 550587

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 550246

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	1.00	1.07		mg/L		107	80 - 120	3	20

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

Lab Sample ID: MB 310-283171/1
Matrix: Water
Analysis Batch: 283171

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<30		30		mg/L			06/24/20 14:27	1

Lab Sample ID: LCS 310-283171/2
Matrix: Water
Analysis Batch: 283171

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	972		mg/L		97	90 - 110

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

Lab Sample ID: MB 310-283379/1
Matrix: Water
Analysis Batch: 283379

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<30		30		mg/L			06/26/20 09:06	1

Lab Sample ID: LCS 310-283379/2
Matrix: Water
Analysis Batch: 283379

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	988		mg/L		99	90 - 110

Lab Sample ID: MB 310-283716/1
Matrix: Water
Analysis Batch: 283716

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<30		30		mg/L			06/30/20 10:00	1

Lab Sample ID: LCS 310-283716/2
Matrix: Water
Analysis Batch: 283716

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	984		mg/L		98	90 - 110

Lab Sample ID: MB 310-283903/1
Matrix: Water
Analysis Batch: 283903

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<30		30		mg/L			07/01/20 14:35	1

Lab Sample ID: LCS 310-283903/2
Matrix: Water
Analysis Batch: 283903

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	952		mg/L		95	90 - 110

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-550210/50
Matrix: Water
Analysis Batch: 550210

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			06/30/20 20:49	1

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

Lab Sample ID: LCS 500-550210/85
Matrix: Water
Analysis Batch: 550210

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	52.2		mg/L		104	85 - 115		

Lab Sample ID: 500-183935-4 MS
Matrix: Water
Analysis Batch: 550210

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	88	F1	50.0	142		mg/L		108	75 - 125		

Lab Sample ID: 500-183935-4 MSD
Matrix: Water
Analysis Batch: 550210

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	88	F1	50.0	141		mg/L		105	75 - 125	1	20

Lab Sample ID: MB 500-550220/12
Matrix: Water
Analysis Batch: 550220

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			06/30/20 22:09	1

Lab Sample ID: LCS 500-550220/13
Matrix: Water
Analysis Batch: 550220

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	51.3		mg/L		103	85 - 115		

Lab Sample ID: 500-183935-13 MS
Matrix: Water
Analysis Batch: 550220

Client Sample ID: G45S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	220		50.0	249	4	mg/L		68	75 - 125		

Lab Sample ID: 500-183935-13 MSD
Matrix: Water
Analysis Batch: 550220

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
Chloride	220		50.0	250	4	mg/L		70	75 - 125	0	20

Lab Sample ID: 500-183935-14 MS
Matrix: Water
Analysis Batch: 550220

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	151		mg/L		82	75 - 125		

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: 500-183935-14 MSD
Matrix: Water
Analysis Batch: 550220

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	155		mg/L		89	75 - 125	2	20

Lab Sample ID: MB 500-550893/145
Matrix: Water
Analysis Batch: 550893

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			07/07/20 00:22	1

Lab Sample ID: LCS 500-550893/146
Matrix: Water
Analysis Batch: 550893

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	55.7		mg/L		111	85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-550744/3
Matrix: Water
Analysis Batch: 550744

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			07/03/20 11:24	1

Lab Sample ID: LCS 500-550744/4
Matrix: Water
Analysis Batch: 550744

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	10.7		mg/L		107	80 - 120

Lab Sample ID: 500-183935-1 MS
Matrix: Water
Analysis Batch: 550744

Client Sample ID: T09S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.39		5.00	5.79		mg/L		108	75 - 125

Lab Sample ID: 500-183935-1 MSD
Matrix: Water
Analysis Batch: 550744

Client Sample ID: T09S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.39		5.00	5.70		mg/L		106	75 - 125	2	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-549372/15
Matrix: Water
Analysis Batch: 549372

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			06/25/20 11:50	1

Lab Sample ID: LCS 500-549372/16
Matrix: Water
Analysis Batch: 549372

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	20.3		mg/L		101	80 - 120

Lab Sample ID: MB 500-550123/15
Matrix: Water
Analysis Batch: 550123

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			06/30/20 12:52	1

Lab Sample ID: LCS 500-550123/16
Matrix: Water
Analysis Batch: 550123

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	19.7		mg/L		98	80 - 120

Lab Sample ID: 500-183935-7 MS
Matrix: Water
Analysis Batch: 550123

Client Sample ID: G20S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	63		20.0	82.2		mg/L		94	75 - 125

Lab Sample ID: 500-183935-7 MSD
Matrix: Water
Analysis Batch: 550123

Client Sample ID: G20S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	63		20.0	82.7		mg/L		97	75 - 125	1	20

Lab Sample ID: MB 500-550142/15
Matrix: Water
Analysis Batch: 550142

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			06/30/20 15:23	1

Lab Sample ID: LCS 500-550142/16
Matrix: Water
Analysis Batch: 550142

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	19.9		mg/L		100	80 - 120

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

Job ID: 500-183935-1

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: 500-183935-19 MS
Matrix: Water
Analysis Batch: 550142

Client Sample ID: G47S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	440	F1	20.0	449	4	mg/L		52	75 - 125		

Lab Sample ID: 500-183935-19 MSD
Matrix: Water
Analysis Batch: 550142

Client Sample ID: G47S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	440	F1	20.0	450	4	mg/L		54	75 - 125	0	20

Chain of Custody Record 457910

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: _____ TAL-8210

Client Contact	Project Manager:	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:	☐ 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: 2020 GW	☐ 2 days			Job / SDG No.: 500-183935
P O #	☐ 1 day			

500-183935 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	TDS, F, Cl, SO4	Total Metals As & Ba	Sample Specific Notes:
TO9S	06/22/20	1008		W	5			1	1	1	1	1	
TO6S	06/22/20	1148		W	5			1	1	1	1	1	
TO5S	06/22/20	1337		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:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 9.1 Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TAL 1540	06/22/20			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by Laboratory by: [signature]	Company: TA-CHI	Date/Time: 6/22/20 1540

Chain of Custody Record 457911

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Pb, Li, Mo, S, Ca, Co

TAL-8210

Client Contact	Project Manager: Jodie Bracken	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: 2020 GW	☐ 2 days			Job / SDG No.: 500-183935
PO #	☐ 1 day			

500-183935 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	TDS, Fl, Cl, SO4	Total Metals As, Ba, Cd, Co, Li, Mo, S	Sample Specific Notes:
4 TO2S	06/23/20	0924		W	5			✓	✓	✓	✓	✓	
5 TOAS	06/23/20	1151		W	5			✓	✓	✓	✓	✓	
6 TO3S	06/23/20	1353		W	5			✓	✓	✓	✓	✓	

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:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 8.5 Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company: TAL 1510	Date/Time: 06/22/20	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Shawn Scott	Company: TA-CHI	Date/Time: 06/23/20 1510

Chain of Custody Record

457912

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Ca, Pb, Li, Mo, S

TAL-8210

Client Contact	Project Manager: Jodie Bracken	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: 2020 GW	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			500-183935

500-183935 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	TDS, Fl, Cl, SO4	Total Metals As, B, Ba, Ca, Co, Li, Mo, Pb, S	Sample Specific Notes:
G205	06/24/20	1020		W	5			1	1	1	1	1	
G335	06/24/20	1354		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:

6.6

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:
	TMI	06/24/20 @ 1520			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Ann Scott	TA-Ark	6/24/20 1520

Chain of Custody Record 457913

eurofins | Environment Testing TestAmerica

Address: ______________________

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

TAL-8210

Client Contact	Project Manager: Diana Mockler	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: 2020 GW	☐ 2 days			Job / SDG No.: 500-183935
P O #	☐ 1 day			

500-183935 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	TDS, Fl, Cl, SO4	Total Metals As, B, Ba, Be, Ca, Co, Cr, Pb, Li, Mo, S	Sample Specific Notes:
9 T01S	06/25/20	0917		W	5			/	/	/	/	/	
10 G30S	06/25/20	1303		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: 7.1 Corr'd:________ Therm ID No.:__________

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: [signature]	Company: TMC	Date/Time: 06/25/20 @ 1510	Received by:	Company:	Date/Time:
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: 6/25/20 1510

Chain of Custody Record 457914

eurofins | Environment Testing TestAmerica

Address: _____

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

TAL-8210

Client Contact	Project Manager: Diana Mackler	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: 2020 GW	☐ 2 days			Job / SDG No.: 500-183935
PO #	☐ 1 day			

500-183935 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	TDS, Fl, Cl, SO4	Total Metals Ba, B, Ca, Co, Mo, Li, Mo, S	Sample Specific Notes:
11	T045	06/26/20	0915		—									Unable to access well due to excavation
12	R085	06/26/20	0940		W	5			✓	✓	✓	✓	✓	
13	G455	06/26/20	1051		W	5			✓	✓	✓	✓	✓	
14	G485	06/26/20	1240		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: 2.1 Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company: TAL 1430	Date/Time: 06/26/20	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-Ort	Date/Time: 6/26/20 1430

Chain of Custody Record 457915

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: PA Li Mo, S

TAL-8210

Client Contact	Project Manager: Diany Mackler	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.: 500-183935
Site: 2020 CW	☐ 2 days			
P O #	☐ 1 day			

500-183935 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	TDS, Fl, Cl, SO4	Total Metals As, B, Ba, Co,
15 G46S	06/29/20	0937		W	5			✓	✓	✓	✓	✓
16 G44S	06/29/20	1051		W	5			✓	✓	✓	✓	✓
17 R32S	06/29/20	1314		W	5			✓	✓	✓	✓	✓
18 R32S DUP	06/29/20	1314		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: 6.7 Corr'd: 6.7 | Therm ID No.: _____

Relinquished by:	Company: TAL	Date/Time: 06/29/20 1430	Received by:	Company: TA	Date/Time: 06/29/20 1430
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

457916

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Address: ______________________

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

TAL-8210

Client Contact	Project Manager: Diana Mockler	Site Contact:	Date:	COC No:
Company Name: Midwest Generation [illegible] 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		500-183935 COC	
Site: [illegible]	☐ 2 days			Job / SDG No.: 500-183935
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	TDS, Fl, Cl, SO4	Total Metals As, B, Ba, Ca, ...	Sample Specific Notes:
19	G47S	06/30/20	0930		W	5			✓	✓	✓	✓	✓	
20	G31S	06/30/20	1105		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: 9.5 Corr'd: ______ Therm ID No.: ______

Relinquished by: [illegible]	Company: TA	Date/Time: 06/30/20 @ 1220	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Paula Buckley	Company: TA	Date/Time: 6/30/20 1220

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136584.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/14/2020			
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:								
T02S (500-183935-4)	6/23/20	09:24 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T08S (500-183935-5)	6/23/20	11:51 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T03S (500-183935-6)	6/23/20	13:53 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:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	6/23/20 1630	TA-CHI	FE		
2	FE			Jan Byk	6/24/20 08:42	ETASTL
3						

Custody Seals Intact: ∆ Yes ∆ 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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136576.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/20/2020			
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, 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:								
T09S (500-183935-1)	6/22/20	10:08 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T06S (500-183935-2)	6/22/20	11:48 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T05S (500-183935-3)	6/22/20	13:37 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:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	6/23/20 1630	TA-CHI	FE		
2	FE			[signature]	6/24/20 08:42	ETASTL
3						

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

Ver: 01/16/2019

eurofins | Environment Testing TestAmerica

500-183935 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: ETA Chicago

City/State: CITY University Park STATE IL

Project: Joliet #9 (Quarry) CCR

Receipt Information

Date/Time Received: DATE 6/24/20 TIME 1025

Received By: JR

Delivery Type: ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes ☐ No	*If yes:* Cooler ID:	H-16
Multiple Coolers?	☐ Yes ☒ No	*If yes:* Cooler # _____ of _____	
Cooler Custody Seals Present?	☒ Yes ☐ No	*If yes:* Cooler custody seals intact?	☒ Yes ☐ No
Sample Custody Seals Present?	☐ Yes ☒ No	*If yes:* Sample custody seals intact?	☐ Yes ☐ No
Trip Blank Present?	☐ Yes ☒ No	*If yes:* Which VOA samples are in cooler? ↓	

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: J

Correction Factor (°C): +0.1

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C):

Corrected Temp (°C):

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:	plastic, 250ml, NT	
Uncorrected Temp (°C):	0.1	
Corrected Temp (°C):	0.2	

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Document: CF-LG-WI-002
Revision: 25
Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

General temperature criteria is 0 to 6°C
Bacteria temperature criteria is 0 to 10°C

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136563.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 3019 Venture Way, ,	Due Date Requested: 7/9/2020			
City: Cedar Falls	TAT Requested (days):			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(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)	2540C_Calcd/ Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
T09S (500-183935-1)	6/22/20	10:08 Central		Water			X	1	
T06S (500-183935-2)	6/22/20	11:48 Central		Water			X	1	
T05S (500-183935-3)	6/22/20	13:37 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	6/23/20 1630	TA-CHI		6/24/20 1025	
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:

7/7/2020

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136583.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 3019 Venture Way, ,	Due Date Requested: 7/9/2020			
City: Cedar Falls	TAT Requested (days):			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(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)	2540C_Calcd/ Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
T02S (500-183935-4)	6/23/20	09:24 Central		Water			X	1	
T08S (500-183935-5)	6/23/20	11:51 Central		Water			X	1	
T03S (500-183935-6)	6/23/20	13:53 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 *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Stephanie Hernandez	6/23/20 1630	TA-CHI			
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 | Environment Testing TestAmerica

500-183935 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Test America Chicago

City/State: CITY University Park STATE IL

Project: NRG Midwest Generation

Receipt Information

Date/Time Received: DATE 6/25/20 TIME 0950

Received By: CC

Delivery Type: ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes	☐ No	*If yes:* Cooler ID: —
Multiple Coolers?	☐ Yes	☒ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present?	☒ Yes	☐ No	*If yes:* Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?	☐ Yes	☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☒ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: M

Correction Factor (°C): 0.1

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C):

Corrected Temp (°C):

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:	1L Plastic	250mL Plastic
Uncorrected Temp (°C):	1.1	0.7
Corrected Temp (°C):	1.2	0.8

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136645.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 3019 Venture Way, ,	Due Date Requested: 7/9/2020			
City: Cedar Falls	TAT Requested (days):			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(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)	2540C_Calcd/ Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
G20S (500-183935-7)	6/24/20	10:20 Central		Water			X	1	
G33S (500-183935-8)	6/24/20	13:54 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: 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: Stephanie Hernandez	Date/Time: 6/24/20 1700	Company: TA-CHI	Received by:	Date/Time: 6/25/20 0956	Company
	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

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500-183935 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: ETA Chicago

City/State: CITY STATE

Project: NRG Midwest Generation LSQ

Receipt Information

Date/Time Received: DATE 6/26/20 TIME 0955

Received By: EAM

Delivery Type: ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes	☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☐ Yes	☒ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present?	☒ Yes	☐ No	*If yes:* Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?	☐ Yes	☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☒ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: N

Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C):

Corrected Temp (°C):

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:	184090-1	
Uncorrected Temp (°C):	+1.5	
Corrected Temp (°C):	+1.5	

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136673.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 3019 Venture Way, ,	Due Date Requested: 7/9/2020			
City: Cedar Falls	TAT Requested (days):			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(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:

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)	2540C_Calcd/ Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
T01S (500-183935-9)	6/25/20	09:17 Central		Water			X	1	
G30S (500-183935-10)	6/25/20	13:03 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	6/25/20 1630	TAL-CHI		6/26/2020 0950	
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 | Environment Testing TestAmerica

500-183935 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: GTA Chicago

City/State: CITY University Park STATE FL | Project:

Receipt Information

Date/Time Received: DATE 6-27-20 TIME 0910 | Received By: ER

Delivery Type: ☐ UPS ☒ FedEx SAT ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes	☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☐ Yes	☒ No	*If yes:* Cooler # ____ of ____
Cooler Custody Seals Present?	☒ Yes	☐ No	*If yes:* Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?	☐ Yes	☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☒ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: P | Correction Factor (°C): +0.1

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): | Corrected Temp (°C):

• Sample Container Temperature

Container(s) used:	CONTAINER 1	CONTAINER 2
	plastic 250mL	
Uncorrected Temp (°C):	0.1	
Corrected Temp (°C):	0.2	

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136707.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 3019 Venture Way, ,	**Due Date Requested:** 7/9/2020			
City: Cedar Falls	**TAT Requested (days):**			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(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)	2540C_Calcd/ Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
				Preservation Code:					
R08S (500-183935-12)	6/26/20	09:40 Central		Water			X	1	
G45S (500-183935-13)	6/26/20	10:51 Central		Water			X	1	
G48S (500-183935-14)	6/26/20	12:40 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
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: Stephanie Hernandez	Date/Time: 6/26/20 1600	Company: TA-CHI	Received by: [signature] Ramos	Date/Time: 6-27-20 0820	Company: EAO
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 | Environment Testing TestAmerica

500-183935 Chain of Custody

Cooler/Sample Receipt and Temperatur

Client Information

Client: TA Chicago

City/State: CITY University Park STATE IL | Project: NRG Midwest Generation

Receipt Information

Date/Time Received: DATE 01/30/20 TIME 1100 | Received By: JJ

Delivery Type: ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes	☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☐ Yes	☒ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present?	☒ Yes	☐ No	*If yes:* Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?	☐ Yes	☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☒ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: M | Correction Factor (°C): -0.1

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): | Corrected Temp (°C):

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:	PC250NT	
Uncorrected Temp (°C):	0.4	
Corrected Temp (°C):	0.5	

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136786.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 3019 Venture Way, ,	Due Date Requested: 7/2/2020			
City: Cedar Falls	TAT Requested (days):			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(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:

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)	2540C_Calcd/ Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
G46S (500-183935-15)	6/29/20	09:37 Central		Water			X	1	
G44S (500-183935-16)	6/29/20	10:51 Central		Water			X	1	
R32S (500-183935-17)	6/29/20	13:14 Central		Water			X	1	
R32S DUP (500-183935-18)	6/29/20	13:14 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:

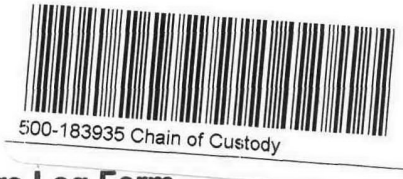
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	6/29/20 1500	TA-CHI	[signature]	6/30/20 1100	
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 | Environment Testing TestAmerica



Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: TA Chicago

City/State: CITY University Park STATE IL

Project: NRG Midwest Generating LLC

Receipt Information

Date/Time Received: DATE 7/1/20 TIME 1055

Received By: JJ

Delivery Type: ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes	☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☐ Yes	☒ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present?	☒ Yes	☐ No	*If yes:* Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?	☐ Yes	☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☒ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: M

Correction Factor (°C): +0.1

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C):	Corrected Temp (°C):

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:	PLTLTNT	
Uncorrected Temp (°C):	0.7	
Corrected Temp (°C):	0.8	

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136825.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 3019 Venture Way, ,	Due Date Requested: 7/7/2020			
City: Cedar Falls	TAT Requested (days):			
State, Zip: IA, 50613				
Phone: 319-277-2401(Tel) 319-277-2425(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)	2540C_Calcd/ Total Dissolved Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
G47S (500-183935-19)	6/30/20	09:30 Central		Water			X	1	
G31S (500-183935-20)	6/30/20	11:03 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 *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: Stephanie Hernandez	Date/Time: 6/30/20 1630	Company TA-CHI	Received by:	Date/Time: 7/1/20 1055	Company
	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: 500-183935-1

Login Number: 183935
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	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	9.1,8.5,6.6,7.1,9.1,6.7,9.5
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: 500-183935-1

Login Number: 183935
List Number: 2
Creator: Johnson, Josie A

List Source: Eurofins TestAmerica, Cedar Falls
List Creation: 06/24/20 12:14 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	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-183935-1

Login Number: 183935
List Number: 4
Creator: Johnson, Josie A

List Source: Eurofins TestAmerica, Cedar Falls
List Creation: 06/25/20 11:24 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	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-183935-1

Login Number: 183935
List Number: 6
Creator: Johnson, Josie A

List Source: Eurofins TestAmerica, Cedar Falls
List Creation: 06/26/20 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	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-183935-1

Login Number: 183935
List Number: 8
Creator: Homolar, Dana J

List Source: Eurofins TestAmerica, Cedar Falls
List Creation: 06/29/20 07:20 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	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-183935-1

Login Number: 183935
List Number: 9
Creator: Johnson, Josie A

List Source: Eurofins TestAmerica, Cedar Falls
List Creation: 06/30/20 02:09 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	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-183935-1

Login Number: 183935
List Number: 11
Creator: Homolar, Dana J

List Source: Eurofins TestAmerica, Cedar Falls
List Creation: 07/01/20 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	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Chronicle

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

Job ID: 500-183935-1

Client Sample ID: T09S

Lab Sample ID: 500-183935-1

Date Collected: 06/22/20 10:08

Matrix: Water

Date Received: 06/22/20 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548849	06/23/20 07:09	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	549617	06/26/20 09:50	JEF	TAL CHI
Total Recoverable	Prep	3005A			548849	06/23/20 07:09	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	549124	06/23/20 14:30	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283171	06/24/20 14:27	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550210	06/30/20 20:55	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 11:33	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	549372	06/25/20 11:56	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/22/20 10:08	JVB	TAL CHI

Client Sample ID: T06S

Lab Sample ID: 500-183935-2

Date Collected: 06/22/20 11:48

Matrix: Water

Date Received: 06/22/20 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548849	06/23/20 07:09	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	549617	06/26/20 09:54	JEF	TAL CHI
Total Recoverable	Prep	3005A			548849	06/23/20 07:09	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	549124	06/23/20 14:32	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283171	06/24/20 14:27	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		1	550210	06/30/20 20:56	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 11:41	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	549372	06/25/20 11:57	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/22/20 11:48	JVB	TAL CHI

Client Sample ID: T05S

Lab Sample ID: 500-183935-3

Date Collected: 06/22/20 13:37

Matrix: Water

Date Received: 06/22/20 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548849	06/23/20 07:09	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	549617	06/26/20 09:58	JEF	TAL CHI
Total Recoverable	Prep	3005A			548849	06/23/20 07:09	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	549124	06/23/20 14:34	FXG	TAL CHI
Total Recoverable	Prep	3005A			548849	06/23/20 07:09	LMN	TAL CHI
Total Recoverable	Analysis	6020A		100	549354	06/24/20 11:37	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283171	06/24/20 14:27	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550210	06/30/20 21:00	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 11:44	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	549372	06/25/20 11:57	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/22/20 13:37	JVB	TAL CHI

Lab Chronicle

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

Job ID: 500-183935-1

Client Sample ID: T02S

Lab Sample ID: 500-183935-4

Date Collected: 06/23/20 09:24

Matrix: Water

Date Received: 06/23/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	549617	06/26/20 10:10	JEF	TAL CHI
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	549550	06/25/20 12:11	FXG	TAL CHI
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	549354	06/24/20 13:48	FXG	TAL CHI
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	549609	06/26/20 10:17	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283171	06/24/20 14:27	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550210	06/30/20 21:00	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 11:47	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	549372	06/25/20 11:57	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/23/20 09:24	JVB	TAL CHI

Client Sample ID: T08S

Lab Sample ID: 500-183935-5

Date Collected: 06/23/20 11:51

Matrix: Water

Date Received: 06/23/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	549617	06/26/20 10:14	JEF	TAL CHI
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	549550	06/25/20 12:12	FXG	TAL CHI
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	549354	06/24/20 13:52	FXG	TAL CHI
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	549609	06/26/20 10:20	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283171	06/24/20 14:27	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550210	06/30/20 21:03	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 11:50	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	549372	06/25/20 11:58	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/23/20 11:51	JVB	TAL CHI

Client Sample ID: T03S

Lab Sample ID: 500-183935-6

Date Collected: 06/23/20 13:53

Matrix: Water

Date Received: 06/23/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	549617	06/26/20 10:43	JEF	TAL CHI
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	549550	06/25/20 12:28	FXG	TAL CHI
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	549354	06/24/20 14:10	FXG	TAL CHI

Lab Chronicle

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

Job ID: 500-183935-1

Client Sample ID: T03S

Lab Sample ID: 500-183935-6

Date Collected: 06/23/20 13:53

Matrix: Water

Date Received: 06/23/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			548978	06/23/20 17:50	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	549609	06/26/20 10:39	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283171	06/24/20 14:27	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550210	06/30/20 21:04	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 11:53	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	549372	06/25/20 11:58	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/23/20 13:53	JVB	TAL CHI

Client Sample ID: G20S

Lab Sample ID: 500-183935-7

Date Collected: 06/24/20 10:20

Matrix: Water

Date Received: 06/24/20 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			549276	06/25/20 06:38	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	549617	06/26/20 10:55	JEF	TAL CHI
Total Recoverable	Prep	3005A			549276	06/25/20 06:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	549752	06/26/20 13:55	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283379	06/26/20 09:06	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		1	550210	06/30/20 21:05	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:09	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	550123	06/30/20 12:53	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/24/20 10:20	JVB	TAL CHI

Client Sample ID: G33S

Lab Sample ID: 500-183935-8

Date Collected: 06/24/20 13:54

Matrix: Water

Date Received: 06/24/20 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			549276	06/25/20 06:38	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	549617	06/26/20 10:59	JEF	TAL CHI
Total Recoverable	Prep	3005A			549276	06/25/20 06:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	549752	06/26/20 13:59	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283379	06/26/20 09:06	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		1	550210	06/30/20 21:05	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:12	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	550123	06/30/20 12:54	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/24/20 13:54	JVB	TAL CHI

Lab Chronicle

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

Job ID: 500-183935-1

Client Sample ID: T01S
Date Collected: 06/25/20 09:17
Date Received: 06/25/20 15:10

Lab Sample ID: 500-183935-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			549425	06/25/20 17:52	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	549617	06/26/20 11:11	JEF	TAL CHI
Total Recoverable	Prep	3005A			549425	06/25/20 17:52	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	549752	06/26/20 15:36	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283716	06/30/20 10:00	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550210	06/30/20 21:06	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:16	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	550123	06/30/20 12:54	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/25/20 09:17	JVB	TAL CHI

Client Sample ID: G30S
Date Collected: 06/25/20 13:03
Date Received: 06/25/20 15:10

Lab Sample ID: 500-183935-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			549425	06/25/20 17:52	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	549617	06/26/20 11:15	JEF	TAL CHI
Total Recoverable	Prep	3005A			549425	06/25/20 17:52	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	549752	06/26/20 15:39	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283716	06/30/20 10:00	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550210	06/30/20 21:08	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:19	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	550123	06/30/20 12:54	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/25/20 13:03	JVB	TAL CHI

Client Sample ID: T04S
Date Collected: 06/26/20 09:15
Date Received: 06/26/20 14:30

Lab Sample ID: 500-183935-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1	550377	06/26/20 09:15	JVB	TAL CHI

Client Sample ID: R08S
Date Collected: 06/26/20 09:40
Date Received: 06/26/20 14:30

Lab Sample ID: 500-183935-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	550449	07/01/20 23:08	EEN	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	550542	07/01/20 13:26	FXG	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	550587	07/02/20 12:25	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283716	06/30/20 10:00	SAS	TAL CF

Lab Chronicle

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

Job ID: 500-183935-1

Client Sample ID: R08S

Lab Sample ID: 500-183935-12

Date Collected: 06/26/20 09:40
Date Received: 06/26/20 14:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		5	550210	06/30/20 21:08	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:22	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	550123	06/30/20 12:55	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/26/20 09:40	JVB	TAL CHI

Client Sample ID: G45S

Lab Sample ID: 500-183935-13

Date Collected: 06/26/20 10:51
Date Received: 06/26/20 14:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	550449	07/01/20 23:12	EEN	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	550542	07/01/20 13:30	FXG	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	550587	07/02/20 12:29	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283716	06/30/20 10:00	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550220	06/30/20 23:41	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:25	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	550123	06/30/20 12:55	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/26/20 10:51	JVB	TAL CHI

Client Sample ID: G48S

Lab Sample ID: 500-183935-14

Date Collected: 06/26/20 12:40
Date Received: 06/26/20 14:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	550449	07/01/20 23:16	EEN	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	550542	07/01/20 13:33	FXG	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	550587	07/02/20 12:33	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283716	06/30/20 10:00	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550220	06/30/20 23:42	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:30	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	550123	06/30/20 13:26	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/26/20 12:40	JVB	TAL CHI

Lab Chronicle

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

Job ID: 500-183935-1

Client Sample ID: G46S

Lab Sample ID: 500-183935-15

Date Collected: 06/29/20 09:37
Matrix: Water
Date Received: 06/29/20 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	550449	07/01/20 23:20	EEN	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	550542	07/01/20 13:37	FXG	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		100	550587	07/02/20 12:37	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283903	07/01/20 14:35	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		25	550893	07/07/20 00:32	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:33	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	550123	06/30/20 13:26	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/29/20 09:37	JVB	TAL CHI

Client Sample ID: G44S

Lab Sample ID: 500-183935-16

Date Collected: 06/29/20 10:51
Matrix: Water
Date Received: 06/29/20 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	550449	07/01/20 23:24	EEN	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	550542	07/01/20 13:41	FXG	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		5	550587	07/02/20 12:40	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283903	07/01/20 14:35	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		1	550220	06/30/20 22:20	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:36	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	550123	06/30/20 13:27	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/29/20 10:51	JVB	TAL CHI

Client Sample ID: R32S

Lab Sample ID: 500-183935-17

Date Collected: 06/29/20 13:14
Matrix: Water
Date Received: 06/29/20 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	550449	07/01/20 23:29	EEN	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	550542	07/01/20 13:44	FXG	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	550587	07/02/20 12:44	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283903	07/01/20 14:35	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550220	06/30/20 23:45	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:39	MS	TAL CHI

Lab Chronicle

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

Job ID: 500-183935-1

Client Sample ID: R32S
Date Collected: 06/29/20 13:14
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-17
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	550123	06/30/20 13:27	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/29/20 13:14	JVB	TAL CHI

Client Sample ID: R32S DUP
Date Collected: 06/29/20 13:14
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	550449	07/01/20 23:33	EEN	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	550542	07/01/20 13:48	FXG	TAL CHI
Total Recoverable	Prep	3005A			550246	07/01/20 06:35	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	550587	07/02/20 12:48	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283903	07/01/20 14:35	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550220	06/30/20 23:46	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:52	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	550123	06/30/20 13:27	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/29/20 13:14	JVB	TAL CHI

Client Sample ID: G47S
Date Collected: 06/30/20 09:30
Date Received: 06/30/20 12:20

Lab Sample ID: 500-183935-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			550154	06/30/20 17:40	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	550354	07/01/20 12:01	JEF	TAL CHI
Total Recoverable	Prep	3005A			550154	06/30/20 17:40	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	550542	07/01/20 12:11	FXG	TAL CHI
Total Recoverable	Prep	3005A			550154	06/30/20 17:40	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	550587	07/02/20 13:06	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283903	07/01/20 14:35	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550220	06/30/20 23:46	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 12:57	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	550142	06/30/20 15:24	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/30/20 09:30	JVB	TAL CHI

Client Sample ID: G31S
Date Collected: 06/30/20 11:03
Date Received: 06/30/20 12:20

Lab Sample ID: 500-183935-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			550154	06/30/20 17:40	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	550354	07/01/20 12:21	JEF	TAL CHI

Lab Chronicle

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

Job ID: 500-183935-1

Client Sample ID: G31S

Date Collected: 06/30/20 11:03
Date Received: 06/30/20 12:20

Lab Sample ID: 500-183935-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			550154	06/30/20 17:40	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	550542	07/01/20 12:30	FXG	TAL CHI
Total Recoverable	Prep	3005A			550154	06/30/20 17:40	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	550587	07/02/20 13:25	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	283903	07/01/20 14:35	SAS	TAL CF
Total/NA	Analysis	SM 4500 Cl- E		5	550220	06/30/20 23:47	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	550744	07/03/20 13:00	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	550142	06/30/20 15:25	RES	TAL CHI
Total/NA	Analysis	Field Sampling		1	550377	06/30/20 11:03	JVB	TAL CHI

Laboratory References:

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

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-183935-2
Client Project/Site: Joliet #9 (Quarry) CCR

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

Attn: Richard Gnat

Diana Mockler

Authorized for release by:
7/30/2020 5:59:55 PM

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

Table of Contents

Job ID: 500-183935-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-183935-2

Comments
No additional comments.

Receipt
The samples were received on 6/22/2020 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 6.6º C, 6.7º C, 7.1º C, 8.5º C, 9.1º C, 9.1º C and 9.5º C.

RAD
Methods 903.0, 9315: Radium 226 Prep Batch 160-474500:

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

T09S (500-183935-1), T06S (500-183935-2), T05S (500-183935-3), T08S (500-183935-5), T03S (500-183935-6), (LCS 160-474500/1-A), (MB 160-474500/14-A) and (500-183935-F-1-A DU)

Methods 903.0, 9315: Radium 226 Prep Batch 160-474655:

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

G20S (500-183935-7), G33S (500-183935-8), (LCS 160-474655/1-A), (MB 160-474655/7-A) and (500-183935-E-7-A DU)

Method 903.0: Radium-226 Prep Batch 160-475087:

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

G46S (500-183935-15), G44S (500-183935-16), R32S (500-183935-17), R32S DUP (500-183935-18), G47S (500-183935-19), G31S (500-183935-20), (LCS 160-475087/1-A), (MB 160-475087/21-A), (600-207409-A-27-A), (600-207409-A-27-B MS) and (600-207409-A-27-C MSD)

Method 903.0: Radium-226 Prep Batch 160-475087:

This following job has a method comment stating QC is required for these sample. The samples were prepped in a batch that contained a MS/MSD on a different job within the batch. Per client approval, the samples were reported with this narrative.

G46S (500-183935-15), G44S (500-183935-16), R32S (500-183935-17), R32S DUP (500-183935-18), G47S (500-183935-19) and G31S (500-183935-20)

Method 903.0: Radium-226 Prep Batch 160-475087:

The radium-226 matrix spike/matrix spike duplicate (MS/MSD) is recovering (9% and 8%, respectively) outside of the control limits of (75-138%). Sample non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The data have been reported with this narrative.

Job ID: 500-183935-2 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

G46S (500-183935-15), G44S (500-183935-16), R32S (500-183935-17), R32S DUP (500-183935-18), G47S (500-183935-19), G31S (500-183935-20), (LCS 160-475087/1-A), (MB 160-475087/21-A), (600-207409-A-27-A), (600-207409-A-27-B MS) and (600-207409-A-27-C MSD)

Method 903.0: Radium-226 Prep Batch 160-474991:

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

T02S (500-183935-4), T01S (500-183935-9), G30S (500-183935-10), R08S (500-183935-12), G45S (500-183935-13), G48S (500-183935-14), (LCS 160-474991/1-A), (MB 160-474991/17-A) and (500-183935-E-4-A DU)

Methods 904.0, 9320: Radium-228 Prep Batch 160-474502:

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

T09S (500-183935-1), T05S (500-183935-3), T08S (500-183935-5), (LCS 160-474502/1-A), (MB 160-474502/14-A) and (500-183935-F-1-B DU)

Methods 904.0, 9320: Radium-228 Prep Batch 160-474502:

The method blank (MB) has R-228 activity above the MDC and RL. The following associated samples are (choose one: non-detect for the contaminant therefore, re-analysis is not required. The data have been reported.

T09S (500-183935-1), T05S (500-183935-3), T08S (500-183935-5), (LCS 160-474502/1-A), (MB 160-474502/14-A) and (500-183935-F-1-B DU)

Method 904.0: Radium-228 Prep Batch 160-474502:

The following sample did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interferences (see prep NCM 160-198239). The data have been reported with this narrative.

T05S (500-183935-3)

Methods 904.0, 9320: Ra-228 Prep Batch 160-474656

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

G20S (500-183935-7), G33S (500-183935-8), (LCS 160-474656/1-A), (MB 160-474656/7-A) and (500-183935-E-7-B DU)

Method 904.0: Ra-228 Prep Batch 160-475089:

The following samples contained a method comment stating QC is required for these samples. However, QC was performed on a different client job within the batch. Per client approval, the results are reported with this narrative.

Job ID: 500-183935-2 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

G46S (500-183935-15), G44S (500-183935-16), R32S (500-183935-17), R32S DUP (500-183935-18), G47S (500-183935-19) and G31S (500-183935-20)

Method 904.0: Radium 228 Prep Batch 160-475089:

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

G46S (500-183935-15), G44S (500-183935-16), R32S (500-183935-17), R32S DUP (500-183935-18), G47S (500-183935-19), G31S (500-183935-20), (LCS 160-475089/1-A), (MB 160-475089/21-A), (600-207409-A-27-D), (600-207409-A-27-E MS) and (600-207409-A-27-F MSD)

Method 904.0: Radium 228 Prep Batch 160-475089:

The radium-228 matrix spike/matrix spike duplicate (MS/MSD) is recovering (23% and 14% respectively) outside of the control limits of (45-150%). Sample non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The data have been reported with this narrative.

Method 904.0: Radium-228 Prep Batch 160-474994:

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

T06S (500-183935-2), T02S (500-183935-4), T03S (500-183935-6), T01S (500-183935-9), G30S (500-183935-10), R08S (500-183935-12), G45S (500-183935-13), G48S (500-183935-14), (LCS 160-474994/1-A), (MB 160-474994/17-A) and (500-183935-E-4-B DU)

Method PrecSep_0: Radium 228 Prep Batch 160-474502

The following samples were prepared at a reduced aliquot due to brown, cloudy discoloration: T05S (500-183935-3).

Method PrecSep_0: Radium 228 Prep Batch 160-474994:
Sample 500-183935-3 was reduced due to brown discoloration. Samples 500-183935-4, 4DU, and 9 were reduced due to a slightly cloudy appearance: T05S (500-183935-3), T02S (500-183935-4), T01S (500-183935-9) and (500-183935-E-4 DU)

Method PrecSep_0: Radium-228 Prep Batch 160-475952:
Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: T06S (500-183935-2) and T03S (500-183935-6). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-474500

The following samples were prepared at a reduced aliquot due to brown, cloudy coloring :T05S (500-183935-3).

Method PrecSep-21: Radium 226 Prep Batch 160-474991:
Sample 500-183935-3 was reduced due to brown discoloration. Samples 500-183935-4, 4DU, and 9 were reduced due to a slightly cloudy appearance: T05S (500-183935-3), T02S (500-183935-4), T01S (500-183935-9) and (500-183935-E-4 DU)

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: 500-183935-2

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 (Quarry) CCR

Job ID: 500-183935-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-183935-1	T09S	Water	06/22/20 10:08	06/22/20 15:40	
500-183935-2	T06S	Water	06/22/20 11:48	06/22/20 15:40	
500-183935-3	T05S	Water	06/22/20 13:37	06/22/20 15:40	
500-183935-4	T02S	Water	06/23/20 09:24	06/23/20 15:10	
500-183935-5	T08S	Water	06/23/20 11:51	06/23/20 15:10	
500-183935-6	T03S	Water	06/23/20 13:53	06/23/20 15:10	
500-183935-7	G20S	Water	06/24/20 10:20	06/24/20 15:20	
500-183935-8	G33S	Water	06/24/20 13:54	06/24/20 15:20	
500-183935-9	T01S	Water	06/25/20 09:17	06/25/20 15:10	
500-183935-10	G30S	Water	06/25/20 13:03	06/25/20 15:10	
500-183935-12	R08S	Water	06/26/20 09:40	06/26/20 14:30	
500-183935-13	G45S	Water	06/26/20 10:51	06/26/20 14:30	
500-183935-14	G48S	Water	06/26/20 12:40	06/26/20 14:30	
500-183935-15	G46S	Water	06/29/20 09:37	06/29/20 14:30	
500-183935-16	G44S	Water	06/29/20 10:51	06/29/20 14:30	
500-183935-17	R32S	Water	06/29/20 13:14	06/29/20 14:30	
500-183935-18	R32S DUP	Water	06/29/20 13:14	06/29/20 14:30	
500-183935-19	G47S	Water	06/30/20 09:30	06/30/20 12:20	
500-183935-20	G31S	Water	06/30/20 11:03	06/30/20 12:20	

Client Sample ID: T09S

Date Collected: 06/22/20 10:08
Date Received: 06/22/20 15:40

Lab Sample ID: 500-183935-1

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	**1.76**		0.222	0.273	1.00	0.0712	pCi/L	06/25/20 12:11	07/17/20 08:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*06/25/20 12:11*	*07/17/20 08:15*	*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	**1.27**		0.363	0.381	1.00	0.475	pCi/L	06/25/20 12:37	07/07/20 09:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*06/25/20 12:37*	*07/07/20 09:11*	*1*
Y Carrier	*76.6*		*40 - 110*	*06/25/20 12:37*	*07/07/20 09:11*	*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	**3.04**		0.426	0.469	5.00	0.475	pCi/L		07/30/20 08:51	1

Client Sample ID: T06S

Date Collected: 06/22/20 11:48
Date Received: 06/22/20 15:40

Lab Sample ID: 500-183935-2

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	**1.19**		0.190	0.218	1.00	0.0932	pCi/L	06/25/20 12:11	07/17/20 08:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*06/25/20 12:11*	*07/17/20 08:15*	*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	0.478	U	0.345	0.348	1.00	0.545	pCi/L	06/30/20 15:54	07/28/20 12:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.1*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:24*	*1*
Y Carrier	*83.4*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:24*	*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	**1.66**		0.394	0.411	5.00	0.545	pCi/L		07/30/20 08:51	1

Client Sample ID: T05S

Date Collected: 06/22/20 13:37
Date Received: 06/22/20 15:40

Lab Sample ID: 500-183935-3

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	**0.201**		0.134	0.135	1.00	0.182	pCi/L	06/25/20 12:11	07/17/20 08:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*62.8*		*40 - 110*	*06/25/20 12:11*	*07/17/20 08:15*	*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	0.480	U G	0.608	0.609	1.00	1.01	pCi/L	06/25/20 12:37	07/07/20 09:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*62.8*		*40 - 110*	*06/25/20 12:37*	*07/07/20 09:11*	*1*
Y Carrier	*66.9*		*40 - 110*	*06/25/20 12:37*	*07/07/20 09:11*	*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	0.681	U	0.623	0.624	5.00	1.01	pCi/L		07/30/20 08:51	1

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

Job ID: 500-183935-2

Client Sample ID: T02S

Date Collected: 06/23/20 09:24
Date Received: 06/23/20 15:10

Lab Sample ID: 500-183935-4

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	0.768		0.330	0.337	1.00	0.375	pCi/L	06/30/20 15:34	07/29/20 07:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*06/30/20 15:34*	*07/29/20 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	1.30		0.518	0.531	1.00	0.749	pCi/L	06/30/20 15:54	07/28/20 12:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:24*	*1*
Y Carrier	*83.4*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:24*	*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	2.07		0.614	0.629	5.00	0.749	pCi/L		07/30/20 08:51	1

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

Job ID: 500-183935-2

Client Sample ID: T08S

Date Collected: 06/23/20 11:51
Date Received: 06/23/20 15:10

Lab Sample ID: 500-183935-5

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	**0.290**		0.111	0.114	1.00	0.124	pCi/L	06/25/20 12:11	07/17/20 08:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*06/25/20 12:11*	*07/17/20 08:15*	*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	0.331	U	0.278	0.279	1.00	0.442	pCi/L	06/25/20 12:37	07/07/20 09:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*06/25/20 12:37*	*07/07/20 09:12*	*1*
Y Carrier	*77.0*		*40 - 110*	*06/25/20 12:37*	*07/07/20 09:12*	*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	**0.620**		0.299	0.301	5.00	0.442	pCi/L		07/30/20 08:51	1

Client Sample ID: T03S

Date Collected: 06/23/20 13:53
Date Received: 06/23/20 15:10

Lab Sample ID: 500-183935-6

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	0.731		0.146	0.160	1.00	0.0751	pCi/L	06/25/20 12:11	07/17/20 08:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.6*		*40 - 110*	*06/25/20 12:11*	*07/17/20 08:17*	*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	0.915		0.388	0.397	1.00	0.556	pCi/L	06/30/20 15:54	07/28/20 12:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.2*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:24*	*1*
Y Carrier	*81.5*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:24*	*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	1.65		0.415	0.428	5.00	0.556	pCi/L		07/30/20 08:51	1

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

Job ID: 500-183935-2

Client Sample ID: G20S

Date Collected: 06/24/20 10:20
Date Received: 06/24/20 15:20

Lab Sample ID: 500-183935-7

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	1.10		0.235	0.255	1.00	0.148	pCi/L	06/26/20 10:59	07/20/20 14:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*40 - 110*	*06/26/20 10:59*	*07/20/20 14:32*	*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	0.971		0.338	0.350	1.00	0.464	pCi/L	06/26/20 11:16	07/17/20 14:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*40 - 110*	*06/26/20 11:16*	*07/17/20 14:38*	*1*
Y Carrier	*86.0*		*40 - 110*	*06/26/20 11:16*	*07/17/20 14:38*	*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	2.07		0.412	0.433	5.00	0.464	pCi/L		07/30/20 08:51	1

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

Job ID: 500-183935-2

Client Sample ID: G33S

Date Collected: 06/24/20 13:54
Date Received: 06/24/20 15:20

Lab Sample ID: 500-183935-8

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	0.494		0.247	0.251	1.00	0.313	pCi/L	06/26/20 10:59	07/20/20 14:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*49.1*		*40 - 110*	*06/26/20 10:59*	*07/20/20 14:32*	*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	-0.0916	U	0.432	0.432	1.00	0.787	pCi/L	06/26/20 11:16	07/17/20 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*49.1*		*40 - 110*	*06/26/20 11:16*	*07/17/20 14:39*	*1*
Y Carrier	*83.0*		*40 - 110*	*06/26/20 11:16*	*07/17/20 14:39*	*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	0.403	U	0.498	0.500	5.00	0.787	pCi/L		07/30/20 08:51	1

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

Job ID: 500-183935-2

Client Sample ID: T01S

Date Collected: 06/25/20 09:17
Date Received: 06/25/20 15:10

Lab Sample ID: 500-183935-9

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	1.01		0.334	0.346	1.00	0.263	pCi/L	06/30/20 15:34	07/29/20 07:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*06/30/20 15:34*	*07/29/20 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	0.890		0.497	0.503	1.00	0.757	pCi/L	06/30/20 15:54	07/28/20 12:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:24*	*1*
Y Carrier	*80.4*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:24*	*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	1.90		0.599	0.611	5.00	0.757	pCi/L		07/30/20 08:51	1

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

Job ID: 500-183935-2

Client Sample ID: G30S
Date Collected: 06/25/20 13:03
Date Received: 06/25/20 15:10

Lab Sample ID: 500-183935-10
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	0.846		0.260	0.271	1.00	0.214	pCi/L	06/30/20 15:34	07/29/20 07:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.2*		*40 - 110*	*06/30/20 15:34*	*07/29/20 07:41*	*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	1.34		0.399	0.417	1.00	0.535	pCi/L	06/30/20 15:54	07/28/20 12:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.2*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:25*	*1*
Y Carrier	*83.4*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:25*	*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	2.19		0.476	0.497	5.00	0.535	pCi/L		07/30/20 08:51	1

Client Sample ID: R08S

Date Collected: 06/26/20 09:40
Date Received: 06/26/20 14:30

Lab Sample ID: 500-183935-12

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	0.837		0.265	0.276	1.00	0.208	pCi/L	06/30/20 15:34	07/29/20 07:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*06/30/20 15:34*	*07/29/20 07:41*	*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	0.846		0.387	0.395	1.00	0.570	pCi/L	06/30/20 15:54	07/28/20 12:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:25*	*1*
Y Carrier	*80.0*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:25*	*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	1.68		0.469	0.482	5.00	0.570	pCi/L		07/30/20 08:50	1

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

Job ID: 500-183935-2

Client Sample ID: G45S

Date Collected: 06/26/20 10:51
Date Received: 06/26/20 14:30

Lab Sample ID: 500-183935-13

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	2.04		0.390	0.431	1.00	0.186	pCi/L	06/30/20 15:34	07/29/20 07:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*40 - 110*	*06/30/20 15:34*	*07/29/20 07:41*	*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		0.356	0.369	1.00	0.477	pCi/L	06/30/20 15:54	07/28/20 12:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:25*	*1*
Y Carrier	*80.4*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:25*	*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	3.10		0.528	0.567	5.00	0.477	pCi/L		07/30/20 08:50	1

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

Job ID: 500-183935-2

Client Sample ID: G48S
Date Collected: 06/26/20 12:40
Date Received: 06/26/20 14:30

Lab Sample ID: 500-183935-14
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	**0.624**		0.234	0.240	1.00	0.200	pCi/L	06/30/20 15:34	07/29/20 07:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.8*		*40 - 110*	*06/30/20 15:34*	*07/29/20 07:41*	*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	0.347	U	0.325	0.327	1.00	0.525	pCi/L	06/30/20 15:54	07/28/20 12:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.8*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:25*	*1*
Y Carrier	*83.0*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:25*	*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	**0.971**		0.400	0.406	5.00	0.525	pCi/L		07/30/20 08:50	1

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

Job ID: 500-183935-2

Client Sample ID: G46S

Date Collected: 06/29/20 09:37
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-15

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	0.947		0.217	0.233	1.00	0.152	pCi/L	07/02/20 08:11	07/27/20 09:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*07/02/20 08:11*	*07/27/20 09:00*	*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	1.83		0.406	0.439	1.00	0.476	pCi/L	07/02/20 09:09	07/24/20 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:41*	*1*
Y Carrier	*72.5*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:41*	*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	2.78		0.460	0.497	5.00	0.476	pCi/L		07/30/20 08:50	1

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

Job ID: 500-183935-2

Client Sample ID: G44S

Date Collected: 06/29/20 10:51
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-16

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	0.513		0.181	0.187	1.00	0.193	pCi/L	07/02/20 08:11	07/27/20 09:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.4*		*40 - 110*	*07/02/20 08:11*	*07/27/20 09:00*	*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	1.35		0.399	0.418	1.00	0.528	pCi/L	07/02/20 09:09	07/24/20 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.4*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:41*	*1*
Y Carrier	*73.6*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:41*	*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	1.86		0.438	0.458	5.00	0.528	pCi/L		07/30/20 08:50	1

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

Job ID: 500-183935-2

Client Sample ID: R32S

Date Collected: 06/29/20 13:14
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-17

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	1.69		0.283	0.322	1.00	0.159	pCi/L	07/02/20 08:11	07/27/20 09:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*40 - 110*	*07/02/20 08:11*	*07/27/20 09:00*	*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	2.22		0.434	0.479	1.00	0.479	pCi/L	07/02/20 09:09	07/24/20 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:41*	*1*
Y Carrier	*75.5*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:41*	*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	3.92		0.518	0.577	5.00	0.479	pCi/L		07/30/20 08:50	1

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

Job ID: 500-183935-2

Client Sample ID: R32S DUP

Date Collected: 06/29/20 13:14
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-18

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	1.63		0.265	0.303	1.00	0.109	pCi/L	07/02/20 08:11	07/27/20 09:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.0*		*40 - 110*	*07/02/20 08:11*	*07/27/20 09:11*	*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	0.861		0.332	0.341	1.00	0.464	pCi/L	07/02/20 09:09	07/24/20 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.0*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:41*	*1*
Y Carrier	*73.3*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:41*	*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	2.49		0.425	0.456	5.00	0.464	pCi/L		07/30/20 08:50	1

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

Job ID: 500-183935-2

Client Sample ID: G47S

Date Collected: 06/30/20 09:30
Date Received: 06/30/20 12:20

Lab Sample ID: 500-183935-19

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	0.441		0.144	0.150	1.00	0.110	pCi/L	07/02/20 08:11	07/27/20 09:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.1*		*40 - 110*	*07/02/20 08:11*	*07/27/20 09:11*	*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	0.797		0.308	0.316	1.00	0.426	pCi/L	07/02/20 09:09	07/24/20 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.1*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:41*	*1*
Y Carrier	*75.1*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:41*	*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	1.24		0.340	0.350	5.00	0.426	pCi/L		07/30/20 08:50	1

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

Job ID: 500-183935-2

Client Sample ID: G31S

Date Collected: 06/30/20 11:03
Date Received: 06/30/20 12:20

Lab Sample ID: 500-183935-20

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	2.07		0.312	0.363	1.00	0.184	pCi/L	07/02/20 08:11	07/27/20 09:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.4*		*40 - 110*	*07/02/20 08:11*	*07/27/20 09:11*	*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	1.73		0.390	0.421	1.00	0.459	pCi/L	07/02/20 09:09	07/24/20 09:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.4*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:42*	*1*
Y Carrier	*76.6*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:42*	*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	3.80		0.499	0.556	5.00	0.459	pCi/L		07/30/20 08:50	1

Definitions/Glossary

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

Job ID: 500-183935-2

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Rad

Prep Batch: 474500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-1	T09S	Total/NA	Water	PrecSep-21	
500-183935-2	T06S	Total/NA	Water	PrecSep-21	
500-183935-3	T05S	Total/NA	Water	PrecSep-21	
500-183935-5	T08S	Total/NA	Water	PrecSep-21	
500-183935-6	T03S	Total/NA	Water	PrecSep-21	
MB 160-474500/14-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-474500/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-183935-1 DU	T09S	Total/NA	Water	PrecSep-21	

Prep Batch: 474502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-1	T09S	Total/NA	Water	PrecSep_0	
500-183935-3	T05S	Total/NA	Water	PrecSep_0	
500-183935-5	T08S	Total/NA	Water	PrecSep_0	
MB 160-474502/14-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-474502/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-183935-1 DU	T09S	Total/NA	Water	PrecSep_0	

Prep Batch: 474655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-7	G20S	Total/NA	Water	PrecSep-21	
500-183935-8	G33S	Total/NA	Water	PrecSep-21	
MB 160-474655/7-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-474655/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-183935-7 DU	G20S	Total/NA	Water	PrecSep-21	

Prep Batch: 474656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-7	G20S	Total/NA	Water	PrecSep_0	
500-183935-8	G33S	Total/NA	Water	PrecSep_0	
MB 160-474656/7-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-474656/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-183935-7 DU	G20S	Total/NA	Water	PrecSep_0	

Prep Batch: 474991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-4	T02S	Total/NA	Water	PrecSep-21	
500-183935-9	T01S	Total/NA	Water	PrecSep-21	
500-183935-10	G30S	Total/NA	Water	PrecSep-21	
500-183935-12	R08S	Total/NA	Water	PrecSep-21	
500-183935-13	G45S	Total/NA	Water	PrecSep-21	
500-183935-14	G48S	Total/NA	Water	PrecSep-21	
MB 160-474991/17-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-474991/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-183935-4 DU	T02S	Total/NA	Water	PrecSep-21	

Prep Batch: 474994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-2	T06S	Total/NA	Water	PrecSep_0	
500-183935-4	T02S	Total/NA	Water	PrecSep_0	
500-183935-6	T03S	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 474994 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-9	T01S	Total/NA	Water	PrecSep_0	
500-183935-10	G30S	Total/NA	Water	PrecSep_0	
500-183935-12	R08S	Total/NA	Water	PrecSep_0	
500-183935-13	G45S	Total/NA	Water	PrecSep_0	
500-183935-14	G48S	Total/NA	Water	PrecSep_0	
MB 160-474994/17-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-474994/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-183935-4 DU	T02S	Total/NA	Water	PrecSep_0	

Prep Batch: 475087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-15	G46S	Total/NA	Water	PrecSep-21	
500-183935-16	G44S	Total/NA	Water	PrecSep-21	
500-183935-17	R32S	Total/NA	Water	PrecSep-21	
500-183935-18	R32S DUP	Total/NA	Water	PrecSep-21	
500-183935-19	G47S	Total/NA	Water	PrecSep-21	
500-183935-20	G31S	Total/NA	Water	PrecSep-21	
MB 160-475087/21-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-475087/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 475089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-183935-15	G46S	Total/NA	Water	PrecSep_0	
500-183935-16	G44S	Total/NA	Water	PrecSep_0	
500-183935-17	R32S	Total/NA	Water	PrecSep_0	
500-183935-18	R32S DUP	Total/NA	Water	PrecSep_0	
500-183935-19	G47S	Total/NA	Water	PrecSep_0	
500-183935-20	G31S	Total/NA	Water	PrecSep_0	
MB 160-475089/21-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-475089/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-474500/14-A
Matrix: Water
Analysis Batch: 476585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474500

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.05006	U	0.0571	0.0573	1.00	0.0920	pCi/L	06/25/20 12:11	07/17/20 08:18	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.8*		*40 - 110*	*06/25/20 12:11*	*07/17/20 08:18*	*1*

Lab Sample ID: LCS 160-474500/1-A
Matrix: Water
Analysis Batch: 476585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474500

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.03		1.04	1.00	0.0681	pCi/L	88	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*97.1*		*40 - 110*

Lab Sample ID: 500-183935-1 DU
Matrix: Water
Analysis Batch: 476585

Client Sample ID: T09S
Prep Type: Total/NA
Prep Batch: 474500

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	1.76			1.809		0.284	1.00	0.109	pCi/L			0.08	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*90.1*		*40 - 110*

Lab Sample ID: MB 160-474655/7-A
Matrix: Water
Analysis Batch: 476658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474655

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01513	U	0.0675	0.0675	1.00	0.135	pCi/L	06/26/20 10:59	07/20/20 14:33	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.7*		*40 - 110*	*06/26/20 10:59*	*07/20/20 14:33*	*1*

Lab Sample ID: LCS 160-474655/1-A
Matrix: Water
Analysis Batch: 476658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474655

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	9.763		1.10	1.00	0.114	pCi/L	86	75 - 125		

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-474655/1-A
Matrix: Water
Analysis Batch: 476658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474655

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	89.8		40 - 110

Lab Sample ID: 500-183935-7 DU
Matrix: Water
Analysis Batch: 476658

Client Sample ID: G20S
Prep Type: Total/NA
Prep Batch: 474655

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	1.10			0.9767		0.237	1.00	0.156	pCi/L			0.26	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	89.5		40 - 110

Lab Sample ID: MB 160-474991/17-A
Matrix: Water
Analysis Batch: 477682

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474991

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.08815	U	0.131	0.131	1.00	0.224	pCi/L	06/30/20 15:34	07/29/20 07:42	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	96.7		40 - 110	06/30/20 15:34	07/29/20 07:42	1

Lab Sample ID: LCS 160-474991/1-A
Matrix: Water
Analysis Batch: 477682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474991

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.33		1.29	1.00	0.201	pCi/L	91	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	80.4		40 - 110

Lab Sample ID: 500-183935-4 DU
Matrix: Water
Analysis Batch: 477682

Client Sample ID: T02S
Prep Type: Total/NA
Prep Batch: 474991

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.768			0.8181		0.335	1.00	0.344	pCi/L			0.07	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	86.4		40 - 110

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-475087/21-A
Matrix: Water
Analysis Batch: 477515

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475087

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01154	U	0.0578	0.0578	1.00	0.119	pCi/L	07/02/20 08:11	07/27/20 11:07	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*40 - 110*	*07/02/20 08:11*	*07/27/20 11:07*	*1*

Lab Sample ID: LCS 160-475087/1-A
Matrix: Water
Analysis Batch: 477516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475087

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.12		1.14	1.00	0.165	pCi/L	89	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.2*		*40 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-474502/14-A
Matrix: Water
Analysis Batch: 475711

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474502

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.084		0.451	0.490	1.00	0.562	pCi/L	06/25/20 12:37	07/07/20 09:06	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.8*		*40 - 110*	*06/25/20 12:37*	*07/07/20 09:06*	*1*
Y Carrier	*75.1*		*40 - 110*	*06/25/20 12:37*	*07/07/20 09:06*	*1*

Lab Sample ID: LCS 160-474502/1-A
Matrix: Water
Analysis Batch: 475712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474502

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	10.34		1.19	1.00	0.420	pCi/L	100	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*97.1*		*40 - 110*
Y Carrier	*78.5*		*40 - 110*

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 500-183935-1 DU
Matrix: Water
Analysis Batch: 475712

Client Sample ID: T09S
Prep Type: Total/NA
Prep Batch: 474502

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	1.27			1.235		0.369	1.00	0.448	pCi/L			0.05	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*90.1*		*40 - 110*
Y Carrier	*78.1*		*40 - 110*

Lab Sample ID: MB 160-474656/7-A
Matrix: Water
Analysis Batch: 476647

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474656

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.04948	U	0.269	0.269	1.00	0.485	pCi/L	06/26/20 11:16	07/17/20 14:39	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.7*		*40 - 110*	*06/26/20 11:16*	*07/17/20 14:39*	*1*
Y Carrier	*82.6*		*40 - 110*	*06/26/20 11:16*	*07/17/20 14:39*	*1*

Lab Sample ID: LCS 160-474656/1-A
Matrix: Water
Analysis Batch: 476647

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474656

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	10.20		1.18	1.00	0.414	pCi/L	99	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.8*		*40 - 110*
Y Carrier	*84.5*		*40 - 110*

Lab Sample ID: 500-183935-7 DU
Matrix: Water
Analysis Batch: 476647

Client Sample ID: G20S
Prep Type: Total/NA
Prep Batch: 474656

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.971			0.6571		0.292	1.00	0.412	pCi/L			0.49	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*89.5*		*40 - 110*
Y Carrier	*86.7*		*40 - 110*

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: MB 160-474994/17-A
Matrix: Water
Analysis Batch: 477661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474994

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1267	U	0.250	0.251	1.00	0.427	pCi/L	06/30/20 15:54	07/28/20 12:25	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.7*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:25*	*1*
Y Carrier	*83.4*		*40 - 110*	*06/30/20 15:54*	*07/28/20 12:25*	*1*

Lab Sample ID: LCS 160-474994/1-A
Matrix: Water
Analysis Batch: 477661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474994

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.2	11.63		1.38	1.00	0.581	pCi/L	114	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*80.4*		*40 - 110*
Y Carrier	*80.0*		*40 - 110*

Lab Sample ID: 500-183935-4 DU
Matrix: Water
Analysis Batch: 477661

Client Sample ID: T02S
Prep Type: Total/NA
Prep Batch: 474994

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	1.30			1.102		0.477	1.00	0.671	pCi/L			0.20	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*86.4*		*40 - 110*
Y Carrier	*83.0*		*40 - 110*

Lab Sample ID: MB 160-475089/21-A
Matrix: Water
Analysis Batch: 477410

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475089

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.6804		0.325	0.331	1.00	0.484	pCi/L	07/02/20 09:09	07/24/20 09:48	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:48*	*1*
Y Carrier	*86.4*		*40 - 110*	*07/02/20 09:09*	*07/24/20 09:48*	*1*

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

Job ID: 500-183935-2

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-475089/1-A
Matrix: Water
Analysis Batch: 477411

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475089

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.2	11.00		1.32	1.00	0.623	pCi/L	107	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.2*		*40 - 110*
Y Carrier	*73.3*		*40 - 110*

Chain of Custody Record 457910

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Cyanide, Pb, Li, Mo, S

TAL-8210

Client Contact	Project Manager:	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:	☐ 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: 2020 GW	☐ 2 days			Job / SDG No.: 500-183935
P O #	☐ 1 day			

500-183935 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	TDS, F, Cl, SO4	Total Metals As & Ba	Sample Specific Notes:
TOQS	06/22/20	1008		W	5			1	1	1	1	1	
TO6S	06/22/20	1148		W	5			1	1	1	1	1	
TO5S	06/22/20	1337		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:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 9.1 Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL 1540	06/22/20			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by Laboratory by:	Company:	Date/Time:
				TA-CHI	6/22/20 1540

Chain of Custody Record 457911

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Pb, Li, Mo, S, Ca, Co

TAL-8210

Client Contact	Project Manager: Jodie Bracken	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: 2020 GW	☐ 2 days			Job / SDG No.: 500-183935
PO #	☐ 1 day			

500-183935 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	TDS, Fl, Cl, SO4	Total Metals As, Ba, Cd, Co, Li, Mo, S	Sample Specific Notes:
4 TO28	06/23/20	0924		W	5			✓	✓	✓	✓	✓	
5 TOAJ	06/23/20	1151		W	5			✓	✓	✓	✓	✓	
6 TO3J	06/23/20	1353		W	5			✓	✓	✓	✓	✓	

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:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 8.5 Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company: TAL 1510	Date/Time: 06/22/20	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Shan Scott	Company: TA-CHI	Date/Time: 06/23/20 1510

Chain of Custody Record

457912

eurofins | Environment Testing TestAmerica

Address: _____

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

TAL-8210

Client Contact	Project Manager: Jodie Brackett	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: 2020 GW	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			500-183935

500-183935 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 Ra 226+228	TDS, Fl, Cl, SO4	Total Metals As, B, Ba, Ca, Pb, Li, Mo, S	Sample Specific Notes:
G205	06/24/20	1020		W	5			1	1	1	1	1	
G335	06/24/20	1354		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:

6.6

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:
	TMI	06/24/20 @ 1520			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Ann Scott	TA-Ark	6/24/20 1520

Chain of Custody Record

457913 eurofins Environment Testing TestAmerica

Address: ______________________

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

TAL-8210

Client Contact	Project Manager: Diana Mockler	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: 2020 GW	☐ 2 days			Job / SDG No.: 500-183935
P O #	☐ 1 day			

500-183935 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	TDS, Fl, Cl, SO4	Total Metals As, B, Ba, Ca, Cr, Co, Pb, Li, Mo, Se	Sample Specific Notes:
9	T01S	06/25/20	0917		W	5			✓	✓	✓	✓	✓	
10	G30S	06/25/20	1303		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: 7.1 Corr'd: ______ Therm ID No.: ______

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TM	06/25/20 @ 1510			
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: 6/25/20 1510

Chain of Custody Record 457914

eurofins | Environment Testing TestAmerica

Address: ____________________

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

TAL-8210

Client Contact	Project Manager: Diana Mackler	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: 2020 GW	☐ 2 days		500-183935 COC	Job / SDG No.:
P O #	☐ 1 day			500-183935

	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	TDS, Fl, Cl, SO4	Total Metals As, B, Ba, Ca, Co, Pb, Li, Mo, S	Sample Specific Notes:
11	T04S	06/26/20	0915		—									Unable to access well due to excavation
12	R08S	06/26/20	0940		W	5			✓	✓	✓	✓	✓	
13	G45S	06/26/20	1051		W	5			✓	✓	✓	✓	✓	
14	G48S	06/26/20	1240		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: 2.1 Corr'd: ______ Therm ID No.: ______

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TMA	06/26/20 1430			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	TA-CHI	6/26/20 1430

Chain of Custody Record 457915

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: PA Li Mo, S

TAL-8210

Client Contact	Project Manager: Diany Mackler	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.: 500-183935
Site: 2020 CW	☐ 2 days			
P O #	☐ 1 day			

500-183935 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 226/228 Combined	TDS, Fl, Cl, SO4	Total Metals As, B, Ba, Ca,
15 G46S	06/29/20	0937		W	5			✓	✓	✓	✓
16 G44S	06/29/20	1051		W	5			✓	✓	✓	✓
17 R32S	06/29/20	1314		W	5			✓	✓	✓	✓
18 R32S DUP	06/29/20	1314		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: 6.7 Corr'd: 6.7 | Therm ID No.: _____

Relinquished by:	Company: TAL	Date/Time: 06/29/20 1430	Received by:	Company: TA	Date/Time: 06/29/20 1430
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 457916

eurofins | Environment Testing TestAmerica

Address: _____

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

TAL-8210

Client Contact	Project Manager: Diana Mockler	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: 2870 CW	☐ 2 days			Job / SDG No.: 500-183935
P O #	☐ 1 day		500-183935 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	TDS, Fl, Cl, SO4	Total Metals: As, B, Ca, Co, Pb, Mo, Se
19	G47S	06/30/20	0930		GW	5			-	-	-	-	-
20	G31S	06/30/20	1103		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: 9.5 Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TAL	06/30/20 1220	[signature]		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TAL	Date/Time: 6/30/20 1220

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136584.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/14/2020			
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:								
T02S (500-183935-4)	6/23/20	09:24 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T08S (500-183935-5)	6/23/20	11:51 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T03S (500-183935-6)	6/23/20	13:53 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:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	6/23/20 1630	TA-CHI	FE		
2	FE			Jan Byk	6/24/20 08:42	ETASTL
3						

Custody Seals Intact: ∆ Yes ∆ 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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136576.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/20/2020			
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, 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:								
T09S (500-183935-1)	6/22/20	10:08 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T06S (500-183935-2)	6/22/20	11:48 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
T05S (500-183935-3)	6/22/20	13:37 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:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	6/23/20 1630	TA-CHI	FE		
2	FE					
3					6/24/20 08:42	ETASTL

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136646.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/14/2020			
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:								
G20S (500-183935-7)	6/24/20	10:20 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G33S (500-183935-8)	6/24/20	13:54 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:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	6/24/20 1700	TA-CHI	FE		
2	FE			Jack Boyd	6/25/20 08:45	ETASTL
3						

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136715.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/2/2020			
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:								
T01S (500-183935-9)	6/25/20	09:17 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G30S (500-183935-10)	6/25/20	13:03 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
R08S (500-183935-12)	6/26/20	09:40 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G45S (500-183935-13)	6/26/20	10:51 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G48S (500-183935-14)	6/26/20	12:40 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:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	6/26/20 1600	TA-CHI	FED EX		
2	FED EX				6/27/2020 0822	ETA STL
3						

Custody Seals Intact: ∆ Yes ∆ 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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136826.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/2/2020			
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:								
G47S (500-183935-19)	6/30/20	09:30 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G31S (500-183935-20)	6/30/20	11:03 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:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Stephanie Hernandez	6/30/20 1630	TA-CHI	FED EX		
FED EX					
				7/1/2020 0847	ETA STL

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 America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-136826.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-183935-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/2/2020			
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 (500-183935-15)	6/29/20	09:37 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
G44S (500-183935-16)	6/29/20	10:51 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
R32S (500-183935-17)	6/29/20	13:14 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
R32S DUP (500-183935-18)	6/29/20	13:14 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:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Stephanie Hernandez	6/30/20 1630	TA-CHI	FED EX		
Relinquished by: FED EX	Date/Time:	Company	Received by:	Date/Time: 7/1/2020 0847	Company ETA STL
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: 500-183935-2

Login Number: 183935
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	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	9.1,8.5,6.6,7.1,9.1,6.7,9.5
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: 500-183935-2

Login Number: 183935
List Number: 3
Creator: Boyd, Jacob C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/24/20 12:17 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.	N/A	
Cooler Temperature is acceptable.	N/A	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-183935-2

Login Number: 183935
List Number: 5
Creator: Boyd, Jacob C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/25/20 02:09 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.	N/A	
Cooler Temperature is acceptable.	N/A	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-183935-2

Login Number: 183935
List Number: 7
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 06/27/20 10:01 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-183935-2

Login Number: 183935
List Number: 10
Creator: Boyd, Jacob C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 07/01/20 11:27 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.	N/A	
Cooler Temperature is acceptable.	N/A	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Chronicle

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

Job ID: 500-183935-2

Client Sample ID: T09S
Date Collected: 06/22/20 10:08
Date Received: 06/22/20 15:40

Lab Sample ID: 500-183935-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474500	06/25/20 12:11	RJD	TAL SL
Total/NA	Analysis	903.0		1	476585	07/17/20 08:15	JLC	TAL SL
Total/NA	Prep	PrecSep_0			474502	06/25/20 12:37	RJD	TAL SL
Total/NA	Analysis	904.0		1	475712	07/07/20 09:11	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477748	07/30/20 08:51	SMP	TAL SL

Client Sample ID: T06S
Date Collected: 06/22/20 11:48
Date Received: 06/22/20 15:40

Lab Sample ID: 500-183935-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474500	06/25/20 12:11	RJD	TAL SL
Total/NA	Analysis	903.0		1	476585	07/17/20 08:15	JLC	TAL SL
Total/NA	Prep	PrecSep_0			474994	06/30/20 15:54	MNH	TAL SL
Total/NA	Analysis	904.0		1	477661	07/28/20 12:24	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477748	07/30/20 08:51	SMP	TAL SL

Client Sample ID: T05S
Date Collected: 06/22/20 13:37
Date Received: 06/22/20 15:40

Lab Sample ID: 500-183935-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474500	06/25/20 12:11	RJD	TAL SL
Total/NA	Analysis	903.0		1	476585	07/17/20 08:15	JLC	TAL SL
Total/NA	Prep	PrecSep_0			474502	06/25/20 12:37	RJD	TAL SL
Total/NA	Analysis	904.0		1	475712	07/07/20 09:11	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477748	07/30/20 08:51	SMP	TAL SL

Client Sample ID: T02S
Date Collected: 06/23/20 09:24
Date Received: 06/23/20 15:10

Lab Sample ID: 500-183935-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474991	06/30/20 15:34	MNH	TAL SL
Total/NA	Analysis	903.0		1	477682	07/29/20 07:39	SCB	TAL SL
Total/NA	Prep	PrecSep_0			474994	06/30/20 15:54	MNH	TAL SL
Total/NA	Analysis	904.0		1	477661	07/28/20 12:24	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477748	07/30/20 08:51	SMP	TAL SL

Lab Chronicle

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

Job ID: 500-183935-2

Client Sample ID: T08S
Date Collected: 06/23/20 11:51
Date Received: 06/23/20 15:10

Lab Sample ID: 500-183935-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474500	06/25/20 12:11	RJD	TAL SL
Total/NA	Analysis	903.0		1	476585	07/17/20 08:15	JLC	TAL SL
Total/NA	Prep	PrecSep_0			474502	06/25/20 12:37	RJD	TAL SL
Total/NA	Analysis	904.0		1	475712	07/07/20 09:12	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477748	07/30/20 08:51	SMP	TAL SL

Client Sample ID: T03S
Date Collected: 06/23/20 13:53
Date Received: 06/23/20 15:10

Lab Sample ID: 500-183935-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474500	06/25/20 12:11	RJD	TAL SL
Total/NA	Analysis	903.0		1	476585	07/17/20 08:17	JLC	TAL SL
Total/NA	Prep	PrecSep_0			474994	06/30/20 15:54	MNH	TAL SL
Total/NA	Analysis	904.0		1	477661	07/28/20 12:24	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477748	07/30/20 08:51	SMP	TAL SL

Client Sample ID: G20S
Date Collected: 06/24/20 10:20
Date Received: 06/24/20 15:20

Lab Sample ID: 500-183935-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474655	06/26/20 10:59	RJD	TAL SL
Total/NA	Analysis	903.0		1	476658	07/20/20 14:32	JLC	TAL SL
Total/NA	Prep	PrecSep_0			474656	06/26/20 11:16	RJD	TAL SL
Total/NA	Analysis	904.0		1	476647	07/17/20 14:38	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477748	07/30/20 08:51	SMP	TAL SL

Client Sample ID: G33S
Date Collected: 06/24/20 13:54
Date Received: 06/24/20 15:20

Lab Sample ID: 500-183935-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474655	06/26/20 10:59	RJD	TAL SL
Total/NA	Analysis	903.0		1	476658	07/20/20 14:32	JLC	TAL SL
Total/NA	Prep	PrecSep_0			474656	06/26/20 11:16	RJD	TAL SL
Total/NA	Analysis	904.0		1	476647	07/17/20 14:39	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477748	07/30/20 08:51	SMP	TAL SL

Lab Chronicle

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

Job ID: 500-183935-2

Client Sample ID: T01S

Lab Sample ID: 500-183935-9
Date Collected: 06/25/20 09:17
Matrix: Water
Date Received: 06/25/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474991	06/30/20 15:34	MNH	TAL SL
Total/NA	Analysis	903.0		1	477682	07/29/20 07:40	SCB	TAL SL
Total/NA	Prep	PrecSep_0			474994	06/30/20 15:54	MNH	TAL SL
Total/NA	Analysis	904.0		1	477661	07/28/20 12:24	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477748	07/30/20 08:51	SMP	TAL SL

Client Sample ID: G30S

Lab Sample ID: 500-183935-10
Date Collected: 06/25/20 13:03
Matrix: Water
Date Received: 06/25/20 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474991	06/30/20 15:34	MNH	TAL SL
Total/NA	Analysis	903.0		1	477682	07/29/20 07:41	SCB	TAL SL
Total/NA	Prep	PrecSep_0			474994	06/30/20 15:54	MNH	TAL SL
Total/NA	Analysis	904.0		1	477661	07/28/20 12:25	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477748	07/30/20 08:51	SMP	TAL SL

Client Sample ID: R08S

Lab Sample ID: 500-183935-12
Date Collected: 06/26/20 09:40
Matrix: Water
Date Received: 06/26/20 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474991	06/30/20 15:34	MNH	TAL SL
Total/NA	Analysis	903.0		1	477682	07/29/20 07:41	SCB	TAL SL
Total/NA	Prep	PrecSep_0			474994	06/30/20 15:54	MNH	TAL SL
Total/NA	Analysis	904.0		1	477661	07/28/20 12:25	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477747	07/30/20 08:50	SMP	TAL SL

Client Sample ID: G45S

Lab Sample ID: 500-183935-13
Date Collected: 06/26/20 10:51
Matrix: Water
Date Received: 06/26/20 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474991	06/30/20 15:34	MNH	TAL SL
Total/NA	Analysis	903.0		1	477682	07/29/20 07:41	SCB	TAL SL
Total/NA	Prep	PrecSep_0			474994	06/30/20 15:54	MNH	TAL SL
Total/NA	Analysis	904.0		1	477661	07/28/20 12:25	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477747	07/30/20 08:50	SMP	TAL SL

Lab Chronicle

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

Job ID: 500-183935-2

Client Sample ID: G48S
Date Collected: 06/26/20 12:40
Date Received: 06/26/20 14:30

Lab Sample ID: 500-183935-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			474991	06/30/20 15:34	MNH	TAL SL
Total/NA	Analysis	903.0		1	477682	07/29/20 07:41	SCB	TAL SL
Total/NA	Prep	PrecSep_0			474994	06/30/20 15:54	MNH	TAL SL
Total/NA	Analysis	904.0		1	477661	07/28/20 12:25	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477747	07/30/20 08:50	SMP	TAL SL

Client Sample ID: G46S
Date Collected: 06/29/20 09:37
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			475087	07/02/20 08:11	RBR	TAL SL
Total/NA	Analysis	903.0		1	477516	07/27/20 09:00	KRR	TAL SL
Total/NA	Prep	PrecSep_0			475089	07/02/20 09:09	RBR	TAL SL
Total/NA	Analysis	904.0		1	477411	07/24/20 09:41	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477747	07/30/20 08:50	SMP	TAL SL

Client Sample ID: G44S
Date Collected: 06/29/20 10:51
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			475087	07/02/20 08:11	RBR	TAL SL
Total/NA	Analysis	903.0		1	477516	07/27/20 09:00	KRR	TAL SL
Total/NA	Prep	PrecSep_0			475089	07/02/20 09:09	RBR	TAL SL
Total/NA	Analysis	904.0		1	477411	07/24/20 09:41	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477747	07/30/20 08:50	SMP	TAL SL

Client Sample ID: R32S
Date Collected: 06/29/20 13:14
Date Received: 06/29/20 14:30

Lab Sample ID: 500-183935-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			475087	07/02/20 08:11	RBR	TAL SL
Total/NA	Analysis	903.0		1	477516	07/27/20 09:00	KRR	TAL SL
Total/NA	Prep	PrecSep_0			475089	07/02/20 09:09	RBR	TAL SL
Total/NA	Analysis	904.0		1	477411	07/24/20 09:41	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477747	07/30/20 08:50	SMP	TAL SL

Lab Chronicle

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

Job ID: 500-183935-2

Client Sample ID: R32S DUP

Lab Sample ID: 500-183935-18

Date Collected: 06/29/20 13:14

Matrix: Water

Date Received: 06/29/20 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			475087	07/02/20 08:11	RBR	TAL SL
Total/NA	Analysis	903.0		1	477515	07/27/20 09:11	KRR	TAL SL
Total/NA	Prep	PrecSep_0			475089	07/02/20 09:09	RBR	TAL SL
Total/NA	Analysis	904.0		1	477411	07/24/20 09:41	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477747	07/30/20 08:50	SMP	TAL SL

Client Sample ID: G47S

Lab Sample ID: 500-183935-19

Date Collected: 06/30/20 09:30

Matrix: Water

Date Received: 06/30/20 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			475087	07/02/20 08:11	RBR	TAL SL
Total/NA	Analysis	903.0		1	477515	07/27/20 09:11	KRR	TAL SL
Total/NA	Prep	PrecSep_0			475089	07/02/20 09:09	RBR	TAL SL
Total/NA	Analysis	904.0		1	477411	07/24/20 09:41	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477747	07/30/20 08:50	SMP	TAL SL

Client Sample ID: G31S

Lab Sample ID: 500-183935-20

Date Collected: 06/30/20 11:03

Matrix: Water

Date Received: 06/30/20 12:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			475087	07/02/20 08:11	RBR	TAL SL
Total/NA	Analysis	903.0		1	477515	07/27/20 09:11	KRR	TAL SL
Total/NA	Prep	PrecSep_0			475089	07/02/20 09:09	RBR	TAL SL
Total/NA	Analysis	904.0		1	477411	07/24/20 09:42	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	477747	07/30/20 08:50	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 (Quarry) CCR

Job ID: 500-183935-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
Lab Sample ID	Client Sample ID	Ba (40-110)
500-183935-1	T09S	93.6
500-183935-1 DU	T09S	90.1
500-183935-2	T06S	87.2
500-183935-3	T05S	62.8
500-183935-4	T02S	85.8
500-183935-4 DU	T02S	86.4
500-183935-5	T08S	86.6
500-183935-6	T03S	91.6
500-183935-7	G20S	84.6
500-183935-7 DU	G20S	89.5
500-183935-8	G33S	49.1
500-183935-9	T01S	85.5
500-183935-10	G30S	90.2
500-183935-12	R08S	85.5
500-183935-13	G45S	88.1
500-183935-14	G48S	82.8
500-183935-15	G46S	93.5
500-183935-16	G44S	88.4
500-183935-17	R32S	88.1
500-183935-18	R32S DUP	95.0
500-183935-19	G47S	96.1
500-183935-20	G31S	91.4
LCS 160-474500/1-A	Lab Control Sample	97.1
LCS 160-474655/1-A	Lab Control Sample	89.8
LCS 160-474991/1-A	Lab Control Sample	80.4
LCS 160-475087/1-A	Lab Control Sample	87.2
MB 160-474500/14-A	Method Blank	94.8
MB 160-474655/7-A	Method Blank	88.7
MB 160-474991/17-A	Method Blank	96.7
MB 160-475087/21-A	Method Blank	94.4

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
500-183935-1	T09S	93.6	76.6
500-183935-1 DU	T09S	90.1	78.1
500-183935-2	T06S	86.1	83.4
500-183935-3	T05S	62.8	66.9
500-183935-4	T02S	85.8	83.4
500-183935-4 DU	T02S	86.4	83.0
500-183935-5	T08S	86.6	77.0
500-183935-6	T03S	77.2	81.5
500-183935-7	G20S	84.6	86.0
500-183935-7 DU	G20S	89.5	86.7

Tracer/Carrier Summary

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

Job ID: 500-183935-2

Method: 904.0 - Radium-228 (GFPC) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
500-183935-8	G33S	49.1	83.0
500-183935-9	T01S	85.5	80.4
500-183935-10	G30S	90.2	83.4
500-183935-12	R08S	85.5	80.0
500-183935-13	G45S	88.1	80.4
500-183935-14	G48S	82.8	83.0
500-183935-15	G46S	93.5	72.5
500-183935-16	G44S	88.4	73.6
500-183935-17	R32S	88.1	75.5
500-183935-18	R32S DUP	95.0	73.3
500-183935-19	G47S	96.1	75.1
500-183935-20	G31S	91.4	76.6
LCS 160-474502/1-A	Lab Control Sample	97.1	78.5
LCS 160-474656/1-A	Lab Control Sample	89.8	84.5
LCS 160-474994/1-A	Lab Control Sample	80.4	80.0
LCS 160-475089/1-A	Lab Control Sample	87.2	73.3
MB 160-474502/14-A	Method Blank	94.8	75.1
MB 160-474656/7-A	Method Blank	88.7	82.6
MB 160-474994/17-A	Method Blank	96.7	83.4
MB 160-475089/21-A	Method Blank	94.4	86.4

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

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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 Quarry
Job #: 500-183935-1

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N) N.C.

Sampling Bladder Pump Dedicated (Y/N)

PURGING INFORMATION

Purge Date: 06/22/20 Start Purge: 0950 (2400 Hr. Clock) End Purge: 1008

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 100.70 (ft.)

Ground Water Elev. 503.04 (ft./msl)

Well Bottom Elevation * 444.80 (ft./msl)

	1st	2nd	Final	
pH	7.49	7.50	7.50	(std.)
SC	1189	1178	1178	(umhos/cm)
Temp.	15.68	15.72	15.72	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 77°F, Rain Shower, S winds 5-10 mph

Other: *Reference Measurement (updated 02/19/14)

Depth To Water from L.S. = 100.70 - 2.40 = 98.30 (FI)

Levels were taken on 06/22/20 @ 0935.

* Total Depth: 158.59

(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: T06S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-183935-2

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: 06/22/20 Start Purge: 1130 (2400 Hr. Clock) End Purge: 1148

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.46

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.30 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 621.02 (ft./msl)

Water Level 111.11 (ft.)

Ground Water Elev. 509.91 (ft./msl)

Well Bottom Elevation * 447.94 (ft./msl)

	1st	2nd	Final	
pH	7.64	7.61	7.69	(std.)
SC	781	779	779	(umhos/cm)
Temp.	25.97	26.04	26.04	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 83°F, Sunny, S winds @ 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 111.11 - 2.30 = 108.81 (ft.)

Levels were taken on 06/22/20 @ 1115 .

* Total Deth = 173.00

(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: T05S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-183935-3

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: 06/22/20 Start Purge: 1315 (2400 Hr. Clock) End Purge: 1337

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 115.24 (ft.)

Ground Water Elev. 508.21 (ft./msl)

Well Bottom Elevation * 448.35 (ft./msl)

	1st	2nd	Final	
pH	10.69	10.71	10.71	(std.)
SC	2420	2420	2420	(umhos/cm)
Temp.	19.15	19.17	19.17	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 74°F, Light Rain, S wind @ 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 115.24 - 2.40 = 112.84 (ft.)

Levels were taken on 06/22/20 @ 1300.

* Total Deth = 175.00

(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: T02S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-183935-4

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: 06/23/20 Start Purge: 0905 (2400 Hr. Clock) End Purge: 0924

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 126.86 (ft.)
Ground Water Elev. 499.30 (ft./msl)
Well Bottom Elevation * 453.40 (ft./msl)

	1st	2nd	Final	
pH	7.77	7.78	7.78	(std.)
SC	1347	1350	1350	(umhos/cm)
Temp.	20.64	20.61	20.61	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 67°F, Mostly Cloudy, NW winds @ 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 126.86 - 2.33 = 124.53 (ft)
Levels were taken on 06/23/20 @ 0850.
* Total Depth = 172.75

(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: T08S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-183935-5

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: 06/23/20 Start Purge: 1135 (2400 Hr. Clock) End Purge: 1151

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.41

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.38 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 627.39 (ft./msl)
Water Level 122.71 (ft.)
Ground Water Elev. 504.68 (ft./msl)
Well Bottom Elevation * 447.38 (ft./msl)

	1st	2nd	Final	
pH	9.13	9.12	9.12	(std.)
SC	1335	1345	1345	(umhos/cm)
Temp.	23.89	23.93	23.93	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Slight Turbidity, No Odor
Weather Conditions: 73°F, Fair, NW winds e 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 122.71 - 2.38 = 120.33 (ft.)
Levels were taken on 06/23/20 @ 1120.
* Total Deth = 180.00

(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: T03S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-183935-6

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: 06/23/20 Start Purge: 1335 (2400 Hr. Clock) End Purge: 1353

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 131.27 (ft.)

Ground Water Elev. 498.62 (ft./msl)

Well Bottom Elevation * 456.70 (ft./msl)

	1st	2nd	Final	
pH	7.29	7.29	7.29	(std.)
SC	1,217	1,220	1,220	(umhos/cm)
Temp.	14.01	14.07	14.07	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Slight Turbidity, No Odor

Weather Conditions: 76°F, Partly Cloudy, NW winds @ 10-15 mph

Other: *Reference Measurement

Depth To Water from L.S. = 131.27 - 3.08 = 128.19 (ft.)

Levels were taken on 06/23/20 @ 1325.

* Total Depth = 172.95

(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 #: 500-183935-7

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: 06/24/20 Start Purge: 1000 (2400 Hr. Clock) End Purge: 1020

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 39.73 (ft.)
Ground Water Elev. 540.60 (ft./msl)
Well Bottom Elevation *442.28 (ft./msl)

	1st	2nd	Final	
pH	7.82	7.81	7.81	(std.)
SC	691	699	699	(umhos/cm)
Temp.	24.29	24.29	24.29	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 74°F, Fair, NW winds @ 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 39.73 - 2.78 = 36.95 (A)
Levels were taken on 06/24/20 @ 0950.

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 #: 500-183935-8

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: 06/24/20 Start Purge: 1335 (2400 Hr. Clock) End Purge: 1354

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.74

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 1.73 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.66 (ft./msl)
Water Level 28.21 (ft.)
Ground Water Elev. 507.45 (ft./msl)
Well Bottom Elevation *452.72 (ft./msl)

	1st	2nd	Final	
pH	7.58	7.59	7.59	(std.)
SC	637	631	631	(umhos/cm)
Temp.	18.79	18.66	18.66	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Gray, Slight Turbidity, No Odor
Weather Conditions: 79°F, Mostly Cloudy, W winds @ 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 28.21 - 1.73 = 26.48 (ft)
Levels were taken on 06/24/20 @ 1330.

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: T01S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-183935-9

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: 06/25/20 Start Purge: 0855 (2400 Hr. Clock) End Purge: 0917

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 111.81 (ft.)
Ground Water Elev. 509.97 (ft./msl)
Well Bottom Elevation * 451.46 (ft./msl)

	1st	2nd	Final	
pH	7.76	7.75	7.75	(std.)
SC	1428	1433	1433	(umhos/cm)
Temp.	22.24	22.25	22.25	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Tan, High Turbidity, Slight Odor
Weather Conditions: 74°F, Sunny, W winds @ 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 111.81 - 2.48 = 109.33 (ft.)
Levels were taken on 06/25/20 @ 0840.
* Total Depth = 170.00

(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: G30S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-183935-10

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: 06/25/20 Start Purge: 1245 (2400 Hr. Clock) End Purge: 1303

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 1.28 (ft.)

Ground Water Elev. 523.42 (ft./msl)

Well Bottom Elevation *462.58 (ft./msl)

	1st	2nd	Final	
pH	8.34	8.33	8.33	(std.)
SC	1,830	1,830	1,830	(umhos/cm)
Temp.	16.00	16.04	16.04	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor

Weather Conditions: 82°F, Mostly Cloudy, W winds @ 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 1.28 - 2.31 = -1.03 (ft.)

Levels were taken on 06/25/20 @ 1240.

(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: T04S
Facility: Midwest Generation-Joliet Quarry
Job #: 500-183935 -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: _____ 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 _____ (ft) pH _____ _____ _____ _____ (std.)

Ref. Measuring Pt. TIC SC _____ _____ _____ _____ (umhos/cm)

Well Elevation * 631.35 (ft./msl) Temp. _____ _____ _____ _____ (°C)

Water Level _____ (ft.) Well Stabilization / Recharge Grid

Ground Water Elev. _____ (ft./msl)

Well Bottom Elevation * 458.07 (ft./msl)

COMMENTS

Sample Appearance/Odor: _____

Weather Conditions: _____

Other: *Reference Measurement

Depth To Water from L.S. =

Levels were taken on @ .

* Total Deth = 173.00

* Unable to access well due to excavation on 06/24/20 @ 0915

(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: R08S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-183935-12

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: 06/26/20 Start Purge: 0925 (2400 Hr. Clock) End Purge: 0940

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 65.69 (ft.)

Ground Water Elev. 512.93 (ft./msl)

Well Bottom Elevation *453.08 (ft./msl)

	1st	2nd	Final	
pH	8.33	8.32	8.32	(std.)
SC	1,104	1,107	1,107	(umhos/cm)
Temp.	14.30	14.30	14.30	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 75° F, Cloudy, SW winds 5-10 mph

Other: *Reference Measurement (Well ID updated 11-25-15)

Depth To Water from L.S. = 65.69 - 2.55 = 63.14 (ft.)

Levels were taken on 06/26/20 @ 0915.

(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: G45S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-183935-13

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: 06/26/20 Start Purge: 1035 (2400 Hr. Clock) End Purge: 1051

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 61.12 (ft.)

Ground Water Elev. 542.19 (ft./msl)

Well Bottom Elevation *471.05 (ft./msl)

	1st	2nd	Final	
pH	7.22	7.21	7.21	(std.)
SC	1590	1590	1590	(umhos/cm)
Temp.	14.90	14.92	14.92	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor

Weather Conditions: 77°F, Mostly Cloudy, SW winds 0-5 mph

Other: *Reference Measurement

Depth To Water from L.S. = 61.12 - 2.97 = 58.15 (ft.)

Levels were taken on 06/26/20 @ 1030.

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: G48S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-183935-14

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: 06/26/20 Start Purge: 1220 (2400 Hr. Clock) End Purge: 1240

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.90

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.45 (ft)
Ref. Measuring Pt. TIC
Well Elevation *620.78 (ft./msl)
Water Level 96.84 (ft.)
Ground Water Elev. 523.94 (ft./msl)
Well Bottom Elevation *468.32 (ft./msl)

	1st	2nd	Final	
pH	9.14	9.20	9.20	(std.)
SC	1,560	1560	1560	(umhos/cm)
Temp.	15.36	15.33	15.33	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 76°F, Mostly Cloudy, S winds @ 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 96.84 - 2.45 = 94.39 (ft.)
Levels were taken on 06/26/20 @ 1215.

(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 #9 CCR
Job #: 500-183935-15

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: 06/29/20 Start Purge: 0920 (2400 Hr. Clock) End Purge: 0937

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 *601.32 (ft./msl)
Water Level 100.11 (ft.)
Ground Water Elev. 501.21 (ft./msl)
Well Bottom Elevation *453.62 (ft./msl)

	1st	2nd	Final	
pH	8.04	8.06	8.06	(std.)
SC	1,494	1,494	1,494	(umhos/cm)
Temp.	16.39	16.42	16.42	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Tan, Slight Turbidity, No Odor
Weather Conditions: 83°F, Mostly Cloudy, S winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 100.11 - 2.70 = 97.41 (ft.)
Levels were taken on 06/29/20 @ 0915.

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 #9 CCR
Job #: 500-183935-1

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: 06/29/20 Start Purge: 1035 (2400 Hr. Clock) End Purge: 1051

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.52

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.18 (ft)
Ref. Measuring Pt. TIC
Well Elevation *586.69 (ft./msl)
Water Level 77.78 (ft.)
Ground Water Elev. 508.91 (ft./msl)
Well Bottom Elevation *455.11 (ft./msl)

	1st	2nd	Final	
pH	7.30	7.30	7.30	(std.)
SC	1051	1055	1055	(umhos/cm)
Temp.	21.54	21.59	21.59	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 86°F, Partly Cloudy, S winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 77.78 - 2.18 = 75.60 (H)
Levels were taken on 06/29/20 @ 1030.

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: R32S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-183935-17

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: 06/29/20 Start Purge: 1255 (2400 Hr. Clock) End Purge: 1314

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 17.85 (ft.)
Ground Water Elev. 519.14 (ft./msl)
Well Bottom Elevation *457.84 (ft./msl)

	1st	2nd	Final	
pH	7.50	7.47	7.47	(std.)
SC	1062	1070	1070	(umhos/cm)
Temp.	12.42	12.48	12.48	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No odor
Weather Conditions: 89°F, Partly Cloudy, SE winds e 5-10mph

Other: *Reference Measurement
Depth To Water from L.S. = 17.85 - 2.03 = 15.82 (ft.)
Levels were taken on 06/29/20 @ 1250.

(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: R32S Dup
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-183935-18

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: _____ 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 2.03 (ft) pH _____ _____ _____ _____ (std.)

Ref. Measuring Pt. TIC SC _____ _____ _____ _____ (umhos/cm)

Well Elevation *536.99 (ft./msl) Temp. _____ _____ _____ _____ (°C)

Water Level _____ (ft.) Well Stabilization / Recharge Grid

Ground Water Elev. _____ (ft./msl)

Well Bottom Elevation *457.84 (ft./msl)

COMMENTS

Sample Appearance/Odor: _____

Weather Conditions: _____

Other: *Reference Measurement

Depth To Water from L.S. = _____

Levels were taken on 06/29/20 @ 1250

* DUP of R32S

Sampled @ 1314

(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 #9 CCR
Job #: 500-183935-19

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: 06/30/20 Start Purge: 0915 (2400 Hr. Clock) End Purge: 0930

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 89.89 (ft.)
Ground Water Elev. 522.21 (ft./msl)
Well Bottom Elevation *459.84 (ft./msl)

	1st	2nd	Final	
pH	9.05	9.04	9.04	(std.)
SC	1,740	1,730	1730	(umhos/cm)
Temp.	17.45	17.47	17.47	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 78°F, Sunny, SE winds e 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 89.89 - 2.50 = 87.39 (ft.)
Levels were taken on 06/30/20 @ 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: G31S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-183935-20

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: 06/30/20 Start Purge: 1045 (2400 Hr. Clock) End Purge: 1103

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.81

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.58 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.78 (ft./msl)
Water Level 26.20 (ft.)
Ground Water Elev. 509.58 (ft./msl)
Well Bottom Elevation *453.36 (ft./msl)

	1st	2nd	Final	
pH	7.24	7.26	7.26	(std.)
SC	2420	2430	2430	(umhos/cm)
Temp.	16.90	16.95	16.95	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 86°F, Sunny, SE winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 26.20 - 2.58 = 23.62 (ft.)
Levels were taken on 06/30/20 @ 1040.

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 500-192056-1
Client Project/Site: Joliet #9 (Quarry) CCR

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

Attn: Richard Gnat

Diana Mockler

Authorized for release by:
12/30/2020 9:12:05 AM

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

Table of Contents

Job ID: 500-192056-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-192056-1

Comments
No additional comments.

Receipt
The samples were received on 12/7/2020 3:00 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 8 coolers at receipt time were 1.9º C, 2.2º C, 3.0º C, 3.6º C, 3.7º C, 5.3º C, 5.4º C and 8.3º C.

Metals
Method 6020A: The continuing calibration verification (CCV) at lines 75 and 95, associated with batch 500-576882 recovered above the upper control limit for Lead. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Method 6020A: The continuing calibration verification (CCV) at line 68, associated with batch 500-577364 recovered above the upper control limit for Lead. The samples associated with this CCV were non-detects for the affected analyte; 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.

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

Method Summary

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

Job ID: 500-192056-1

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 CHI
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

Sample Summary

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

Job ID: 500-192056-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-192056-1	G30S	Water	12/07/20 09:48	12/07/20 15:00	
500-192056-2	G48S	Water	12/07/20 11:26	12/07/20 15:00	
500-192056-3	G47S	Water	12/07/20 13:25	12/07/20 15:00	
500-192056-4	T09S	Water	12/08/20 10:08	12/08/20 15:34	
500-192056-5	DUP	Water	12/08/20 10:08	12/08/20 15:34	
500-192056-6	T05S	Water	12/08/20 13:32	12/08/20 15:34	
500-192056-7	T08S	Water	12/09/20 09:58	12/09/20 15:45	
500-192056-8	T02S	Water	12/09/20 12:29	12/09/20 15:45	
500-192056-9	G31S	Water	12/09/20 14:40	12/09/20 15:45	
500-192056-10	G33S	Water	12/10/20 10:20	12/10/20 12:00	
500-192056-11	G20S	Water	12/11/20 09:05	12/11/20 15:45	
500-192056-12	G45S	Water	12/11/20 12:42	12/11/20 15:45	
500-192056-13	T01S	Water	12/14/20 09:06	12/14/20 15:35	
500-192056-14	T06S	Water	12/14/20 11:25	12/14/20 15:35	
500-192056-15	R08S	Water	12/14/20 14:17	12/14/20 15:35	
500-192056-16	T03S	Water	12/15/20 09:13	12/15/20 15:00	
500-192056-17	G46S	Water	12/15/20 10:22	12/15/20 15:00	
500-192056-18	T04S	Water	12/15/20 13:25	12/15/20 15:00	
500-192056-19	G44S	Water	12/15/20 13:49	12/15/20 15:00	
500-192056-20	R32S	Water	12/16/20 08:54	12/16/20 13:10	

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

Job ID: 500-192056-1

Client Sample ID: G30S

Date Collected: 12/07/20 09:48
Date Received: 12/07/20 15:00

Lab Sample ID: 500-192056-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.024		0.010		mg/L		12/08/20 06:21	12/08/20 12:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0044		0.0010		mg/L		12/08/20 06:21	12/14/20 17:47	1
Barium	0.043		0.0025		mg/L		12/08/20 06:21	12/14/20 17:47	1
Boron	5.3		1.0		mg/L		12/08/20 06:21	12/14/20 12:22	20
Calcium	57		0.20		mg/L		12/08/20 06:21	12/14/20 17:47	1
Cobalt	<0.0010		0.0010		mg/L		12/08/20 06:21	12/08/20 18:04	1
Lead	<0.00050		0.00050		mg/L		12/08/20 06:21	12/08/20 18:04	1
Molybdenum	0.018		0.0050		mg/L		12/08/20 06:21	12/14/20 17:47	1
Selenium	<0.0025		0.0025		mg/L		12/08/20 06:21	12/14/20 17:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L			12/08/20 04:37	1
Chloride	220		10		mg/L			12/12/20 15:03	5
Fluoride	1.2		0.10		mg/L			12/22/20 16:40	1
Sulfate	450		50		mg/L			12/17/20 13:38	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	-0.15				ft			12/07/20 09:48	1
Depth to Water (ft from MP)	2.16				ft			12/07/20 09:48	1
Elevation of well (ft from MP)	524.69				ft			12/07/20 09:48	1
Field pH	7.83				SU			12/07/20 09:48	1
Field Temperature	47.8				Degrees F			12/07/20 09:48	1
Ground Water Elevation	522.53				ft			12/07/20 09:48	1
Specific Conductance	1840				umhos/cm			12/07/20 09:48	1
Well bottom elevation	462.58				ft			12/07/20 09:48	1

Client Sample Results

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

Job ID: 500-192056-1

Client Sample ID: G48S

Date Collected: 12/07/20 11:26
Date Received: 12/07/20 15:00

Lab Sample ID: 500-192056-2

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		12/08/20 06:21	12/08/20 12:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.016		0.0010		mg/L		12/08/20 06:21	12/14/20 17:50	1
Barium	0.020		0.0025		mg/L		12/08/20 06:21	12/14/20 17:50	1
Boron	6.0		1.0		mg/L		12/08/20 06:21	12/14/20 12:26	20
Calcium	29		0.20		mg/L		12/08/20 06:21	12/14/20 17:50	1
Cobalt	<0.0010		0.0010		mg/L		12/08/20 06:21	12/08/20 18:07	1
Lead	<0.00050		0.00050		mg/L		12/08/20 06:21	12/08/20 18:07	1
Molybdenum	0.41		0.0050		mg/L		12/08/20 06:21	12/14/20 17:50	1
Selenium	<0.0025		0.0025		mg/L		12/08/20 06:21	12/14/20 17:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	890		10		mg/L			12/08/20 04:40	1
Chloride	110		10		mg/L			12/12/20 15:04	5
Fluoride	1.1		0.10		mg/L			12/22/20 16:51	1
Sulfate	410		50		mg/L			12/17/20 13:38	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	98.51				ft			12/07/20 11:26	1
Depth to Water (ft from MP)	100.96				ft			12/07/20 11:26	1
Elevation of well (ft from MP)	620.74				ft			12/07/20 11:26	1
Field pH	8.40				SU			12/07/20 11:26	1
Field Temperature	51.1				Degrees F			12/07/20 11:26	1
Ground Water Elevation	519.78				ft			12/07/20 11:26	1
Specific Conductance	1560				umhos/cm			12/07/20 11:26	1
Well bottom elevation	468.32				ft			12/07/20 11:26	1

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

Job ID: 500-192056-1

Client Sample ID: G47S

Date Collected: 12/07/20 13:25
Date Received: 12/07/20 15:00

Lab Sample ID: 500-192056-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.047		0.010		mg/L		12/08/20 06:21	12/08/20 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.066		0.0010		mg/L		12/08/20 06:21	12/14/20 17:54	1
Barium	0.012		0.0025		mg/L		12/08/20 06:21	12/14/20 17:54	1
Boron	7.6		1.0		mg/L		12/08/20 06:21	12/14/20 12:29	20
Calcium	11		0.20		mg/L		12/08/20 06:21	12/14/20 17:54	1
Cobalt	<0.0010		0.0010		mg/L		12/08/20 06:21	12/08/20 18:11	1
Lead	<0.00050		0.00050		mg/L		12/08/20 06:21	12/08/20 18:11	1
Molybdenum	0.62		0.0050		mg/L		12/08/20 06:21	12/14/20 17:54	1
Selenium	0.0030		0.0025		mg/L		12/08/20 06:21	12/14/20 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L			12/09/20 02:47	1
Chloride	120		10		mg/L			12/12/20 15:05	5
Fluoride	1.1		0.10		mg/L			12/22/20 16:56	1
Sulfate	500		50		mg/L			12/17/20 13:39	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	84.42				ft			12/07/20 13:25	1
Depth to Water (ft from MP)	86.92				ft			12/07/20 13:25	1
Elevation of well (ft from MP)	612.04				ft			12/07/20 13:25	1
Field pH	9.13				SU			12/07/20 13:25	1
Field Temperature	51.1				Degrees F			12/07/20 13:25	1
Ground Water Elevation	525.12				ft			12/07/20 13:25	1
Specific Conductance	1620				umhos/cm			12/07/20 13:25	1
Well bottom elevation	459.84				ft			12/07/20 13:25	1

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

Job ID: 500-192056-1

Client Sample ID: T09S

Date Collected: 12/08/20 10:08
Date Received: 12/08/20 15:34

Lab Sample ID: 500-192056-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.070		0.010		mg/L		12/08/20 17:57	12/10/20 10:40	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		12/08/20 17:57	12/14/20 16:56	1
Barium	0.080		0.0025		mg/L		12/08/20 17:57	12/11/20 19:18	1
Boron	5.7		1.0		mg/L		12/08/20 17:57	12/15/20 16:03	20
Calcium	110		0.20		mg/L		12/08/20 17:57	12/11/20 19:18	1
Cobalt	<0.0010		0.0010		mg/L		12/08/20 17:57	12/11/20 19:18	1
Lead	0.00061		0.00050		mg/L		12/08/20 17:57	12/11/20 19:18	1
Molybdenum	0.89		0.0050		mg/L		12/08/20 17:57	12/11/20 19:18	1
Selenium	<0.0025		0.0025		mg/L		12/08/20 17:57	12/14/20 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	890		10		mg/L			12/09/20 02:55	1
Chloride	84		10		mg/L			12/12/20 15:05	5
Fluoride	0.46		0.10		mg/L			12/22/20 16:59	1
Sulfate	410		50		mg/L			12/17/20 13:39	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	100.76				ft			12/08/20 10:08	1
Depth to Water (ft from MP)	103.16				ft			12/08/20 10:08	1
Elevation of well (ft from MP)	603.69				ft			12/08/20 10:08	1
Field pH	7.51				SU			12/08/20 10:08	1
Field Temperature	45.1				Degrees F			12/08/20 10:08	1
Ground Water Elevation	500.53				ft			12/08/20 10:08	1
Specific Conductance	964				umhos/cm			12/08/20 10:08	1
Well bottom elevation	444.80				ft			12/08/20 10:08	1

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

Job ID: 500-192056-1

Client Sample ID: DUP

Date Collected: 12/08/20 10:08
Date Received: 12/08/20 15:34

Lab Sample ID: 500-192056-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.069		0.010		mg/L		12/08/20 17:57	12/10/20 10:44	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		12/08/20 17:57	12/14/20 16:58	1
Barium	0.081		0.0025		mg/L		12/08/20 17:57	12/11/20 19:21	1
Boron	5.4		1.0		mg/L		12/08/20 17:57	12/15/20 16:07	20
Calcium	110		0.20		mg/L		12/08/20 17:57	12/11/20 19:21	1
Cobalt	<0.0010		0.0010		mg/L		12/08/20 17:57	12/11/20 19:21	1
Lead	0.00057		0.00050		mg/L		12/08/20 17:57	12/11/20 19:21	1
Molybdenum	0.90		0.0050		mg/L		12/08/20 17:57	12/11/20 19:21	1
Selenium	<0.0025		0.0025		mg/L		12/08/20 17:57	12/14/20 16:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	890		10		mg/L			12/09/20 03:00	1
Chloride	84		10		mg/L			12/12/20 15:11	5
Fluoride	0.45		0.10		mg/L			12/22/20 17:03	1
Sulfate	400		50		mg/L			12/17/20 13:39	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	100.76				ft			12/08/20 10:08	1
Depth to Water (ft from MP)	103.16				ft			12/08/20 10:08	1
Elevation of well (ft from MP)	603.69				ft			12/08/20 10:08	1
Field pH	7.51				SU			12/08/20 10:08	1
Field Temperature	45.1				Degrees F			12/08/20 10:08	1
Ground Water Elevation	500.53				ft			12/08/20 10:08	1
Specific Conductance	964				umhos/cm			12/08/20 10:08	1
Well bottom elevation	444.80				ft			12/08/20 10:08	1

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

Job ID: 500-192056-1

Client Sample ID: T05S

Date Collected: 12/08/20 13:32
Date Received: 12/08/20 15:34

Lab Sample ID: 500-192056-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.021		0.010		mg/L		12/08/20 17:57	12/10/20 10:48	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		12/08/20 17:57	12/14/20 17:00	1
Barium	0.010		0.0025		mg/L		12/08/20 17:57	12/11/20 19:25	1
Boron	14		5.0		mg/L		12/08/20 17:57	12/15/20 16:10	100
Calcium	1.5		0.20		mg/L		12/08/20 17:57	12/11/20 19:25	1
Cobalt	<0.0010		0.0010		mg/L		12/08/20 17:57	12/11/20 19:25	1
Lead	<0.00050		0.00050		mg/L		12/08/20 17:57	12/11/20 19:25	1
Molybdenum	1.2		0.0050		mg/L		12/08/20 17:57	12/11/20 19:25	1
Selenium	0.0048		0.0025		mg/L		12/08/20 17:57	12/14/20 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1400		10		mg/L			12/09/20 03:03	1
Chloride	140		10		mg/L			12/12/20 15:11	5
Fluoride	2.0		0.10		mg/L			12/22/20 17:10	1
Sulfate	610		100		mg/L			12/17/20 13:40	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	118.77				ft			12/08/20 13:32	1
Depth to Water (ft from MP)	121.17				ft			12/08/20 13:32	1
Elevation of well (ft from MP)	623.46				ft			12/08/20 13:32	1
Field pH	10.35				SU			12/08/20 13:32	1
Field Temperature	44.6				Degrees F			12/08/20 13:32	1
Ground Water Elevation	502.29				ft			12/08/20 13:32	1
Specific Conductance	1750				umhos/cm			12/08/20 13:32	1
Well bottom elevation	448.35				ft			12/08/20 13:32	1

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

Job ID: 500-192056-1

Client Sample ID: T08S

Date Collected: 12/09/20 09:58
Date Received: 12/09/20 15:45

Lab Sample ID: 500-192056-7

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		12/10/20 07:37	12/12/20 00:29	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		12/10/20 07:37	12/14/20 17:57	1
Barium	0.023		0.0025		mg/L		12/10/20 07:37	12/14/20 17:57	1
Boron	9.1		1.0		mg/L		12/10/20 07:37	12/15/20 17:28	20
Calcium	16		0.20		mg/L		12/10/20 07:37	12/14/20 17:57	1
Cobalt	<0.0010		0.0010		mg/L		12/10/20 07:37	12/16/20 13:52	1
Lead	<0.00050		0.00050		mg/L		12/10/20 07:37	12/16/20 13:52	1
Molybdenum	0.68		0.10		mg/L		12/10/20 07:37	12/15/20 17:28	20
Selenium	<0.0025		0.0025		mg/L		12/10/20 07:37	12/14/20 17:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	840		10		mg/L			12/11/20 03:08	1
Chloride	100		10		mg/L			12/12/20 15:12	5
Fluoride	0.91		0.10		mg/L			12/22/20 17:22	1
Sulfate	460		50		mg/L			12/17/20 13:40	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	124.74				ft			12/09/20 09:58	1
Depth to Water (ft from MP)	127.12				ft			12/09/20 09:58	1
Elevation of well (ft from MP)	627.50				ft			12/09/20 09:58	1
Field pH	8.35				SU			12/09/20 09:58	1
Field Temperature	50.4				Degrees F			12/09/20 09:58	1
Ground Water Elevation	500.38				ft			12/09/20 09:58	1
Specific Conductance	996				umhos/cm			12/09/20 09:58	1
Well bottom elevation	447.38				ft			12/09/20 09:58	1

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

Job ID: 500-192056-1

Client Sample ID: T02S

Date Collected: 12/09/20 12:29
Date Received: 12/09/20 15:45

Lab Sample ID: 500-192056-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.040		0.010		mg/L		12/10/20 07:37	12/12/20 00:33	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		12/10/20 07:37	12/14/20 17:59	1
Barium	0.091		0.0025		mg/L		12/10/20 07:37	12/14/20 17:59	1
Boron	4.9		0.50		mg/L		12/10/20 07:37	12/15/20 17:32	10
Calcium	64		0.20		mg/L		12/10/20 07:37	12/14/20 17:59	1
Cobalt	<0.0010		0.0010		mg/L		12/10/20 07:37	12/16/20 13:56	1
Lead	<0.00050		0.00050		mg/L		12/10/20 07:37	12/16/20 13:56	1
Molybdenum	0.33		0.050		mg/L		12/10/20 07:37	12/15/20 17:32	10
Selenium	<0.0025		0.0025		mg/L		12/10/20 07:37	12/14/20 17:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	740		10		mg/L			12/11/20 03:11	1
Chloride	97		10		mg/L			12/12/20 15:12	5
Fluoride	0.55		0.10		mg/L			12/22/20 17:27	1
Sulfate	370		50		mg/L			12/17/20 13:41	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	129.71				ft			12/09/20 12:29	1
Depth to Water (ft from MP)	132.04				ft			12/09/20 12:29	1
Elevation of well (ft from MP)	626.12				ft			12/09/20 12:29	1
Field pH	7.70				SU			12/09/20 12:29	1
Field Temperature	62.4				Degrees F			12/09/20 12:29	1
Ground Water Elevation	494.08				ft			12/09/20 12:29	1
Specific Conductance	1130				umhos/cm			12/09/20 12:29	1
Well bottom elevation	453.40				ft			12/09/20 12:29	1

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

Job ID: 500-192056-1

Client Sample ID: G31S

Date Collected: 12/09/20 14:40
Date Received: 12/09/20 15:45

Lab Sample ID: 500-192056-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.10		0.010		mg/L		12/10/20 07:37	12/12/20 00:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0034		0.0010		mg/L		12/10/20 07:37	12/14/20 18:01	1
Barium	0.049		0.0025		mg/L		12/10/20 07:37	12/14/20 18:01	1
Boron	4.5		0.50		mg/L		12/10/20 07:37	12/15/20 17:35	10
Calcium	120		0.20		mg/L		12/10/20 07:37	12/14/20 18:01	1
Cobalt	<0.0010		0.0010		mg/L		12/10/20 07:37	12/16/20 13:59	1
Lead	<0.00050		0.00050		mg/L		12/10/20 07:37	12/16/20 13:59	1
Molybdenum	0.57		0.050		mg/L		12/10/20 07:37	12/15/20 17:35	10
Selenium	<0.0025		0.0025		mg/L		12/10/20 07:37	12/14/20 18:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	890		10		mg/L			12/11/20 03:13	1
Chloride	180		10		mg/L			12/12/20 15:13	5
Fluoride	0.29		0.10		mg/L			12/22/20 17:31	1
Sulfate	400		50		mg/L			12/17/20 13:41	10

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			12/09/20 14:40	1
Depth to Water (ft from MP)	27.82				ft			12/09/20 14:40	1
Elevation of well (ft from MP)	535.77				ft			12/09/20 14:40	1
Field pH	7.29				SU			12/09/20 14:40	1
Field Temperature	56.7				Degrees F			12/09/20 14:40	1
Ground Water Elevation	507.95				ft			12/09/20 14:40	1
Specific Conductance	1071				umhos/cm			12/09/20 14:40	1
Well bottom elevation	453.36				ft			12/09/20 14:40	1

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

Job ID: 500-192056-1

Client Sample ID: G33S

Date Collected: 12/10/20 10:20
Date Received: 12/10/20 12:00

Lab Sample ID: 500-192056-10

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		12/11/20 07:38	12/14/20 12:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0016		0.0010		mg/L		12/11/20 07:38	12/15/20 18:45	1
Barium	0.046		0.0025		mg/L		12/11/20 07:38	12/11/20 21:20	1
Boron	1.0		0.25		mg/L		12/11/20 07:38	12/15/20 16:54	5
Calcium	51		0.20		mg/L		12/11/20 07:38	12/11/20 21:20	1
Cobalt	<0.0010		0.0010		mg/L		12/11/20 07:38	12/15/20 18:45	1
Lead	0.00058		0.00050		mg/L		12/11/20 07:38	12/11/20 21:20	1
Molybdenum	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 21:20	1
Selenium	<0.0025		0.0025		mg/L		12/11/20 07:38	12/15/20 18:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	360		10		mg/L			12/11/20 03:16	1
Chloride	12		2.0		mg/L			12/16/20 11:01	1
Fluoride	1.1		0.10		mg/L			12/22/20 17:34	1
Sulfate	74		15		mg/L			12/17/20 13:42	3

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	29.15				ft			12/10/20 10:20	1
Depth to Water (ft from MP)	30.88				ft			12/10/20 10:20	1
Elevation of well (ft from MP)	535.65				ft			12/10/20 10:20	1
Field pH	7.41				SU			12/10/20 10:20	1
Field Temperature	55.0				Degrees F			12/10/20 10:20	1
Ground Water Elevation	504.77				ft			12/10/20 10:20	1
Specific Conductance	646				umhos/cm			12/10/20 10:20	1
Well bottom elevation	452.72				ft			12/10/20 10:20	1

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

Job ID: 500-192056-1

Client Sample ID: G20S

Date Collected: 12/11/20 09:05
Date Received: 12/11/20 15:45

Lab Sample ID: 500-192056-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.042**		0.010		mg/L		12/14/20 08:25	12/14/20 20:13	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		12/14/20 08:25	12/14/20 22:08	1
Barium	**0.043**		0.0025		mg/L		12/14/20 08:25	12/14/20 22:08	1
Boron	**1.4**		0.050		mg/L		12/14/20 08:25	12/14/20 22:08	1
Calcium	**61**		0.20		mg/L		12/14/20 08:25	12/14/20 22:08	1
Cobalt	<0.0010		0.0010		mg/L		12/14/20 08:25	12/14/20 22:08	1
Lead	<0.00050	^+	0.00050		mg/L		12/14/20 08:25	12/14/20 22:08	1
Molybdenum	**0.022**		0.0050		mg/L		12/14/20 08:25	12/14/20 22:08	1
Selenium	<0.0025		0.0025		mg/L		12/14/20 08:25	12/14/20 22:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**390**		10		mg/L			12/15/20 02:24	1
Chloride	**14**		2.0		mg/L			12/16/20 11:05	1
Fluoride	**0.89**		0.10		mg/L			12/22/20 17:41	1
Sulfate	**69**		15		mg/L			12/17/20 13:42	3

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**46.86**				ft			12/11/20 09:05	1
Depth to Water (ft from MP)	**49.64**				ft			12/11/20 09:05	1
Elevation of well (ft from MP)	**580.94**				ft			12/11/20 09:05	1
Field pH	**7.41**				SU			12/11/20 09:05	1
Field Temperature	**46.0**				Degrees F			12/11/20 09:05	1
Ground Water Elevation	**531.30**				ft			12/11/20 09:05	1
Specific Conductance	**632**				umhos/cm			12/11/20 09:05	1
Well bottom elevation	**442.28**				ft			12/11/20 09:05	1

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

Job ID: 500-192056-1

Client Sample ID: G45S

Date Collected: 12/11/20 12:42
Date Received: 12/11/20 15:45

Lab Sample ID: 500-192056-12

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		12/14/20 08:25	12/14/20 20:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.011		0.0010		mg/L		12/14/20 08:25	12/14/20 22:11	1
Barium	0.042		0.0025		mg/L		12/14/20 08:25	12/14/20 22:11	1
Boron	0.70		0.050		mg/L		12/14/20 08:25	12/14/20 22:11	1
Calcium	120		0.20		mg/L		12/14/20 08:25	12/14/20 22:11	1
Cobalt	<0.0010		0.0010		mg/L		12/14/20 08:25	12/14/20 22:11	1
Lead	<0.00050	^+	0.00050		mg/L		12/14/20 08:25	12/14/20 22:11	1
Molybdenum	0.012		0.0050		mg/L		12/14/20 08:25	12/14/20 22:11	1
Selenium	<0.0025		0.0025		mg/L		12/14/20 08:25	12/14/20 22:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	760		10		mg/L			12/15/20 02:32	1
Chloride	180		10		mg/L			12/16/20 11:39	5
Fluoride	0.38		0.10		mg/L			12/22/20 17:44	1
Sulfate	220		50		mg/L			12/17/20 13:42	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	62.48				ft			12/11/20 12:42	1
Depth to Water (ft from MP)	65.45				ft			12/11/20 12:42	1
Elevation of well (ft from MP)	603.94				ft			12/11/20 12:42	1
Field pH	7.16				SU			12/11/20 12:42	1
Field Temperature	54.7				Degrees F			12/11/20 12:42	1
Ground Water Elevation	538.49				ft			12/11/20 12:42	1
Specific Conductance	1273				umhos/cm			12/11/20 12:42	1
Well bottom elevation	471.05				ft			12/11/20 12:42	1

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

Job ID: 500-192056-1

Client Sample ID: T01S

Date Collected: 12/14/20 09:06
Date Received: 12/14/20 15:35

Lab Sample ID: 500-192056-13

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		12/15/20 07:01	12/16/20 15:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.011		0.0010		mg/L		12/15/20 07:01	12/15/20 23:13	1
Barium	0.040		0.0025		mg/L		12/15/20 07:01	12/15/20 23:13	1
Boron	3.8		0.050		mg/L		12/15/20 07:01	12/15/20 23:13	1
Calcium	48		0.20		mg/L		12/15/20 07:01	12/15/20 23:13	1
Cobalt	<0.0010		0.0010		mg/L		12/15/20 07:01	12/15/20 23:13	1
Lead	<0.00050		0.00050		mg/L		12/15/20 07:01	12/15/20 23:13	1
Molybdenum	0.33		0.0050		mg/L		12/15/20 07:01	12/16/20 13:19	1
Selenium	<0.0025		0.0025		mg/L		12/15/20 07:01	12/16/20 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	870		10		mg/L			12/15/20 02:37	1
Chloride	120		10		mg/L			12/16/20 11:39	5
Fluoride	1.3		0.10		mg/L			12/22/20 17:48	1
Sulfate	400		50		mg/L			12/17/20 13:43	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	116.82				ft			12/14/20 09:06	1
Depth to Water (ft from MP)	119.30				ft			12/14/20 09:06	1
Elevation of well (ft from MP)	621.71				ft			12/14/20 09:06	1
Field pH	7.44				SU			12/14/20 09:06	1
Field Temperature	38.3				Degrees F			12/14/20 09:06	1
Ground Water Elevation	502.41				ft			12/14/20 09:06	1
Specific Conductance	1255				umhos/cm			12/14/20 09:06	1
Well bottom elevation	451.46				ft			12/14/20 09:06	1

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

Job ID: 500-192056-1

Client Sample ID: T06S

Date Collected: 12/14/20 11:25
Date Received: 12/14/20 15:35

Lab Sample ID: 500-192056-14

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		12/15/20 07:01	12/16/20 15:18	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		12/15/20 07:01	12/15/20 23:17	1
Barium	**0.031**		0.0025		mg/L		12/15/20 07:01	12/15/20 23:17	1
Boron	**0.69**		0.050		mg/L		12/15/20 07:01	12/15/20 23:17	1
Calcium	**82**		0.20		mg/L		12/15/20 07:01	12/15/20 23:17	1
Cobalt	<0.0010		0.0010		mg/L		12/15/20 07:01	12/15/20 23:17	1
Lead	<0.00050		0.00050		mg/L		12/15/20 07:01	12/15/20 23:17	1
Molybdenum	**0.011**		0.0050		mg/L		12/15/20 07:01	12/16/20 13:23	1
Selenium	<0.0025		0.0025		mg/L		12/15/20 07:01	12/16/20 13:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**450**		10		mg/L			12/17/20 01:22	1
Chloride	**13**		2.0		mg/L			12/16/20 11:11	1
Fluoride	**0.51**		0.10		mg/L			12/22/20 17:50	1
Sulfate	**100**		15		mg/L			12/17/20 13:43	3

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	**110.32**				ft			12/14/20 11:25	1
Depth to Water (ft from MP)	**112.62**				ft			12/14/20 11:25	1
Elevation of well (ft from MP)	**620.99**				ft			12/14/20 11:25	1
Field pH	**7.51**				SU			12/14/20 11:25	1
Field Temperature	**45.3**				Degrees F			12/14/20 11:25	1
Ground Water Elevation	**508.37**				ft			12/14/20 11:25	1
Specific Conductance	**658**				umhos/cm			12/14/20 11:25	1
Well bottom elevation	**447.94**				ft			12/14/20 11:25	1

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

Job ID: 500-192056-1

Client Sample ID: R08S

Date Collected: 12/14/20 14:17
Date Received: 12/14/20 15:35

Lab Sample ID: 500-192056-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.14		0.010		mg/L		12/15/20 07:01	12/16/20 15:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0015		0.0010		mg/L		12/15/20 07:01	12/15/20 23:20	1
Barium	0.040		0.0025		mg/L		12/15/20 07:01	12/15/20 23:20	1
Boron	8.0		1.0		mg/L		12/15/20 07:01	12/16/20 12:08	20
Calcium	130		0.20		mg/L		12/15/20 07:01	12/15/20 23:20	1
Cobalt	<0.0010		0.0010		mg/L		12/15/20 07:01	12/15/20 23:20	1
Lead	<0.00050		0.00050		mg/L		12/15/20 07:01	12/15/20 23:20	1
Molybdenum	0.38		0.0050		mg/L		12/15/20 07:01	12/16/20 13:34	1
Selenium	0.0081		0.0025		mg/L		12/15/20 07:01	12/16/20 13:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	700		10		mg/L			12/17/20 01:30	1
Chloride	88		10		mg/L			12/16/20 11:40	5
Fluoride	0.18		0.10		mg/L			12/22/20 17:56	1
Sulfate	400		50		mg/L			12/17/20 13:43	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	65.36				ft			12/14/20 14:17	1
Depth to Water (ft from MP)	67.91				ft			12/14/20 14:17	1
Elevation of well (ft from MP)	578.51				ft			12/14/20 14:17	1
Field pH	8.15				SU			12/14/20 14:17	1
Field Temperature	53.1				Degrees F			12/14/20 14:17	1
Ground Water Elevation	510.60				ft			12/14/20 14:17	1
Specific Conductance	941				umhos/cm			12/14/20 14:17	1
Well bottom elevation	453.08				ft			12/14/20 14:17	1

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

Job ID: 500-192056-1

Client Sample ID: T03S

Date Collected: 12/15/20 09:13
Date Received: 12/15/20 15:00

Lab Sample ID: 500-192056-16

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		12/15/20 17:29	12/16/20 10:12	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		12/15/20 17:29	12/16/20 14:20	1
Barium	0.11		0.0025		mg/L		12/15/20 17:29	12/16/20 14:20	1
Boron	1.4		0.25		mg/L		12/15/20 17:29	12/16/20 18:11	5
Calcium	140		0.20		mg/L		12/15/20 17:29	12/16/20 14:20	1
Cobalt	0.0015		0.0010		mg/L		12/15/20 17:29	12/16/20 14:20	1
Lead	<0.00050		0.00050		mg/L		12/15/20 17:29	12/16/20 14:20	1
Molybdenum	0.14		0.0050		mg/L		12/15/20 17:29	12/16/20 14:20	1
Selenium	<0.0025		0.0025		mg/L		12/15/20 17:29	12/16/20 14:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	960		10		mg/L			12/17/20 01:32	1
Chloride	170	F1	10		mg/L			12/16/20 11:40	5
Fluoride	0.27		0.10		mg/L			12/22/20 17:59	1
Sulfate	280		50		mg/L			12/17/20 13:43	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	133.35				ft			12/15/20 09:13	1
Depth to Water (ft from MP)	136.43				ft			12/15/20 09:13	1
Elevation of well (ft from MP)	629.74				ft			12/15/20 09:13	1
Field pH	7.01				SU			12/15/20 09:13	1
Field Temperature	50.7				Degrees F			12/15/20 09:13	1
Ground Water Elevation	493.31				ft			12/15/20 09:13	1
Specific Conductance	1240				umhos/cm			12/15/20 09:13	1
Well bottom elevation	456.70				ft			12/15/20 09:13	1

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

Job ID: 500-192056-1

Client Sample ID: G46S

Date Collected: 12/15/20 10:22
Date Received: 12/15/20 15:00

Lab Sample ID: 500-192056-17

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.21		0.010		mg/L		12/15/20 17:29	12/16/20 10:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.27		0.0010		mg/L		12/15/20 17:29	12/16/20 14:37	1
Barium	0.075		0.0025		mg/L		12/15/20 17:29	12/16/20 14:37	1
Boron	10		5.0		mg/L		12/15/20 17:29	12/16/20 18:28	100
Calcium	120		0.20		mg/L		12/15/20 17:29	12/16/20 14:37	1
Cobalt	<0.0010		0.0010		mg/L		12/15/20 17:29	12/16/20 14:37	1
Lead	0.00085		0.00050		mg/L		12/15/20 17:29	12/16/20 14:37	1
Molybdenum	1.5		0.0050		mg/L		12/15/20 17:29	12/16/20 14:37	1
Selenium	<0.0025		0.0025		mg/L		12/15/20 17:29	12/16/20 14:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		10		mg/L			12/17/20 01:35	1
Chloride	73		2.0		mg/L			12/16/20 11:14	1
Fluoride	0.35		0.10		mg/L			12/22/20 18:12	1
Sulfate	540		100		mg/L			12/17/20 13:44	20

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	99.08				ft			12/15/20 10:22	1
Depth to Water (ft from MP)	101.78				ft			12/15/20 10:22	1
Elevation of well (ft from MP)	601.34				ft			12/15/20 10:22	1
Field pH	7.74				SU			12/15/20 10:22	1
Field Temperature	52.7				Degrees F			12/15/20 10:22	1
Ground Water Elevation	499.56				ft			12/15/20 10:22	1
Specific Conductance	1156				umhos/cm			12/15/20 10:22	1
Well bottom elevation	453.62				ft			12/15/20 10:22	1

Client Sample Results

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

Job ID: 500-192056-1

Client Sample ID: T04S

Date Collected: 12/15/20 13:25
Date Received: 12/15/20 15:00

Lab Sample ID: 500-192056-18

Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	0				ft			12/15/20 13:25	1
Depth to Water (ft from MP)	0				ft			12/15/20 13:25	1
Elevation of well (ft from MP)	631.35				ft			12/15/20 13:25	1
Field pH	0				SU			12/15/20 13:25	1
Field Temperature	0				Degrees F			12/15/20 13:25	1
Ground Water Elevation	0				ft			12/15/20 13:25	1
Specific Conductance	0				umhos/cm			12/15/20 13:25	1
Well bottom elevation	458.07				ft			12/15/20 13:25	1

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

Job ID: 500-192056-1

Client Sample ID: G44S

Date Collected: 12/15/20 13:49
Date Received: 12/15/20 15:00

Lab Sample ID: 500-192056-19

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.030		0.010		mg/L		12/15/20 17:29	12/16/20 10:38	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		12/15/20 17:29	12/16/20 14:40	1
Barium	0.062		0.0025		mg/L		12/15/20 17:29	12/16/20 14:40	1
Boron	1.7		0.25		mg/L		12/15/20 17:29	12/16/20 18:32	5
Calcium	140		0.20		mg/L		12/15/20 17:29	12/16/20 14:40	1
Cobalt	<0.0010		0.0010		mg/L		12/15/20 17:29	12/16/20 14:40	1
Lead	<0.00050		0.00050		mg/L		12/15/20 17:29	12/16/20 14:40	1
Molybdenum	0.28		0.0050		mg/L		12/15/20 17:29	12/16/20 14:40	1
Selenium	<0.0025		0.0025		mg/L		12/15/20 17:29	12/16/20 14:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	650		10		mg/L			12/17/20 01:37	1
Chloride	52		2.0		mg/L			12/16/20 11:15	1
Fluoride	0.25		0.10		mg/L			12/22/20 18:16	1
Sulfate	180		25		mg/L			12/17/20 13:45	5

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	79.24				ft			12/15/20 13:49	1
Depth to Water (ft from MP)	81.42				ft			12/15/20 13:49	1
Elevation of well (ft from MP)	586.49				ft			12/15/20 13:49	1
Field pH	7.17				SU			12/15/20 13:49	1
Field Temperature	50.9				Degrees F			12/15/20 13:49	1
Ground Water Elevation	505.07				ft			12/15/20 13:49	1
Specific Conductance	838				umhos/cm			12/15/20 13:49	1
Well bottom elevation	455.11				ft			12/15/20 13:49	1

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

Job ID: 500-192056-1

Client Sample ID: R32S

Date Collected: 12/16/20 08:54
Date Received: 12/16/20 13:10

Lab Sample ID: 500-192056-20

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		12/16/20 18:00	12/17/20 08:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0025		0.0010		mg/L		12/16/20 18:00	12/17/20 14:14	1
Barium	0.038		0.0025		mg/L		12/16/20 18:00	12/17/20 14:14	1
Boron	6.1		1.0		mg/L		12/16/20 18:00	12/17/20 19:08	20
Calcium	150		0.20		mg/L		12/16/20 18:00	12/17/20 14:14	1
Cobalt	<0.0010		0.0010		mg/L		12/16/20 18:00	12/17/20 14:14	1
Lead	<0.00050	^+	0.00050		mg/L		12/16/20 18:00	12/17/20 14:14	1
Molybdenum	0.75		0.0050		mg/L		12/16/20 18:00	12/17/20 14:14	1
Selenium	<0.0025	F1	0.0025		mg/L		12/16/20 18:00	12/17/20 14:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	840		10		mg/L			12/17/20 01:40	1
Chloride	66	F1	2.0		mg/L			12/22/20 14:44	1
Fluoride	0.34		0.10		mg/L			12/22/20 18:22	1
Sulfate	430		50		mg/L			12/17/20 13:45	10

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Depth to water from land surface	18.41				ft			12/16/20 08:54	1
Depth to Water (ft from MP)	20.44				ft			12/16/20 08:54	1
Elevation of well (ft from MP)	536.91				ft			12/16/20 08:54	1
Field pH	7.43				SU			12/16/20 08:54	1
Field Temperature	51.8				Degrees F			12/16/20 08:54	1
Ground Water Elevation	516.47				ft			12/16/20 08:54	1
Specific Conductance	882.				umhos/cm			12/16/20 08:54	1
Well bottom elevation	457.84				ft			12/16/20 08:54	1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds 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.
F1	MS and/or MSD recovery exceeds control 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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Metals

Prep Batch: 575753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-1	G30S	Total Recoverable	Water	3005A	
500-192056-2	G48S	Total Recoverable	Water	3005A	
500-192056-3	G47S	Total Recoverable	Water	3005A	
MB 500-575753/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-575753/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 575869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-1	G30S	Total Recoverable	Water	6010C	575753
500-192056-2	G48S	Total Recoverable	Water	6010C	575753
500-192056-3	G47S	Total Recoverable	Water	6010C	575753
MB 500-575753/1-A	Method Blank	Total Recoverable	Water	6010C	575753
LCS 500-575753/2-A	Lab Control Sample	Total Recoverable	Water	6010C	575753

Prep Batch: 575895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-4	T09S	Total Recoverable	Water	3005A	
500-192056-5	DUP	Total Recoverable	Water	3005A	
500-192056-6	T05S	Total Recoverable	Water	3005A	
MB 500-575895/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-575895/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 576042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-1	G30S	Total Recoverable	Water	6020A	575753
500-192056-2	G48S	Total Recoverable	Water	6020A	575753
500-192056-3	G47S	Total Recoverable	Water	6020A	575753
MB 500-575753/1-A	Method Blank	Total Recoverable	Water	6020A	575753
LCS 500-575753/2-A	Lab Control Sample	Total Recoverable	Water	6020A	575753

Prep Batch: 576150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-7	T08S	Total Recoverable	Water	3005A	
500-192056-8	T02S	Total Recoverable	Water	3005A	
500-192056-9	G31S	Total Recoverable	Water	3005A	
MB 500-576150/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-576150/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 576224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-4	T09S	Total Recoverable	Water	6010C	575895
500-192056-5	DUP	Total Recoverable	Water	6010C	575895
500-192056-6	T05S	Total Recoverable	Water	6010C	575895
MB 500-575895/1-A	Method Blank	Total Recoverable	Water	6010C	575895
LCS 500-575895/2-A	Lab Control Sample	Total Recoverable	Water	6010C	575895

Prep Batch: 576343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-10	G33S	Total Recoverable	Water	3005A	
MB 500-576343/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-576343/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals

Analysis Batch: 576582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-7	T08S	Total Recoverable	Water	6010C	576150
500-192056-8	T02S	Total Recoverable	Water	6010C	576150
500-192056-9	G31S	Total Recoverable	Water	6010C	576150
MB 500-576150/1-A	Method Blank	Total Recoverable	Water	6010C	576150
LCS 500-576150/2-A	Lab Control Sample	Total Recoverable	Water	6010C	576150

Prep Batch: 576613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-11	G20S	Total Recoverable	Water	3005A	
500-192056-12	G45S	Total Recoverable	Water	3005A	
MB 500-576613/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-576613/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 576644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-4	T09S	Total Recoverable	Water	6020A	575895
500-192056-5	DUP	Total Recoverable	Water	6020A	575895
500-192056-6	T05S	Total Recoverable	Water	6020A	575895
500-192056-10	G33S	Total Recoverable	Water	6020A	576343
MB 500-575895/1-A	Method Blank	Total Recoverable	Water	6020A	575895
MB 500-576343/1-A	Method Blank	Total Recoverable	Water	6020A	576343
LCS 500-575895/2-A	Lab Control Sample	Total Recoverable	Water	6020A	575895
LCS 500-576343/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576343

Analysis Batch: 576684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-1	G30S	Total Recoverable	Water	6020A	575753
500-192056-2	G48S	Total Recoverable	Water	6020A	575753
500-192056-3	G47S	Total Recoverable	Water	6020A	575753
MB 500-575753/1-A	Method Blank	Total Recoverable	Water	6020A	575753
LCS 500-575753/2-A	Lab Control Sample	Total Recoverable	Water	6020A	575753

Prep Batch: 576797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-13	T01S	Total Recoverable	Water	3005A	
500-192056-14	T06S	Total Recoverable	Water	3005A	
500-192056-15	R08S	Total Recoverable	Water	3005A	
MB 500-576797/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-576797/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 576808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-11	G20S	Total Recoverable	Water	6010C	576613
500-192056-12	G45S	Total Recoverable	Water	6010C	576613
MB 500-576613/1-A	Method Blank	Total Recoverable	Water	6010C	576613
LCS 500-576613/2-A	Lab Control Sample	Total Recoverable	Water	6010C	576613

Analysis Batch: 576826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-10	G33S	Total Recoverable	Water	6010C	576343
MB 500-576343/1-A	Method Blank	Total Recoverable	Water	6010C	576343

Metals (Continued)

Analysis Batch: 576826 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-576343/2-A	Lab Control Sample	Total Recoverable	Water	6010C	576343

Analysis Batch: 576866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-4	T09S	Total Recoverable	Water	6020A	575895
500-192056-5	DUP	Total Recoverable	Water	6020A	575895
500-192056-6	T05S	Total Recoverable	Water	6020A	575895
500-192056-7	T08S	Total Recoverable	Water	6020A	576150
500-192056-8	T02S	Total Recoverable	Water	6020A	576150
500-192056-9	G31S	Total Recoverable	Water	6020A	576150
MB 500-575895/1-A	Method Blank	Total Recoverable	Water	6020A	575895
MB 500-576150/1-A	Method Blank	Total Recoverable	Water	6020A	576150
LCS 500-575895/2-A	Lab Control Sample	Total Recoverable	Water	6020A	575895
LCS 500-576150/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576150

Analysis Batch: 576882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-1	G30S	Total Recoverable	Water	6020A	575753
500-192056-2	G48S	Total Recoverable	Water	6020A	575753
500-192056-3	G47S	Total Recoverable	Water	6020A	575753
500-192056-11	G20S	Total Recoverable	Water	6020A	576613
500-192056-12	G45S	Total Recoverable	Water	6020A	576613
MB 500-575753/1-A	Method Blank	Total Recoverable	Water	6020A	575753
MB 500-576613/1-A	Method Blank	Total Recoverable	Water	6020A	576613
LCS 500-575753/2-A	Lab Control Sample	Total Recoverable	Water	6020A	575753
LCS 500-576613/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576613

Prep Batch: 576951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-16	T03S	Total Recoverable	Water	3005A	
500-192056-17	G46S	Total Recoverable	Water	3005A	
500-192056-19	G44S	Total Recoverable	Water	3005A	
MB 500-576951/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-576951/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-192056-16 MS	T03S	Total Recoverable	Water	3005A	
500-192056-16 MSD	T03S	Total Recoverable	Water	3005A	
500-192056-16 DU	T03S	Total Recoverable	Water	3005A	

Analysis Batch: 577089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-4	T09S	Total Recoverable	Water	6020A	575895
500-192056-5	DUP	Total Recoverable	Water	6020A	575895
500-192056-6	T05S	Total Recoverable	Water	6020A	575895
500-192056-7	T08S	Total Recoverable	Water	6020A	576150
500-192056-8	T02S	Total Recoverable	Water	6020A	576150
500-192056-9	G31S	Total Recoverable	Water	6020A	576150
500-192056-10	G33S	Total Recoverable	Water	6020A	576343
500-192056-10	G33S	Total Recoverable	Water	6020A	576343
500-192056-13	T01S	Total Recoverable	Water	6020A	576797
500-192056-14	T06S	Total Recoverable	Water	6020A	576797
500-192056-15	R08S	Total Recoverable	Water	6020A	576797

Metals (Continued)

Analysis Batch: 577089 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-575895/1-A	Method Blank	Total Recoverable	Water	6020A	575895
MB 500-576150/1-A	Method Blank	Total Recoverable	Water	6020A	576150
MB 500-576343/1-A	Method Blank	Total Recoverable	Water	6020A	576343
MB 500-576797/1-A	Method Blank	Total Recoverable	Water	6020A	576797
LCS 500-575895/2-A	Lab Control Sample	Total Recoverable	Water	6020A	575895
LCS 500-576150/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576150
LCS 500-576343/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576343
LCS 500-576797/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576797

Analysis Batch: 577113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-16	T03S	Total Recoverable	Water	6010C	576951
500-192056-17	G46S	Total Recoverable	Water	6010C	576951
500-192056-19	G44S	Total Recoverable	Water	6010C	576951
MB 500-576951/1-A	Method Blank	Total Recoverable	Water	6010C	576951
LCS 500-576951/2-A	Lab Control Sample	Total Recoverable	Water	6010C	576951
500-192056-16 MS	T03S	Total Recoverable	Water	6010C	576951
500-192056-16 MSD	T03S	Total Recoverable	Water	6010C	576951
500-192056-16 DU	T03S	Total Recoverable	Water	6010C	576951

Analysis Batch: 577145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-7	T08S	Total Recoverable	Water	6020A	576150
500-192056-8	T02S	Total Recoverable	Water	6020A	576150
500-192056-9	G31S	Total Recoverable	Water	6020A	576150
500-192056-13	T01S	Total Recoverable	Water	6020A	576797
500-192056-14	T06S	Total Recoverable	Water	6020A	576797
500-192056-15	R08S	Total Recoverable	Water	6020A	576797
500-192056-15	R08S	Total Recoverable	Water	6020A	576797
500-192056-16	T03S	Total Recoverable	Water	6020A	576951
500-192056-17	G46S	Total Recoverable	Water	6020A	576951
500-192056-19	G44S	Total Recoverable	Water	6020A	576951
MB 500-576150/1-A	Method Blank	Total Recoverable	Water	6020A	576150
MB 500-576797/1-A	Method Blank	Total Recoverable	Water	6020A	576797
MB 500-576951/1-A	Method Blank	Total Recoverable	Water	6020A	576951
LCS 500-576150/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576150
LCS 500-576797/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576797
LCS 500-576951/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576951
500-192056-16 MS	T03S	Total Recoverable	Water	6020A	576951
500-192056-16 MSD	T03S	Total Recoverable	Water	6020A	576951
500-192056-16 DU	T03S	Total Recoverable	Water	6020A	576951

Prep Batch: 577169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-20	R32S	Total Recoverable	Water	3005A	
MB 500-577169/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-577169/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-192056-20 MS	R32S	Total Recoverable	Water	3005A	
500-192056-20 MSD	R32S	Total Recoverable	Water	3005A	
500-192056-20 DU	R32S	Total Recoverable	Water	3005A	

Metals

Analysis Batch: 577216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-13	T01S	Total Recoverable	Water	6010C	576797
500-192056-14	T06S	Total Recoverable	Water	6010C	576797
500-192056-15	R08S	Total Recoverable	Water	6010C	576797
MB 500-576797/1-A	Method Blank	Total Recoverable	Water	6010C	576797
LCS 500-576797/2-A	Lab Control Sample	Total Recoverable	Water	6010C	576797

Analysis Batch: 577277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-16	T03S	Total Recoverable	Water	6020A	576951
500-192056-17	G46S	Total Recoverable	Water	6020A	576951
500-192056-19	G44S	Total Recoverable	Water	6020A	576951
MB 500-576951/1-A	Method Blank	Total Recoverable	Water	6020A	576951
LCS 500-576951/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576951
500-192056-16 MS	T03S	Total Recoverable	Water	6020A	576951
500-192056-16 MSD	T03S	Total Recoverable	Water	6020A	576951
500-192056-16 DU	T03S	Total Recoverable	Water	6020A	576951

Analysis Batch: 577331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-20	R32S	Total Recoverable	Water	6010C	577169
MB 500-577169/1-A	Method Blank	Total Recoverable	Water	6010C	577169
LCS 500-577169/2-A	Lab Control Sample	Total Recoverable	Water	6010C	577169
500-192056-20 MS	R32S	Total Recoverable	Water	6010C	577169
500-192056-20 MSD	R32S	Total Recoverable	Water	6010C	577169
500-192056-20 DU	R32S	Total Recoverable	Water	6010C	577169

Analysis Batch: 577364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-20	R32S	Total Recoverable	Water	6020A	577169
MB 500-577169/1-A	Method Blank	Total Recoverable	Water	6020A	577169
LCS 500-577169/2-A	Lab Control Sample	Total Recoverable	Water	6020A	577169
500-192056-20 MS	R32S	Total Recoverable	Water	6020A	577169
500-192056-20 MSD	R32S	Total Recoverable	Water	6020A	577169
500-192056-20 DU	R32S	Total Recoverable	Water	6020A	577169

Analysis Batch: 577514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-20	R32S	Total Recoverable	Water	6020A	577169
MB 500-577169/1-A	Method Blank	Total Recoverable	Water	6020A	577169
LCS 500-577169/2-A	Lab Control Sample	Total Recoverable	Water	6020A	577169
500-192056-20 MS	R32S	Total Recoverable	Water	6020A	577169
500-192056-20 MSD	R32S	Total Recoverable	Water	6020A	577169
500-192056-20 DU	R32S	Total Recoverable	Water	6020A	577169

General Chemistry

Analysis Batch: 575750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-1	G30S	Total/NA	Water	SM 2540C	
500-192056-2	G48S	Total/NA	Water	SM 2540C	
MB 500-575750/1	Method Blank	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 575750 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-575750/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 575962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-3	G47S	Total/NA	Water	SM 2540C	
500-192056-4	T09S	Total/NA	Water	SM 2540C	
500-192056-5	DUP	Total/NA	Water	SM 2540C	
500-192056-6	T05S	Total/NA	Water	SM 2540C	
MB 500-575962/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-575962/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-192056-3 MS	G47S	Total/NA	Water	SM 2540C	
500-192056-3 DU	G47S	Total/NA	Water	SM 2540C	
500-192056-4 DU	T09S	Total/NA	Water	SM 2540C	

Analysis Batch: 576321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-7	T08S	Total/NA	Water	SM 2540C	
500-192056-8	T02S	Total/NA	Water	SM 2540C	
500-192056-9	G31S	Total/NA	Water	SM 2540C	
500-192056-10	G33S	Total/NA	Water	SM 2540C	
MB 500-576321/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-576321/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 576531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-1	G30S	Total/NA	Water	SM 4500 Cl- E	
500-192056-2	G48S	Total/NA	Water	SM 4500 Cl- E	
500-192056-3	G47S	Total/NA	Water	SM 4500 Cl- E	
500-192056-4	T09S	Total/NA	Water	SM 4500 Cl- E	
500-192056-5	DUP	Total/NA	Water	SM 4500 Cl- E	
500-192056-6	T05S	Total/NA	Water	SM 4500 Cl- E	
500-192056-7	T08S	Total/NA	Water	SM 4500 Cl- E	
500-192056-8	T02S	Total/NA	Water	SM 4500 Cl- E	
500-192056-9	G31S	Total/NA	Water	SM 4500 Cl- E	
MB 500-576531/4	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-576531/5	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-192056-4 MS	T09S	Total/NA	Water	SM 4500 Cl- E	
500-192056-4 MSD	T09S	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 576777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-11	G20S	Total/NA	Water	SM 2540C	
500-192056-12	G45S	Total/NA	Water	SM 2540C	
500-192056-13	T01S	Total/NA	Water	SM 2540C	
MB 500-576777/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-576777/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-192056-11 MS	G20S	Total/NA	Water	SM 2540C	
500-192056-11 DU	G20S	Total/NA	Water	SM 2540C	
500-192056-12 DU	G45S	Total/NA	Water	SM 2540C	

General Chemistry

Analysis Batch: 577109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-10	G33S	Total/NA	Water	SM 4500 Cl- E	
500-192056-11	G20S	Total/NA	Water	SM 4500 Cl- E	
500-192056-12	G45S	Total/NA	Water	SM 4500 Cl- E	
500-192056-13	T01S	Total/NA	Water	SM 4500 Cl- E	
500-192056-14	T06S	Total/NA	Water	SM 4500 Cl- E	
500-192056-15	R08S	Total/NA	Water	SM 4500 Cl- E	
500-192056-16	T03S	Total/NA	Water	SM 4500 Cl- E	
500-192056-17	G46S	Total/NA	Water	SM 4500 Cl- E	
500-192056-19	G44S	Total/NA	Water	SM 4500 Cl- E	
MB 500-577109/39	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-577109/40	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-192056-10 MS	G33S	Total/NA	Water	SM 4500 Cl- E	
500-192056-10 MSD	G33S	Total/NA	Water	SM 4500 Cl- E	
500-192056-16 MS	T03S	Total/NA	Water	SM 4500 Cl- E	
500-192056-16 MSD	T03S	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 577212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-14	T06S	Total/NA	Water	SM 2540C	
500-192056-15	R08S	Total/NA	Water	SM 2540C	
500-192056-16	T03S	Total/NA	Water	SM 2540C	
500-192056-17	G46S	Total/NA	Water	SM 2540C	
500-192056-19	G44S	Total/NA	Water	SM 2540C	
500-192056-20	R32S	Total/NA	Water	SM 2540C	
MB 500-577212/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-577212/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-192056-14 MS	T06S	Total/NA	Water	SM 2540C	
500-192056-14 DU	T06S	Total/NA	Water	SM 2540C	

Analysis Batch: 577347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-1	G30S	Total/NA	Water	SM 4500 SO4 E	
500-192056-2	G48S	Total/NA	Water	SM 4500 SO4 E	
500-192056-3	G47S	Total/NA	Water	SM 4500 SO4 E	
500-192056-4	T09S	Total/NA	Water	SM 4500 SO4 E	
500-192056-5	DUP	Total/NA	Water	SM 4500 SO4 E	
500-192056-6	T05S	Total/NA	Water	SM 4500 SO4 E	
500-192056-7	T08S	Total/NA	Water	SM 4500 SO4 E	
500-192056-8	T02S	Total/NA	Water	SM 4500 SO4 E	
500-192056-9	G31S	Total/NA	Water	SM 4500 SO4 E	
500-192056-10	G33S	Total/NA	Water	SM 4500 SO4 E	
500-192056-11	G20S	Total/NA	Water	SM 4500 SO4 E	
500-192056-12	G45S	Total/NA	Water	SM 4500 SO4 E	
500-192056-13	T01S	Total/NA	Water	SM 4500 SO4 E	
500-192056-14	T06S	Total/NA	Water	SM 4500 SO4 E	
500-192056-15	R08S	Total/NA	Water	SM 4500 SO4 E	
500-192056-16	T03S	Total/NA	Water	SM 4500 SO4 E	
500-192056-17	G46S	Total/NA	Water	SM 4500 SO4 E	
500-192056-19	G44S	Total/NA	Water	SM 4500 SO4 E	
500-192056-20	R32S	Total/NA	Water	SM 4500 SO4 E	
MB 500-577347/15	Method Blank	Total/NA	Water	SM 4500 SO4 E	

General Chemistry (Continued)

Analysis Batch: 577347 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-577347/40	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-577347/16	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
LCS 500-577347/43	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-192056-1 MS	G30S	Total/NA	Water	SM 4500 SO4 E	
500-192056-1 MSD	G30S	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 578099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-20	R32S	Total/NA	Water	SM 4500 Cl- E	
MB 500-578099/39	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-578099/40	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-192056-20 MS	R32S	Total/NA	Water	SM 4500 Cl- E	
500-192056-20 MSD	R32S	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 578222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-1	G30S	Total/NA	Water	SM 4500 F C	
500-192056-2	G48S	Total/NA	Water	SM 4500 F C	
500-192056-3	G47S	Total/NA	Water	SM 4500 F C	
500-192056-4	T09S	Total/NA	Water	SM 4500 F C	
500-192056-5	DUP	Total/NA	Water	SM 4500 F C	
500-192056-6	T05S	Total/NA	Water	SM 4500 F C	
500-192056-7	T08S	Total/NA	Water	SM 4500 F C	
500-192056-8	T02S	Total/NA	Water	SM 4500 F C	
500-192056-9	G31S	Total/NA	Water	SM 4500 F C	
500-192056-10	G33S	Total/NA	Water	SM 4500 F C	
500-192056-11	G20S	Total/NA	Water	SM 4500 F C	
500-192056-12	G45S	Total/NA	Water	SM 4500 F C	
500-192056-13	T01S	Total/NA	Water	SM 4500 F C	
500-192056-14	T06S	Total/NA	Water	SM 4500 F C	
500-192056-15	R08S	Total/NA	Water	SM 4500 F C	
500-192056-16	T03S	Total/NA	Water	SM 4500 F C	
500-192056-17	G46S	Total/NA	Water	SM 4500 F C	
500-192056-19	G44S	Total/NA	Water	SM 4500 F C	
500-192056-20	R32S	Total/NA	Water	SM 4500 F C	
MB 500-578222/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-578222/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-192056-1 MS	G30S	Total/NA	Water	SM 4500 F C	
500-192056-1 MSD	G30S	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 576226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-1	G30S	Total/NA	Water	Field Sampling	
500-192056-2	G48S	Total/NA	Water	Field Sampling	
500-192056-3	G47S	Total/NA	Water	Field Sampling	
500-192056-4	T09S	Total/NA	Water	Field Sampling	
500-192056-5	DUP	Total/NA	Water	Field Sampling	
500-192056-6	T05S	Total/NA	Water	Field Sampling	
500-192056-7	T08S	Total/NA	Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 576226 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192056-8	T02S	Total/NA	Water	Field Sampling	
500-192056-9	G31S	Total/NA	Water	Field Sampling	
500-192056-10	G33S	Total/NA	Water	Field Sampling	
500-192056-11	G20S	Total/NA	Water	Field Sampling	
500-192056-12	G45S	Total/NA	Water	Field Sampling	
500-192056-13	T01S	Total/NA	Water	Field Sampling	
500-192056-14	T06S	Total/NA	Water	Field Sampling	
500-192056-15	R08S	Total/NA	Water	Field Sampling	
500-192056-16	T03S	Total/NA	Water	Field Sampling	
500-192056-17	G46S	Total/NA	Water	Field Sampling	
500-192056-18	T04S	Total/NA	Water	Field Sampling	
500-192056-19	G44S	Total/NA	Water	Field Sampling	
500-192056-20	R32S	Total/NA	Water	Field Sampling	

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-575753/1-A
Matrix: Water
Analysis Batch: 575869

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575753

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/08/20 06:21	12/08/20 12:43	1

Lab Sample ID: LCS 500-575753/2-A
Matrix: Water
Analysis Batch: 575869

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575753

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.522		mg/L		104	80 - 120

Lab Sample ID: MB 500-575895/1-A
Matrix: Water
Analysis Batch: 576224

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/08/20 17:57	12/10/20 10:27	1

Lab Sample ID: LCS 500-575895/2-A
Matrix: Water
Analysis Batch: 576224

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.529		mg/L		106	80 - 120

Lab Sample ID: MB 500-576150/1-A
Matrix: Water
Analysis Batch: 576582

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/10/20 07:37	12/11/20 23:59	1

Lab Sample ID: LCS 500-576150/2-A
Matrix: Water
Analysis Batch: 576582

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.527		mg/L		105	80 - 120

Lab Sample ID: MB 500-576343/1-A
Matrix: Water
Analysis Batch: 576826

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/11/20 07:38	12/14/20 11:54	1

Lab Sample ID: LCS 500-576343/2-A
Matrix: Water
Analysis Batch: 576826

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576343

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

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-576613/1-A
Matrix: Water
Analysis Batch: 576808

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576613

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/14/20 08:25	12/14/20 20:06	1

Lab Sample ID: LCS 500-576613/2-A
Matrix: Water
Analysis Batch: 576808

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576613

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.532		mg/L		106	80 - 120

Lab Sample ID: MB 500-576797/1-A
Matrix: Water
Analysis Batch: 577216

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/15/20 07:01	12/16/20 15:08	1

Lab Sample ID: LCS 500-576797/2-A
Matrix: Water
Analysis Batch: 577216

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.532		mg/L		106	80 - 120

Lab Sample ID: MB 500-576951/1-A
Matrix: Water
Analysis Batch: 577113

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/15/20 17:29	12/16/20 10:05	1

Lab Sample ID: LCS 500-576951/2-A
Matrix: Water
Analysis Batch: 577113

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.515		mg/L		103	80 - 120

Lab Sample ID: 500-192056-16 MS
Matrix: Water
Analysis Batch: 577113

Client Sample ID: T03S
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.031		0.500	0.595		mg/L		113	75 - 125

Lab Sample ID: 500-192056-16 MSD
Matrix: Water
Analysis Batch: 577113

Client Sample ID: T03S
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.031		0.500	0.595		mg/L		113	75 - 125	0	20

Method: 6010C - Metals (ICP)

Lab Sample ID: 500-192056-16 DU
Matrix: Water
Analysis Batch: 577113

Client Sample ID: T03S
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lithium	0.031			0.0323		mg/L				5	20

Lab Sample ID: MB 500-577169/1-A
Matrix: Water
Analysis Batch: 577331

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/16/20 18:00	12/17/20 08:43	1

Lab Sample ID: LCS 500-577169/2-A
Matrix: Water
Analysis Batch: 577331

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lithium			0.500	0.545		mg/L		109	80 - 120		

Lab Sample ID: 500-192056-20 MS
Matrix: Water
Analysis Batch: 577331

Client Sample ID: R32S
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lithium	0.11		0.500	0.654		mg/L		110	75 - 125		

Lab Sample ID: 500-192056-20 MSD
Matrix: Water
Analysis Batch: 577331

Client Sample ID: R32S
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium	0.11		0.500	0.645		mg/L		108	75 - 125	1	20

Lab Sample ID: 500-192056-20 DU
Matrix: Water
Analysis Batch: 577331

Client Sample ID: R32S
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lithium	0.11			0.106		mg/L				0.4	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-575753/1-A
Matrix: Water
Analysis Batch: 576042

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575753

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.0010		0.0010		mg/L		12/08/20 06:21	12/08/20 16:27	1
Lead	<0.00050		0.00050		mg/L		12/08/20 06:21	12/08/20 16:27	1

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

Lab Sample ID: MB 500-575753/1-A
Matrix: Water
Analysis Batch: 576684

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575753

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		12/08/20 06:21	12/14/20 12:15	1

Lab Sample ID: MB 500-575753/1-A
Matrix: Water
Analysis Batch: 576882

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575753

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/08/20 06:21	12/14/20 17:40	1
Barium	<0.0025		0.0025		mg/L		12/08/20 06:21	12/14/20 17:40	1
Calcium	<0.20		0.20		mg/L		12/08/20 06:21	12/14/20 17:40	1
Molybdenum	<0.0050		0.0050		mg/L		12/08/20 06:21	12/14/20 17:40	1
Selenium	<0.0025		0.0025		mg/L		12/08/20 06:21	12/14/20 17:40	1

Lab Sample ID: LCS 500-575753/2-A
Matrix: Water
Analysis Batch: 576042

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575753

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.500	0.470		mg/L		94	80 - 120
Lead	0.100	0.0982		mg/L		98	80 - 120

Lab Sample ID: LCS 500-575753/2-A
Matrix: Water
Analysis Batch: 576684

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575753

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: LCS 500-575753/2-A
Matrix: Water
Analysis Batch: 576882

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575753

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.103		mg/L		103	80 - 120
Barium	2.00	2.05		mg/L		102	80 - 120
Calcium	10.0	10.4		mg/L		104	80 - 120
Molybdenum	1.00	1.01		mg/L		101	80 - 120
Selenium	0.100	0.101		mg/L		101	80 - 120

Lab Sample ID: MB 500-575895/1-A
Matrix: Water
Analysis Batch: 576644

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0025		0.0025		mg/L		12/08/20 17:57	12/11/20 18:29	1
Calcium	<0.20		0.20		mg/L		12/08/20 17:57	12/11/20 18:29	1
Cobalt	<0.0010		0.0010		mg/L		12/08/20 17:57	12/11/20 18:29	1
Lead	<0.00050		0.00050		mg/L		12/08/20 17:57	12/11/20 18:29	1
Molybdenum	<0.0050		0.0050		mg/L		12/08/20 17:57	12/11/20 18:29	1

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

Lab Sample ID: MB 500-575895/1-A
Matrix: Water
Analysis Batch: 576866

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/08/20 17:57	12/14/20 16:27	1
Selenium	<0.0025		0.0025		mg/L		12/08/20 17:57	12/14/20 16:27	1

Lab Sample ID: MB 500-575895/1-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		12/08/20 17:57	12/15/20 15:13	1

Lab Sample ID: LCS 500-575895/2-A
Matrix: Water
Analysis Batch: 576644

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	2.00	2.05		mg/L		103	80 - 120
Calcium	10.0	10.3		mg/L		103	80 - 120
Cobalt	0.500	0.488		mg/L		98	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Molybdenum	1.00	0.992		mg/L		99	80 - 120

Lab Sample ID: LCS 500-575895/2-A
Matrix: Water
Analysis Batch: 576866

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0998		mg/L		100	80 - 120
Selenium	0.100	0.0971		mg/L		97	80 - 120

Lab Sample ID: LCS 500-575895/2-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.07		mg/L		107	80 - 120

Lab Sample ID: MB 500-576150/1-A
Matrix: Water
Analysis Batch: 576866

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/10/20 07:37	12/14/20 17:07	1
Barium	<0.0025		0.0025		mg/L		12/10/20 07:37	12/14/20 17:07	1
Calcium	<0.20		0.20		mg/L		12/10/20 07:37	12/14/20 17:07	1
Selenium	<0.0025		0.0025		mg/L		12/10/20 07:37	12/14/20 17:07	1

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

Lab Sample ID: MB 500-576150/1-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		12/10/20 07:37	12/15/20 17:07	1
Molybdenum	<0.0050		0.0050		mg/L		12/10/20 07:37	12/15/20 17:07	1

Lab Sample ID: MB 500-576150/1-A
Matrix: Water
Analysis Batch: 577145

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.0010		0.0010		mg/L		12/10/20 07:37	12/16/20 13:39	1
Lead	<0.00050		0.00050		mg/L		12/10/20 07:37	12/16/20 13:39	1

Lab Sample ID: LCS 500-576150/2-A
Matrix: Water
Analysis Batch: 576866

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576150

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	1.66		mg/L		83	80 - 120
Calcium	10.0	11.8		mg/L		118	80 - 120
Selenium	0.100	0.0989		mg/L		99	80 - 120

Lab Sample ID: LCS 500-576150/2-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.07		mg/L		107	80 - 120
Molybdenum	1.00	0.975		mg/L		97	80 - 120

Lab Sample ID: LCS 500-576150/2-A
Matrix: Water
Analysis Batch: 577145

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.500	0.542		mg/L		108	80 - 120
Lead	0.100	0.112		mg/L		112	80 - 120

Lab Sample ID: MB 500-576343/1-A
Matrix: Water
Analysis Batch: 576644

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0025		0.0025		mg/L		12/11/20 07:38	12/11/20 19:39	1
Calcium	<0.20		0.20		mg/L		12/11/20 07:38	12/11/20 19:39	1
Lead	<0.00050		0.00050		mg/L		12/11/20 07:38	12/11/20 19:39	1
Molybdenum	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 19:39	1

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

Lab Sample ID: MB 500-576343/1-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/11/20 07:38	12/15/20 16:25	1
Boron	<0.050		0.050		mg/L		12/11/20 07:38	12/15/20 16:25	1
Cobalt	<0.0010		0.0010		mg/L		12/11/20 07:38	12/15/20 16:25	1
Selenium	<0.0025		0.0025		mg/L		12/11/20 07:38	12/15/20 16:25	1

Lab Sample ID: LCS 500-576343/2-A
Matrix: Water
Analysis Batch: 576644

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	2.00	2.15		mg/L		107	80 - 120
Calcium	10.0	10.3		mg/L		103	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Molybdenum	1.00	0.996		mg/L		100	80 - 120

Lab Sample ID: LCS 500-576343/2-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0927		mg/L		93	80 - 120
Boron	1.00	1.05		mg/L		105	80 - 120
Cobalt	0.500	0.522		mg/L		104	80 - 120
Selenium	0.100	0.0969		mg/L		97	80 - 120

Lab Sample ID: MB 500-576613/1-A
Matrix: Water
Analysis Batch: 576882

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576613

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/14/20 08:25	12/14/20 21:13	1
Barium	<0.0025		0.0025		mg/L		12/14/20 08:25	12/14/20 21:13	1
Boron	<0.050	^+	0.050		mg/L		12/14/20 08:25	12/14/20 21:13	1
Calcium	<0.20		0.20		mg/L		12/14/20 08:25	12/14/20 21:13	1
Cobalt	<0.0010		0.0010		mg/L		12/14/20 08:25	12/14/20 21:13	1
Lead	<0.00050	^+	0.00050		mg/L		12/14/20 08:25	12/14/20 21:13	1
Molybdenum	<0.0050		0.0050		mg/L		12/14/20 08:25	12/14/20 21:13	1
Selenium	<0.0025		0.0025		mg/L		12/14/20 08:25	12/14/20 21:13	1

Lab Sample ID: LCS 500-576613/2-A
Matrix: Water
Analysis Batch: 576882

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576613

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0944		mg/L		94	80 - 120
Barium	2.00	2.02		mg/L		101	80 - 120
Calcium	10.0	10.3		mg/L		103	80 - 120
Cobalt	0.500	0.538		mg/L		108	80 - 120
Lead	0.100	0.112	^+	mg/L		112	80 - 120

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

Lab Sample ID: LCS 500-576613/2-A
Matrix: Water
Analysis Batch: 576882

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576613

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	1.00	0.990		mg/L		99	80 - 120
Selenium	0.100	0.0952		mg/L		95	80 - 120

Lab Sample ID: MB 500-576797/1-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/15/20 07:01	12/15/20 23:06	1
Barium	<0.0025		0.0025		mg/L		12/15/20 07:01	12/15/20 23:06	1
Boron	<0.050		0.050		mg/L		12/15/20 07:01	12/15/20 23:06	1
Calcium	<0.20		0.20		mg/L		12/15/20 07:01	12/15/20 23:06	1
Cobalt	<0.0010		0.0010		mg/L		12/15/20 07:01	12/15/20 23:06	1
Lead	<0.00050		0.00050		mg/L		12/15/20 07:01	12/15/20 23:06	1

Lab Sample ID: MB 500-576797/1-A
Matrix: Water
Analysis Batch: 577145

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	<0.0050		0.0050		mg/L		12/15/20 07:01	12/16/20 13:12	1
Selenium	<0.0025		0.0025		mg/L		12/15/20 07:01	12/16/20 13:12	1

Lab Sample ID: LCS 500-576797/2-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0964		mg/L		96	80 - 120
Barium	2.00	1.84		mg/L		92	80 - 120
Boron	1.00	0.903		mg/L		90	80 - 120
Calcium	10.0	9.31		mg/L		93	80 - 120
Cobalt	0.500	0.475		mg/L		95	80 - 120
Lead	0.100	0.0972		mg/L		97	80 - 120

Lab Sample ID: LCS 500-576797/2-A
Matrix: Water
Analysis Batch: 577145

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	1.00	1.00		mg/L		100	80 - 120
Selenium	0.100	0.103		mg/L		103	80 - 120

Lab Sample ID: MB 500-576951/1-A
Matrix: Water
Analysis Batch: 577145

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/15/20 17:29	12/16/20 14:13	1
Barium	<0.0025		0.0025		mg/L		12/15/20 17:29	12/16/20 14:13	1

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

Lab Sample ID: MB 500-576951/1-A
Matrix: Water
Analysis Batch: 577145

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.20		0.20		mg/L		12/15/20 17:29	12/16/20 14:13	1
Cobalt	<0.0010		0.0010		mg/L		12/15/20 17:29	12/16/20 14:13	1
Lead	<0.00050		0.00050		mg/L		12/15/20 17:29	12/16/20 14:13	1
Molybdenum	<0.0050		0.0050		mg/L		12/15/20 17:29	12/16/20 14:13	1
Selenium	<0.0025		0.0025		mg/L		12/15/20 17:29	12/16/20 14:13	1

Lab Sample ID: MB 500-576951/1-A
Matrix: Water
Analysis Batch: 577277

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		12/15/20 17:29	12/16/20 18:04	1

Lab Sample ID: LCS 500-576951/2-A
Matrix: Water
Analysis Batch: 577145

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0911		mg/L		91	80 - 120
Barium	2.00	1.90		mg/L		95	80 - 120
Calcium	10.0	9.32		mg/L		93	80 - 120
Cobalt	0.500	0.526		mg/L		105	80 - 120
Lead	0.100	0.110		mg/L		110	80 - 120
Molybdenum	1.00	0.961		mg/L		96	80 - 120
Selenium	0.100	0.0989		mg/L		99	80 - 120

Lab Sample ID: LCS 500-576951/2-A
Matrix: Water
Analysis Batch: 577277

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	0.955		mg/L		96	80 - 120

Lab Sample ID: 500-192056-16 MS
Matrix: Water
Analysis Batch: 577145

Client Sample ID: T03S
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0013		0.100	0.0960		mg/L		95	75 - 125
Barium	0.11		2.00	1.98		mg/L		93	75 - 125
Calcium	140		10.0	151	4	mg/L		96	75 - 125
Cobalt	0.0015		0.500	0.502		mg/L		100	75 - 125
Lead	<0.00050		0.100	0.106		mg/L		106	75 - 125
Molybdenum	0.14		1.00	1.15		mg/L		101	75 - 125
Selenium	<0.0025		0.100	0.0959		mg/L		96	75 - 125

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

Lab Sample ID: 500-192056-16 MS
Matrix: Water
Analysis Batch: 577277

Client Sample ID: T03S
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.4		1.00	2.35		mg/L		92	75 - 125

Lab Sample ID: 500-192056-16 MSD
Matrix: Water
Analysis Batch: 577145

Client Sample ID: T03S
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0013		0.100	0.0963		mg/L		95	75 - 125	0	20
Barium	0.11		2.00	2.00		mg/L		94	75 - 125	1	20
Calcium	140		10.0	152	4	mg/L		103	75 - 125	0	20
Cobalt	0.0015		0.500	0.500		mg/L		100	75 - 125	0	20
Lead	<0.00050		0.100	0.106		mg/L		106	75 - 125	0	20
Molybdenum	0.14		1.00	1.15		mg/L		101	75 - 125	0	20
Selenium	<0.0025		0.100	0.0952		mg/L		95	75 - 125	1	20

Lab Sample ID: 500-192056-16 MSD
Matrix: Water
Analysis Batch: 577277

Client Sample ID: T03S
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	1.4		1.00	2.54		mg/L		111	75 - 125	8	20

Lab Sample ID: 500-192056-16 DU
Matrix: Water
Analysis Batch: 577145

Client Sample ID: T03S
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.0013		0.00136		mg/L		8	20
Barium	0.11		0.115		mg/L		0.1	20
Calcium	140		143		mg/L		0.7	20
Cobalt	0.0015		0.00140		mg/L		5	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Molybdenum	0.14		0.145		mg/L		1	20
Selenium	<0.0025		<0.0025		mg/L		NC	20

Lab Sample ID: 500-192056-16 DU
Matrix: Water
Analysis Batch: 577277

Client Sample ID: T03S
Prep Type: Total Recoverable
Prep Batch: 576951

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	1.4		1.45		mg/L		1	20

Lab Sample ID: MB 500-577169/1-A
Matrix: Water
Analysis Batch: 577364

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/16/20 18:00	12/17/20 13:50	1
Barium	<0.0025		0.0025		mg/L		12/16/20 18:00	12/17/20 13:50	1
Calcium	<0.20		0.20		mg/L		12/16/20 18:00	12/17/20 13:50	1

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

Lab Sample ID: MB 500-577169/1-A
Matrix: Water
Analysis Batch: 577364

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.0010		0.0010		mg/L		12/16/20 18:00	12/17/20 13:50	1
Lead	<0.00050		0.00050		mg/L		12/16/20 18:00	12/17/20 13:50	1
Molybdenum	<0.0050		0.0050		mg/L		12/16/20 18:00	12/17/20 13:50	1
Selenium	<0.0025		0.0025		mg/L		12/16/20 18:00	12/17/20 13:50	1

Lab Sample ID: MB 500-577169/1-A
Matrix: Water
Analysis Batch: 577514

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		12/16/20 18:00	12/17/20 19:02	1

Lab Sample ID: LCS 500-577169/2-A
Matrix: Water
Analysis Batch: 577364

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0965		mg/L		96	80 - 120
Barium	2.00	2.04		mg/L		102	80 - 120
Calcium	10.0	9.15		mg/L		92	80 - 120
Cobalt	0.500	0.517		mg/L		103	80 - 120
Lead	0.100	0.111		mg/L		111	80 - 120
Molybdenum	1.00	0.991		mg/L		99	80 - 120
Selenium	0.100	0.102		mg/L		102	80 - 120

Lab Sample ID: LCS 500-577169/2-A
Matrix: Water
Analysis Batch: 577514

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	0.967		mg/L		97	80 - 120

Lab Sample ID: 500-192056-20 MS
Matrix: Water
Analysis Batch: 577364

Client Sample ID: R32S
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0025		0.100	0.101		mg/L		98	75 - 125
Barium	0.038		2.00	2.07		mg/L		102	75 - 125
Calcium	150		10.0	153	4	mg/L		67	75 - 125
Cobalt	<0.0010		0.500	0.513		mg/L		103	75 - 125
Lead	<0.00050	^+	0.100	0.107	^+	mg/L		107	75 - 125
Molybdenum	0.75		1.00	1.76		mg/L		101	75 - 125
Selenium	<0.0025	F1	0.100	0.0660	F1	mg/L		66	75 - 125

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

Lab Sample ID: 500-192056-20 MS
Matrix: Water
Analysis Batch: 577514

Client Sample ID: R32S
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	6.1		1.00	6.85	4	mg/L		71	75 - 125

Lab Sample ID: 500-192056-20 MSD
Matrix: Water
Analysis Batch: 577364

Client Sample ID: R32S
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0025		0.100	0.102		mg/L		100	75 - 125	1	20
Barium	0.038		2.00	2.06		mg/L		101	75 - 125	1	20
Calcium	150		10.0	155	4	mg/L		87	75 - 125	1	20
Cobalt	<0.0010		0.500	0.515		mg/L		103	75 - 125	0	20
Lead	<0.00050	^+	0.100	0.108	^+	mg/L		108	75 - 125	2	20
Molybdenum	0.75		1.00	1.77		mg/L		101	75 - 125	1	20
Selenium	<0.0025	F1	0.100	0.0683	F1	mg/L		68	75 - 125	4	20

Lab Sample ID: 500-192056-20 MSD
Matrix: Water
Analysis Batch: 577514

Client Sample ID: R32S
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	6.1		1.00	6.95	4	mg/L		82	75 - 125	2	20

Lab Sample ID: 500-192056-20 DU
Matrix: Water
Analysis Batch: 577364

Client Sample ID: R32S
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.0025		0.00243		mg/L		4	20
Barium	0.038		0.0380		mg/L		1	20
Calcium	150		143		mg/L		2	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Lead	<0.00050	^+	<0.00050	^+	mg/L		NC	20
Molybdenum	0.75		0.739		mg/L		2	20
Selenium	<0.0025	F1	<0.0025		mg/L		NC	20

Lab Sample ID: 500-192056-20 DU
Matrix: Water
Analysis Batch: 577514

Client Sample ID: R32S
Prep Type: Total Recoverable
Prep Batch: 577169

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	6.1		5.81		mg/L		5	20

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

Lab Sample ID: MB 500-575750/1
Matrix: Water
Analysis Batch: 575750

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			12/08/20 03:41	1

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

Lab Sample ID: LCS 500-575750/2
Matrix: Water
Analysis Batch: 575750

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	248		mg/L		99	80 - 120		

Lab Sample ID: MB 500-575962/1
Matrix: Water
Analysis Batch: 575962

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			12/09/20 02:42	1

Lab Sample ID: LCS 500-575962/2
Matrix: Water
Analysis Batch: 575962

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	236		mg/L		94	80 - 120		

Lab Sample ID: 500-192056-3 MS
Matrix: Water
Analysis Batch: 575962

Client Sample ID: G47S
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	1390	4	mg/L		105	75 - 125		

Lab Sample ID: 500-192056-3 DU
Matrix: Water
Analysis Batch: 575962

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	1100			1140		mg/L				2	5

Lab Sample ID: 500-192056-4 DU
Matrix: Water
Analysis Batch: 575962

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	890			868		mg/L				3	5

Lab Sample ID: MB 500-576321/1
Matrix: Water
Analysis Batch: 576321

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			12/11/20 02:48	1

Lab Sample ID: LCS 500-576321/2
Matrix: Water
Analysis Batch: 576321

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	230		mg/L		92	80 - 120		

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

Lab Sample ID: MB 500-576777/1
Matrix: Water
Analysis Batch: 576777

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			12/15/20 02:09	1

Lab Sample ID: LCS 500-576777/2
Matrix: Water
Analysis Batch: 576777

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	224		mg/L		90	80 - 120

Lab Sample ID: 500-192056-11 MS
Matrix: Water
Analysis Batch: 576777

Client Sample ID: G20S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	390		250	602		mg/L		85	75 - 125

Lab Sample ID: 500-192056-11 DU
Matrix: Water
Analysis Batch: 576777

Client Sample ID: G20S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	390		392		mg/L		0.5	5

Lab Sample ID: 500-192056-12 DU
Matrix: Water
Analysis Batch: 576777

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	760		780		mg/L		3	5

Lab Sample ID: MB 500-577212/1
Matrix: Water
Analysis Batch: 577212

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			12/17/20 01:12	1

Lab Sample ID: LCS 500-577212/2
Matrix: Water
Analysis Batch: 577212

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	228		mg/L		91	80 - 120

Lab Sample ID: 500-192056-14 MS
Matrix: Water
Analysis Batch: 577212

Client Sample ID: T06S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	450		250	720		mg/L		110	75 - 125

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

Job ID: 500-192056-1

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

Lab Sample ID: 500-192056-14 DU
Matrix: Water
Analysis Batch: 577212

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	450		442		mg/L		0.9	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-576531/4
Matrix: Water
Analysis Batch: 576531

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			12/12/20 14:24	1

Lab Sample ID: LCS 500-576531/5
Matrix: Water
Analysis Batch: 576531

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

Lab Sample ID: 500-192056-4 MS
Matrix: Water
Analysis Batch: 576531

Client Sample ID: T09S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	84		50.0	132		mg/L		95	75 - 125

Lab Sample ID: 500-192056-4 MSD
Matrix: Water
Analysis Batch: 576531

Client Sample ID: T09S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	84		50.0	131		mg/L		94	75 - 125	0	20

Lab Sample ID: MB 500-577109/39
Matrix: Water
Analysis Batch: 577109

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			12/16/20 10:59	1

Lab Sample ID: LCS 500-577109/40
Matrix: Water
Analysis Batch: 577109

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	50.4		mg/L		101	85 - 115

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

Lab Sample ID: 500-192056-10 MS
Matrix: Water
Analysis Batch: 577109

Client Sample ID: G33S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	12		50.0	56.2		mg/L		88	75 - 125

Lab Sample ID: 500-192056-10 MSD
Matrix: Water
Analysis Batch: 577109

Client Sample ID: G33S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	12		50.0	56.7		mg/L		89	75 - 125	1	20

Lab Sample ID: 500-192056-16 MS
Matrix: Water
Analysis Batch: 577109

Client Sample ID: T03S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	170	F1	50.0	205	F1	mg/L		72	75 - 125

Lab Sample ID: 500-192056-16 MSD
Matrix: Water
Analysis Batch: 577109

Client Sample ID: T03S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	170	F1	50.0	211		mg/L		83	75 - 125	3	20

Lab Sample ID: MB 500-578099/39
Matrix: Water
Analysis Batch: 578099

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			12/22/20 14:23	1

Lab Sample ID: LCS 500-578099/40
Matrix: Water
Analysis Batch: 578099

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	48.3		mg/L		97	85 - 115

Lab Sample ID: 500-192056-20 MS
Matrix: Water
Analysis Batch: 578099

Client Sample ID: R32S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	66	F1	50.0	102	F1	mg/L		70	75 - 125

Lab Sample ID: 500-192056-20 MSD
Matrix: Water
Analysis Batch: 578099

Client Sample ID: R32S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	66	F1	50.0	104	F1	mg/L		74	75 - 125	2	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-578222/3
Matrix: Water
Analysis Batch: 578222

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			12/22/20 16:33	1

Lab Sample ID: LCS 500-578222/4
Matrix: Water
Analysis Batch: 578222

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	11.3		mg/L		113	80 - 120

Lab Sample ID: 500-192056-1 MS
Matrix: Water
Analysis Batch: 578222

Client Sample ID: G30S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.2		5.00	6.85		mg/L		113	75 - 125

Lab Sample ID: 500-192056-1 MSD
Matrix: Water
Analysis Batch: 578222

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
Fluoride	1.2		5.00	6.85		mg/L		113	75 - 125	0	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-577347/15
Matrix: Water
Analysis Batch: 577347

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			12/17/20 13:37	1

Lab Sample ID: MB 500-577347/40
Matrix: Water
Analysis Batch: 577347

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			12/17/20 13:44	1

Lab Sample ID: LCS 500-577347/16
Matrix: Water
Analysis Batch: 577347

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	21.3		mg/L		107	80 - 120

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

Job ID: 500-192056-1

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

Lab Sample ID: LCS 500-577347/43
Matrix: Water
Analysis Batch: 577347

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			20.0	21.2		mg/L		106	80 - 120		

Lab Sample ID: 500-192056-1 MS
Matrix: Water
Analysis Batch: 577347

Client Sample ID: G30S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	450		16.0	463	4	mg/L		89	75 - 125		

Lab Sample ID: 500-192056-1 MSD
Matrix: Water
Analysis Batch: 577347

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
Sulfate	450		16.0	465	4	mg/L		100	75 - 125	0	20

Chain of Custody Record 487141

eurofins | Environment Testing TestAmerica

Address: _____

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

TAL-8210

Client Contact	Project Manager: Diana Meckler	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: 4Q20 GW	☐ 2 days			Job / SDG No.: 500-192056
P O #	☐ 1 day			

500-192056 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, Ca, Co, Li, Mo, TDS, Fl, Cl, SO4	
G30S	12/07/20	0948		W	5			✓	✓	✓	✓	✓
G48S	12/07/20	1126		W	5			✓	✓	✓	✓	✓
G47S	12/07/20	1325		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:

5.5 → 5.4 48hr.

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	12/07/20 1500			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 12/7/20 1500

Chain of Custody Record 487150

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: TAL-8210

Client Contact	Project Manager: Diana Mockler	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.: 500-192056
P O #	☐ 1 day			

500-192056 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, Li, Mo, Se	TDS, Fl, Cl, SO4	Sample Specific Notes:
4	TO9S	12/08/20	1008	G	W	5			/	/	/	/	/	
5	DUP (of TO9S)	12/08/20	1008		W	5			/	/	/	/	/	
6	TO5S	12/08/20	1332		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: 2.3 Corr'd: 2.2 | Therm ID No.:_____

Relinquished by:	Company: TAL	Date/Time: 12/08/20 @ 1534	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: TALHT	Date/Time: 12/8/20 1534

Chain of Custody Record 488304

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Address: _____

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

TAL-8210

Client Contact	Project Manager: Diana Mockler	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: 4Q20 GW	☐ 2 days			Job / SDG No.: 500-192056
P O #	☐ 1 day			

500-192056 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, Pb, Se, Tl	TDS, Fl, Cl, SO4	Sample Specific Notes:
1 TOBS	12/09/20	0958	G	W	5			-	-	-	-	-	
8 TO2S	12/09/20	1229		W	5			-	-	-	-	-	
9 G31S	12/09/20	1440		W	5			-	-	-	-	-	

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:

19

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____			
Relinquished by:	Company: TAL	Date/Time: 12/09/20 @ 1545	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Paula Buckley	Company: EET	Date/Time: 12/9/20 1545

Chain of Custody Record 487142

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: TAL-8210

Client Contact	Project Manager: Diana Mackler	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: 4Q20 GW	☐ 2 days			Job / SDG No.: 500-192056
P O #	☐ 1 day			

500-192056 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, Ca, Co, Li, Mo, S	TDS, Fl, Cl, SO4	Sample Specific Notes:
10 G335	12/10/20	1020	G	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:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 2.8 Corr'd: 3.7 | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TMT	12/10/20 @ 1200			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Pallia Buckley	Company: ETA	Date/Time: 12/11/20 1200

Chain of Custody Record 487143

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Address: ______________________

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

TAL-8210

Client Contact	**Project Manager:** Diana Makler	**Site Contact:**	**Date:**
Company Name: Midwest Generation EME LLC	Tel/Email:	**Lab Contact:**	**Carrier:**

COC No: ______ of ______ COCs

Client Contact	
Company Name:	Midwest Generation EME LLC
Address:	
City/State/Zip:	Joliet, IL
Phone:	
Fax:	
Project Name:	Joliet #9 (Quarry) CCR
Site:	4420 GW
P O #	

Analysis Turnaround Time

☐ CALENDAR DAYS ☐ WORKING DAYS

TAT if different from Below __________

☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sampler:

For Lab Use Only:
Walk-in Client:
Lab Sampling:

Job / SDG No.: 500-192056

500-192056 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, Co, Pb, Li, Mo,	TDS, Fl, Cl, SO4	Sample Specific Notes:
11	G205	12/11/20	0905		W	5			/	/	/	/	/	
12	G45S	12/11/20	1242		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:

5.6 5.3

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]	TAZ	12/11/20			
[signature]	ETA	12/11/20 1545			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: ETA-CHI	Date/Time: 12/11/20 1545

Chain of Custody Record 488357

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TAL-8210

Address: ______________________

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl

Client Contact	Project Manager: Diana Mockler	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: 4020 GW	☐ 2 days			Job / SDG No.: 500-192056
P O #	☐ 1 day		500-192056 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,	TDS, Fl, Cl, SO4	Sample Specific Notes:
13	T01S	12/14/20	0906		W	5			✓	✓	✓	✓	✓	
14	T06S	12/14/20	1125		W	5			✓	✓	✓	✓	✓	
15	R08S	12/14/20	1417		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: 8.3 Corr'd: ____ Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TTRC	12/14/20 @ 1535			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Allen Scott	Company: ETA-CHI	Date/Time: 12/14/20 1535

Address: ______________________

Chain of Custody Record 488360

eurofins | Environment Testing TestAmerica

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

TAL-8210

Client Contact	Project Manager: Diana Mockler	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: 4020 GW	☐ 2 days			Job / SDG No.: 500-192056
P O #	☐ 1 day			

500-192056 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, Pb, Li, Mo	TDS, Fl, Cl, SO4	Sample Specific Notes:
16	T03S	12/15/20	0913		W	5			/	/	/	/	/	
17	G46S	12/15/20	1022		W	5			/	/	/	/	/	
18	T04S	12/15/20	1325		—	—								Property Development excavation, no samples
19	G44S	12/15/20	1349		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:

3.3 / 3.0

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	12/15/20 1500			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Stephanie Hernandez	Company: ETA-CHI	Date/Time: 12/15/20 1500

Chain of Custody Record 488362

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: Diana Mucha	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: 4020 GW	☐ 2 days			Job / SDG No.: 500-192056
P O #	☐ 1 day		500-192056 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, Co, Pb, Li, Mo, S	TDS, Fl, Cl, SO4	Sample Specific Notes:
20 R325	12/16/20	0854	G	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:

3.9 → 3.6 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	1310 12/16/20			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Stephanie Hernandez	Company: ETA-CHI	Date/Time: 12/16/20 1310

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-192056-1

Login Number: 192056
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	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	5.4,2.2,1.9,3.7,5.3,8.3,3.0,3.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Sample ID: G30S

Lab Sample ID: 500-192056-1

Date Collected: 12/07/20 09:48

Matrix: Water

Date Received: 12/07/20 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	575869	12/08/20 12:50	EEN	TAL CHI
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576042	12/08/20 18:04	FXG	TAL CHI
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	576684	12/14/20 12:22	FXG	TAL CHI
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576882	12/14/20 17:47	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	575750	12/08/20 04:37	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576531	12/12/20 15:03	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 16:40	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:38	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/07/20 09:48	JVB	TAL CHI

Client Sample ID: G48S

Lab Sample ID: 500-192056-2

Date Collected: 12/07/20 11:26

Matrix: Water

Date Received: 12/07/20 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	575869	12/08/20 12:53	EEN	TAL CHI
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576042	12/08/20 18:07	FXG	TAL CHI
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	576684	12/14/20 12:26	FXG	TAL CHI
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576882	12/14/20 17:50	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	575750	12/08/20 04:40	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576531	12/12/20 15:04	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 16:51	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:38	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/07/20 11:26	JVB	TAL CHI

Client Sample ID: G47S

Lab Sample ID: 500-192056-3

Date Collected: 12/07/20 13:25

Matrix: Water

Date Received: 12/07/20 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	575869	12/08/20 12:56	EEN	TAL CHI
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576042	12/08/20 18:11	FXG	TAL CHI
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	576684	12/14/20 12:29	FXG	TAL CHI

Client Sample ID: G47S

Lab Sample ID: 500-192056-3

Date Collected: 12/07/20 13:25

Matrix: Water

Date Received: 12/07/20 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			575753	12/08/20 06:21	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576882	12/14/20 17:54	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	575962	12/09/20 02:47	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576531	12/12/20 15:05	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 16:56	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:39	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/07/20 13:25	JVB	TAL CHI

Client Sample ID: T09S

Lab Sample ID: 500-192056-4

Date Collected: 12/08/20 10:08

Matrix: Water

Date Received: 12/08/20 15:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	576224	12/10/20 10:40	EEN	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 16:56	FXG	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 19:18	FXG	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	577089	12/15/20 16:03	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	575962	12/09/20 02:55	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576531	12/12/20 15:05	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 16:59	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:39	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/08/20 10:08	JVB	TAL CHI

Client Sample ID: DUP

Lab Sample ID: 500-192056-5

Date Collected: 12/08/20 10:08

Matrix: Water

Date Received: 12/08/20 15:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	576224	12/10/20 10:44	EEN	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 16:58	FXG	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 19:21	FXG	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	577089	12/15/20 16:07	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	575962	12/09/20 03:00	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576531	12/12/20 15:11	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:03	MS	TAL CHI

Lab Chronicle

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

Job ID: 500-192056-1

Client Sample ID: DUP

Lab Sample ID: 500-192056-5

Date Collected: 12/08/20 10:08

Matrix: Water

Date Received: 12/08/20 15:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:39	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/08/20 10:08	JVB	TAL CHI

Client Sample ID: T05S

Lab Sample ID: 500-192056-6

Date Collected: 12/08/20 13:32

Matrix: Water

Date Received: 12/08/20 15:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	576224	12/10/20 10:48	EEN	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 17:00	FXG	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 19:25	FXG	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		100	577089	12/15/20 16:10	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	575962	12/09/20 03:03	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576531	12/12/20 15:11	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:10	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	577347	12/17/20 13:40	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/08/20 13:32	JVB	TAL CHI

Client Sample ID: T08S

Lab Sample ID: 500-192056-7

Date Collected: 12/09/20 09:58

Matrix: Water

Date Received: 12/09/20 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576582	12/12/20 00:29	JJB	TAL CHI
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 17:57	FXG	TAL CHI
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	577089	12/15/20 17:28	FXG	TAL CHI
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577145	12/16/20 13:52	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576321	12/11/20 03:08	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576531	12/12/20 15:12	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:22	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:40	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/09/20 09:58	JVB	TAL CHI

Client Sample ID: T02S

Lab Sample ID: 500-192056-8

Date Collected: 12/09/20 12:29

Matrix: Water

Date Received: 12/09/20 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576582	12/12/20 00:33	JJB	TAL CHI
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 17:59	FXG	TAL CHI
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6020A		10	577089	12/15/20 17:32	FXG	TAL CHI
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577145	12/16/20 13:56	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576321	12/11/20 03:11	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576531	12/12/20 15:12	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:27	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:41	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/09/20 12:29	JVB	TAL CHI

Client Sample ID: G31S

Lab Sample ID: 500-192056-9

Date Collected: 12/09/20 14:40

Matrix: Water

Date Received: 12/09/20 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576582	12/12/20 00:36	JJB	TAL CHI
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 18:01	FXG	TAL CHI
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6020A		10	577089	12/15/20 17:35	FXG	TAL CHI
Total Recoverable	Prep	3005A			576150	12/10/20 07:37	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577145	12/16/20 13:59	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576321	12/11/20 03:13	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576531	12/12/20 15:13	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:31	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:41	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/09/20 14:40	JVB	TAL CHI

Client Sample ID: G33S

Lab Sample ID: 500-192056-10

Date Collected: 12/10/20 10:20

Matrix: Water

Date Received: 12/10/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576826	12/14/20 12:26	EEN	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 21:20	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		5	577089	12/15/20 16:54	FXG	TAL CHI

Lab Chronicle

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

Job ID: 500-192056-1

Client Sample ID: G33S

Lab Sample ID: 500-192056-10

Date Collected: 12/10/20 10:20
Date Received: 12/10/20 12:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577089	12/15/20 18:45	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576321	12/11/20 03:16	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	577109	12/16/20 11:01	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:34	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		3	577347	12/17/20 13:42	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/10/20 10:20	JVB	TAL CHI

Client Sample ID: G20S

Lab Sample ID: 500-192056-11

Date Collected: 12/11/20 09:05
Date Received: 12/11/20 15:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576613	12/14/20 08:25	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576808	12/14/20 20:13	EEN	TAL CHI
Total Recoverable	Prep	3005A			576613	12/14/20 08:25	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576882	12/14/20 22:08	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576777	12/15/20 02:24	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	577109	12/16/20 11:05	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:41	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		3	577347	12/17/20 13:42	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/11/20 09:05	JVB	TAL CHI

Client Sample ID: G45S

Lab Sample ID: 500-192056-12

Date Collected: 12/11/20 12:42
Date Received: 12/11/20 15:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576613	12/14/20 08:25	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576808	12/14/20 20:26	EEN	TAL CHI
Total Recoverable	Prep	3005A			576613	12/14/20 08:25	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576882	12/14/20 22:11	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576777	12/15/20 02:32	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	577109	12/16/20 11:39	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:44	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:42	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/11/20 12:42	JVB	TAL CHI

Client Sample ID: T01S

Lab Sample ID: 500-192056-13

Date Collected: 12/14/20 09:06

Matrix: Water

Date Received: 12/14/20 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576797	12/15/20 07:01	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	577216	12/16/20 15:14	EEN	TAL CHI
Total Recoverable	Prep	3005A			576797	12/15/20 07:01	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577089	12/15/20 23:13	FXG	TAL CHI
Total Recoverable	Prep	3005A			576797	12/15/20 07:01	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577145	12/16/20 13:19	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576777	12/15/20 02:37	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	577109	12/16/20 11:39	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:48	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:43	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/14/20 09:06	JVB	TAL CHI

Client Sample ID: T06S

Lab Sample ID: 500-192056-14

Date Collected: 12/14/20 11:25

Matrix: Water

Date Received: 12/14/20 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576797	12/15/20 07:01	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	577216	12/16/20 15:18	EEN	TAL CHI
Total Recoverable	Prep	3005A			576797	12/15/20 07:01	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577089	12/15/20 23:17	FXG	TAL CHI
Total Recoverable	Prep	3005A			576797	12/15/20 07:01	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577145	12/16/20 13:23	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	577212	12/17/20 01:22	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	577109	12/16/20 11:11	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:50	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		3	577347	12/17/20 13:43	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/14/20 11:25	JVB	TAL CHI

Client Sample ID: R08S

Lab Sample ID: 500-192056-15

Date Collected: 12/14/20 14:17

Matrix: Water

Date Received: 12/14/20 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576797	12/15/20 07:01	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	577216	12/16/20 15:21	EEN	TAL CHI
Total Recoverable	Prep	3005A			576797	12/15/20 07:01	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577089	12/15/20 23:20	FXG	TAL CHI
Total Recoverable	Prep	3005A			576797	12/15/20 07:01	LMN	TAL CHI
Total Recoverable	Analysis	6020A		20	577145	12/16/20 12:08	FXG	TAL CHI
Total Recoverable	Prep	3005A			576797	12/15/20 07:01	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577145	12/16/20 13:34	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	577212	12/17/20 01:30	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	577109	12/16/20 11:40	EAT	TAL CHI

Client Sample ID: R08S

Lab Sample ID: 500-192056-15

Date Collected: 12/14/20 14:17

Matrix: Water

Date Received: 12/14/20 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:56	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:43	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/14/20 14:17	JVB	TAL CHI

Client Sample ID: T03S

Lab Sample ID: 500-192056-16

Date Collected: 12/15/20 09:13

Matrix: Water

Date Received: 12/15/20 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576951	12/15/20 17:29	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	577113	12/16/20 10:12	EEN	TAL CHI
Total Recoverable	Prep	3005A			576951	12/15/20 17:29	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	577145	12/16/20 14:20	FXG	TAL CHI
Total Recoverable	Prep	3005A			576951	12/15/20 17:29	BDE	TAL CHI
Total Recoverable	Analysis	6020A		5	577277	12/16/20 18:11	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	577212	12/17/20 01:32	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	577109	12/16/20 11:40	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 17:59	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:43	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/15/20 09:13	JVB	TAL CHI

Client Sample ID: G46S

Lab Sample ID: 500-192056-17

Date Collected: 12/15/20 10:22

Matrix: Water

Date Received: 12/15/20 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576951	12/15/20 17:29	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	577113	12/16/20 10:34	EEN	TAL CHI
Total Recoverable	Prep	3005A			576951	12/15/20 17:29	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	577145	12/16/20 14:37	FXG	TAL CHI
Total Recoverable	Prep	3005A			576951	12/15/20 17:29	BDE	TAL CHI
Total Recoverable	Analysis	6020A		100	577277	12/16/20 18:28	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	577212	12/17/20 01:35	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	577109	12/16/20 11:14	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 18:12	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	577347	12/17/20 13:44	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/15/20 10:22	JVB	TAL CHI

Client Sample ID: T04S

Lab Sample ID: 500-192056-18

Date Collected: 12/15/20 13:25

Matrix: Water

Date Received: 12/15/20 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1	576226	12/15/20 13:25	JVB	TAL CHI

Lab Chronicle

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

Job ID: 500-192056-1

Client Sample ID: G44S

Lab Sample ID: 500-192056-19

Date Collected: 12/15/20 13:49
Date Received: 12/15/20 15:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576951	12/15/20 17:29	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	577113	12/16/20 10:38	EEN	TAL CHI
Total Recoverable	Prep	3005A			576951	12/15/20 17:29	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	577145	12/16/20 14:40	FXG	TAL CHI
Total Recoverable	Prep	3005A			576951	12/15/20 17:29	BDE	TAL CHI
Total Recoverable	Analysis	6020A		5	577277	12/16/20 18:32	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	577212	12/17/20 01:37	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	577109	12/16/20 11:15	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 18:16	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	577347	12/17/20 13:45	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/15/20 13:49	JVB	TAL CHI

Client Sample ID: R32S

Lab Sample ID: 500-192056-20

Date Collected: 12/16/20 08:54
Date Received: 12/16/20 13:10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			577169	12/16/20 18:00	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	577331	12/17/20 08:50	JJB	TAL CHI
Total Recoverable	Prep	3005A			577169	12/16/20 18:00	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	577364	12/17/20 14:14	FXG	TAL CHI
Total Recoverable	Prep	3005A			577169	12/16/20 18:00	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	577514	12/17/20 19:08	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	577212	12/17/20 01:40	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	578099	12/22/20 14:44	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	578222	12/22/20 18:22	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	577347	12/17/20 13:45	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	576226	12/16/20 08:54	JVB	TAL CHI

Laboratory References:

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

eurofins | Environment Testing TestAmerica

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 #: 500-192056-1

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: 12/07/20 Start Purge: 0925 (2400 Hr. Clock) End Purge: 0948

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.30

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.31 (ft)
Ref. Measuring Pt. TIC
Well Elevation *524.69 (ft./msl)
Water Level 2.16 (ft.)
Ground Water Elev. 522.53 (ft./msl)
Well Bottom Elevation *462.58 (ft./msl)

	1st	2nd	Final	
pH	7.85	7.83	7.83	(std.)
SC	1,820	1,840	1840	(umhos/cm)
Temp.	8.80	8.84	8.84	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Strong Odor
Weather Conditions: 37°F, Partly Cloudy, NE winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 2.16 - 2.31 = -0.15 (ft.)
Levels were taken on 12/07/20 @ 0915.

(Updated: 08/04/2020)

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 #9 CCR
Job #: 500-192056-2

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: 12/07/20 Start Purge: 1107 (2400 Hr. Clock) End Purge: 1126

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.74

MEASUREMENTS

Well Diameter 4.0 (inches)

Stick Up 2.45 (ft)

Ref. Measuring Pt. TIC

Well Elevation *620.74 (ft./msl)

Water Level 100.96 (ft.)

Ground Water Elev. 519.78 (ft./msl)

Well Bottom Elevation *468.32 (ft./msl)

	1st	2nd	Final	
pH	8.39	8.40	8.40	(std.)
SC	1550	1560	1560	(umhos/cm)
Temp.	10.61	10.57	10.57	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor

Weather Conditions: 39°F, Cloudy, NE winds @ 0-5 mph

Other: *Reference Measurement

Depth To Water from L.S. = 100.96 - 2.45 = 98.51 (ft.)

Levels were taken on 12/07/20 @ 1100

(Updated: 08/04/2020)

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: G47S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192056-3

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: 12/07/20 Start Purge: 1305 (2400 Hr. Clock) End Purge: 1325

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.90

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.50 (ft)
Ref. Measuring Pt. TIC
Well Elevation *612.04 (ft./msl)
Water Level 86.92 (ft.)
Ground Water Elev. 525.12 (ft./msl)
Well Bottom Elevation *459.84 (ft./msl)

	1st	2nd	Final	
pH	9.14	9.13	9.13	(std.)
SC	1590	1620	1620	(umhos/cm)
Temp.	10.65	10.64	10.64	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 39°F, Cloudy, Calm winds

Other: *Reference Measurement
Depth To Water from L.S. = 86.92 - 2.50 = 84.42 (ft.)
Levels were taken on 12/07/20 @ 1310

(Updated: 08/04/2020)

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: T09S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192056-4

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: 12/08/20 Start Purge: 0950 (2400 Hr. Clock) End Purge: 1008

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 _* 603.69 (ft./msl)

Water Level 103.16 (ft.)

Ground Water Elev. 500.53 (ft./msl)

Well Bottom Elevation * 444.80 (ft./msl)

	1st	2nd	Final	
pH	7.52	7.51	7.51	(std.)
SC	969	964	964	(umhos/cm)
Temp.	7.32	7.31	7.31	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 35°F, Cloudy, SW wind 5-10 mph

Other: *Reference Measurement (updated 02/19/14)

Depth To Water from L.S. = 103.16 - 2.40 = 100.76 (ft.)

Levels were taken on 12/08/20 @ 0935.

* Total Depth: 158.59

(Updated: 08/04/2020)

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: T09S Dup
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192056-5

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: _____ 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 2.40 (ft) pH _____ _____ _____ _____ (std.)

Ref. Measuring Pt. TIC SC _____ _____ _____ _____ (umhos/cm)

Well Elevation * 603.69 (ft./msl) Temp. _____ _____ _____ _____ (°C)

Water Level _____ (ft.) Well Stabilization / Recharge Grid

Ground Water Elev. _____ (ft./msl)

Well Bottom Elevation * 444.80 (ft./msl)

COMMENTS

Sample Appearance/Odor: _____

Weather Conditions: _____

Other: *Reference Measurement (updated 02/19/14)

Depth To Water from L.S. = _____

Levels were taken on @

* Total Depth: 158.59

* Sampled @ 12/08/20 @ 1008

(Updated: 08/04/2020)

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: T05S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192056-6

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: 12/08/20 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 * 623.46 (ft./msl)
Water Level 121.17 (ft.)
Ground Water Elev. 502.29 (ft./msl)
Well Bottom Elevation * 448.35 (ft./msl)

	1st	2nd	Final	
pH	10.37	10.35	10.35	(std.)
SC	1,790	1,750	1,750	(umhos/cm)
Temp.	7.06	7.03	7.03	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 32°F, Cloudy, SW winds 10-15 mph

Other: *Reference Measurement
Depth To Water from L.S. = 121.17 - 2.40 = 118.77 (ft.)
Levels were taken on 12/08/20 @ 1255.
* Total Deth = 175.00

(Updated: 08/04/2020)

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: T08S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192056-7

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: 12/09/20 Start Purge: 0940 (2400 Hr. Clock) End Purge: 0958

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.46

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.38 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 627.50 (ft./msl)

Water Level 127.12 (ft.)

Ground Water Elev. 500.38 (ft./msl)

Well Bottom Elevation * 447.38 (ft./msl)

	1st	2nd	Final	
pH	8.30	8.35	8.35	(std.)
SC	998	996	996	(umhos/cm)
Temp.	10.21	10.19	10.19	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Slight Turbidity, No Odor

Weather Conditions: 40°F, Sunny, SW winds 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 127.12 - 2.38 = 124.74 (ft)

Levels were taken on 12/09/20 @ 0925.

* Total Deth = 180.00

(Updated: 08/04/2020)

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 #: 500-192056-8

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: 12/09/20 Start Purge: 1210 (2400 Hr. Clock) End Purge: 1229

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 * 626.12 (ft./msl)
Water Level 132.04 (ft.)
Ground Water Elev. 494.08 (ft./msl)
Well Bottom Elevation * 453.40 (ft./msl)

	1st	2nd	Final	
pH	7.70	7.70	7.70	(std.)
SC	1120	1130	1130	(umhos/cm)
Temp.	16.98	16.94	16.94	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 49°F, Sunny, W winds @ 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 132.04 - 2.33 = 129.71 (ft.)
Levels were taken on 12/09/20 @ 1155.
* Total Depth = 172.75

(Updated: 08/04/2020)

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 #9 CCR
Job #: 500-192056-9

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: 12/09/20 Start Purge: 1420 (2400 Hr. Clock) End Purge: 1440

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 1.42

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.58 (ft)

Ref. Measuring Pt. TIC

Well Elevation *535.77 (ft./msl)

Water Level 27.82 (ft.)

Ground Water Elev. 507.95 (ft./msl)

Well Bottom Elevation *453.36 (ft./msl)

	1st	2nd	Final	
pH	7.28	7.29	7.29	(std.)
SC	1074	1071	1071	(umhos/cm)
Temp.	13.73	13.72	13.72	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 53°F, Sunny, NW winds 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 27.82 - 2.58 = 25.24 (ft.)

Levels were taken on 12/09/20 @ 1415.

(Updated: 08/04/2020)

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: G33S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192056-10

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: 12/10/20 Start Purge: 1000 (2400 Hr. Clock) End Purge: 1020

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.52

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 1.73 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.65 (ft./msl)
Water Level 30.88 (ft.)
Ground Water Elev. 504.77 (ft./msl)
Well Bottom Elevation *452.72 (ft./msl)

	1st	2nd	Final	
pH	7.40	7.41	7.41	(std.)
SC	651	646	646	(umhos/cm)
Temp.	12.87	12.80	12.80	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 44°F, Sunny, S winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 30.88 - 1.73 = 29.15 (ft.)
Levels were taken on 12/10/20 @ 0955.

(Updated: 08/04/2020)

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 #9 CCR
Job #: 500-192056-11

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: 12/11/20 Start Purge: 0845 (2400 Hr. Clock) End Purge: 0905

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 *580.94 (ft./msl)

Water Level 49.64 (ft.)

Ground Water Elev. 531.30 (ft./msl)

Well Bottom Elevation *442.28 (ft./msl)

	1st	2nd	Final	
pH	7.40	7.41	7.41	(std.)
SC	636	632	632	(umhos/cm)
Temp.	7.81	7.82	7.82	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 43°F, Partly Cloudy, NE winds 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 49.64 - 2.78 = 46.86 (ft.)

Levels were taken on 12/11/20 @ 0840.

(Updated: 08/04/2020)

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: G45S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192056-12

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: 12/11/20 Start Purge: 1220 (2400 Hr. Clock) End Purge: 1242

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.85

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.97 (ft)
Ref. Measuring Pt. TIC
Well Elevation *603.94 (ft./msl)
Water Level 65.45 (ft.)
Ground Water Elev. 538.49 (ft./msl)
Well Bottom Elevation *471.05 (ft./msl)

	1st	2nd	Final	
pH	7.16	7.16	7.16	(std.)
SC	1282	1273	1273	(umhos/cm)
Temp.	12.58	12.57	12.57	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 46°F, Light Rain, NE winds @ 10-15 mph

Other: *Reference Measurement
Depth To Water from L.S. = 65.45 − 2.97 = 62.48 (ft.)
Levels were taken on 12/11/20 @ 1215.

(Updated: 08/04/2020)

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: T01S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192056-13

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: 12/14/20 Start Purge: 0845 (2400 Hr. Clock) End Purge: 0906

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.27

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.48 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 621.71 (ft./msl)
Water Level 119.30 (ft.)
Ground Water Elev. 502.41 (ft./msl)
Well Bottom Elevation * 451.46 (ft./msl)

	1st	2nd	Final	
pH	7.42	7.44	7.44	(std.)
SC	1,250	1,255	1,255	(umhos/cm)
Temp.	3.40	3.47	3.47	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 31°F, Mostly Cloudy, NW winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 119.30 - 2.48 = 116.82 (ft)
Levels were taken on 12/14/20 @ 0830.
* Total Depth = 170.00

(Updated: 08/04/2020)

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: T06S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192050-14

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: 12/14/20 Start Purge: 1105 (2400 Hr. Clock) End Purge: 1125

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 * 620.99 (ft./msl)
Water Level 112.62 (ft.)
Ground Water Elev. 508.37 (ft./msl)
Well Bottom Elevation * 447.94 (ft./msl)

	1st	2nd	Final	
pH	7.50	7.51	7.51	(std.)
SC	655	658	658	(umhos/cm)
Temp.	7.41	7.45	7.45	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 31°F, Partly Cloudy, NW winds 5-10 m/h

Other: *Reference Measurement
Depth To Water from L.S. = 112.62 - 2.30 = 110.32 (ft)
Levels were taken on 12/14/20 @ 1050.
* Total Deth = 173.00

(Updated: 08/04/2020)

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 #9 CCR
Job #: 500-192056-15

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: 12/14/20 Start Purge: 1400 (2400 Hr. Clock) End Purge: 1417

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 1.32

MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.55 (ft)
Ref. Measuring Pt. TIC
Well Elevation *578.51 (ft./msl)
Water Level 67.91 (ft.)
Ground Water Elev. 510.60 (ft./msl)
Well Bottom Elevation *453.08 (ft./msl)

	1st	2nd	Final	
pH	8.17	8.15	8.15	(std.)
SC	940	941	941	(umhos/cm)
Temp.	11.64	11.66	11.66	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 32°F, Partly Cloudy, NW winds e 10-15 mph

Other: *Reference Measurement (Well ID updated 11-25-15)
Depth To Water from L.S. = 67.91 - 2.55 = 65.36 (ft.)
Levels were taken on 12/14/20 @ 1355 .

(Updated: 08/04/2020)

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 #: 500-192056-1&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: 12/15/20 Start Purge: 0855 (2400 Hr. Clock) End Purge: 0913

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 * 629.74 (ft./msl)
Water Level 136.43 (ft.)
Ground Water Elev. 493.31 (ft./msl)
Well Bottom Elevation * 456.70 (ft./msl)

	1st	2nd	Final	
pH	6.99	7.01	7.01	(std.)
SC	1260	1240	1240	(umhos/cm)
Temp.	10.44	10.44	10.44	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 27°F, Sunny, NE winds 0-5 mph

Other: *Reference Measurement
Depth To Water from L.S. = 136.43 - 3.08 = 133.35 (ft)
Levels were taken on 12/15/20 @ 0845.
* Total Depth = 172.95

(Updated: 08/04/2020)

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: G46S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192056-17

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: 12/15/20 Start Purge: 1005 (2400 Hr. Clock) End Purge: 1022

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.55

MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.70 (ft)
Ref. Measuring Pt. TIC
Well Elevation *601.34 (ft./msl)
Water Level 101.78 (ft.)
Ground Water Elev. 499.56 (ft./msl)
Well Bottom Elevation *453.62 (ft./msl)

	1st	2nd	Final	
pH	7.73	7.74	7.74	(std.)
SC	1148	1156	1156	(umhos/cm)
Temp.	11.49	11.48	11.48	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Tan, Moderate Turbidity, No Odor
Weather Conditions: 31°F, Sunny, NE winds 5-10 mph

Other: *Reference Measurement
Depth To Water from L.S. = 101.78 - 2.70 = 99.08 (ft.)
Levels were taken on 12/15/20 @ 1000.

(Updated: 08/04/2020)

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: T04S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192051o-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: _____ 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 _____ (ft) pH _____ _____ _____ _____ (std.)

Ref. Measuring Pt. TIC SC _____ _____ _____ _____ (umhos/cm)

Well Elevation * 631.35 (ft./msl) Temp. _____ _____ _____ _____ (°C)

Water Level _____ (ft.) Well Stabilization / Recharge Grid

Ground Water Elev. _____ (ft./msl)

Well Bottom Elevation * 458.07 (ft./msl)

COMMENTS

Sample Appearance/Odor: _____

Weather Conditions: _____

Other: *Reference Measurement

Depth To Water from L.S. =

Levels were taken on @

* Total Deth = 173.00

* Property Development excavation, unable to purge or sample on 12/15/20 @ 1325

(Updated: 12-11-2018)

Sampler Name (Print): Noe Lopez Signature: NJ

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: G44S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-192056-19

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: 12/15/20 Start Purge: 1335 (2400 Hr. Clock) End Purge: 1349

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.72

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.18 (ft)

Ref. Measuring Pt. TIC

Well Elevation *586.49 (ft./msl)

Water Level 81.42 (ft.)

Ground Water Elev. 505.07 (ft./msl)

Well Bottom Elevation *455.11 (ft./msl)

	1st	2nd	Final	
pH	7.18	7.17	7.17	(std.)
SC	836	838	838	(umhos/cm)
Temp.	10.54	10.52	1052	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 34°F, Partly Cloudy, SE winds 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 81.42 - 2.18 = 79.24 (ft)

Levels were taken on 12/15/20 @ 1330

(Updated: 08/04/2020)

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 #: 500-192056-20

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: 12/16/20 Start Purge: 0835 (2400 Hr. Clock) End Purge: 0854

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 1.23

MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.03 (ft)

Ref. Measuring Pt. TIC

Well Elevation *536.91 (ft./msl)

Water Level 20.44 (ft.)

Ground Water Elev. 516.47 (ft./msl)

Well Bottom Elevation *457.84 (ft./msl)

	1st	2nd	Final	
pH	7.45	7.43	7.43	(std.)
SC	877	882	882	(umhos/cm)
Temp.	11.04	11.02	11.02	(°C)

Well Stabilization / Recharge Grid

COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 30°F, Cloudy, NE winds e 5-10 mph

Other: *Reference Measurement

Depth To Water from L.S. = 20.44 - 2.03 = 18.41 (ft.)

Levels were taken on 12/16/20 @ 0830

(Updated: 08/04/2020)

Sampler Name (Print): Noe Lopez Signature: NL

FIELD FORM 1