# DATA SUMMARY POSTING

Station: Midwest Generation Joliet #9 Generating Station

Regulated Unit(s): Lincoln Stone Quarry (IEPA ID No. W1970450046-01)

In accordance with the new Ill. Adm. Code Title 35, Part 845: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments (State CCR Rule) groundwater monitoring was completed during the 4th quarter 2021 which includes the entire list of parameters specified under Section 845.600(a)(1) and (b). Table 1 is a summary table of all available CCR monitoring data to date including any data generated previously as part of the Federal CCR Rule monitoring. In addition, Table 2 provides a summary of turbidity data which was collected as part of State CCR Rule requirements which is a data parameter that was not required under the Federal CCR Rule.

No background statistics or proposed Groundwater Protection Standards are included on these tables. The background statistics and Proposed Groundwater Protection Standards were submitted to Illinois Environmental Protection Agency (EPA) as part of the Application for Initial Operating Permit submitted October 31, 2021. Upon Illinois EPA approval of the Operating Permit and Proposed Groundwater Protection Standards, the approved comparison values will be included on the tables for subsequent data comparisons/evaluations.

Table 1. Groundwater Analytical Results - Midwest Generation, LLC, Joliet Station #9, Joliet, IL.

| Well | Date | Boron | Calcium | Chloride | Fluoride | pH | Sulfate | Total Dissolved Solids | Antimony | Arsenic | Barium | Beryllium | Cadmium | Chromium | Cobalt | Lead | Lithium | Mercury | Molybdenum | Radium 226 + 228 Combined | Selenium | Thallium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G45S up-gradient | 11/20/2015 | 0.81 | 120 | 180 | 0.35 | 7.20 | 360 | 810 | < 0.003 | 0.0081 | 0.044 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.036 | < 0.0002 | 0.0120 | 1.76 | < 0.0025 | < 0.002 |
| | 5/12/2016 | 0.68 | 110 | 140 | 0.34 | 7.37 | 230 | 860 | < 0.003 | 0.0076 | 0.041 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.036 | < 0.0002 | 0.0100 | 3.01 | < 0.0025 | < 0.002 |
| | 6/30/2016 | 0.48 | 87 | 110 | 0.34 | 7.50 | 170 | 670 | < 0.003 | 0.0075 | 0.031 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.034 | < 0.0002 | 0.008 | 2.05 | < 0.0025 | < 0.002 |
| | 8/25/2016 | 0.47 | 94 | 100 | 0.35 | 7.28 | 170 | 790 | < 0.003 | 0.0076 | 0.036 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.031 | < 0.0002 | 0.0086 | 1.91 | < 0.0025 | < 0.002 |
| | 11/16/2016 | 0.41 | 91 | 90 | 0.33 | 7.34 | 170 | 620 | < 0.003 | 0.0079 | 0.033 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.028 | < 0.0002 | 0.0094 | 2.04 | < 0.0025 | < 0.002 |
| | 2/14/2017 | 0.43 | 97 | 97 | 0.32 | 7.36 | 160 | 620 | < 0.003 | 0.0093 | 0.037 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.029 | < 0.0002 | 0.0083 | 1.85 | < 0.0025 | < 0.002 |
| | 5/23/2017 | 0.36 | 85 | 110 | < 0.35 | 7.30 | 150 | 660 | < 0.003 | 0.0082 | 0.033 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.027 | < 0.0002 | 0.0093 | 1.40 | < 0.0025 | < 0.002 |
| | 7/7/2017 | 0.42 | 94 | 120 | < 0.1 | 7.21 | 150 | 600 | < 0.003 | 0.0086 | 0.035 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.030 | < 0.0002 | 0.007 | 1.88 | < 0.0025 | < 0.002 |
| | 9/26/2017 | 0.43 | 110 | 130 | 0.3 | 7.21 | 160 | 790 | < 0.003 | 0.0096 | 0.04 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.029 | < 0.0002 | 0.0079 | 2.14 | < 0.0025 | < 0.002 |
| | 11/21/2017 | 0.34 | 96 | 130 | 0.33 | 7.29 | 180 | 700 | < 0.003 | 0.0094 | 0.038 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.028 | < 0.0002 | 0.0072 | 8.45 | < 0.0025 | < 0.002 |
| | 3/9/2018 | 0.38 | 97 | 110 | 0.32 | 7.18 | 180 | 710 | < 0.003 | 0.0093 | 0.036 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.028 | ^ < 0.0002 | 0.008 | 1.89 | < 0.0025 | < 0.002 |
| | 5/21/2018 | 0.76 | 110 | 150 | 0.33 | 7.00 | 230 | 970 | NA | 0.0072 | 0.047 | NA | NA | NA | < 0.001 | < 0.0005 | 0.033 | NA | 0.013 | 2.37 | < 0.0025 | NA |
| | 12/7/2018 | 0.46 | 91 | 120 | 0.33 | 7.02 | 100 | 740 | NA | 0.0090 | 0.034 | NA | NA | NA | < 0.001 | < 0.0005 | 0.031 | NA | 0.0100 | 1.910 | < 0.0025 | NA |
| | 6/28/2019 | 0.39 | 96 | 130 | 0.33 | 7.51 | 120 | 720 | NA | 0.0100 | 0.039 | NA | NA | NA | < 0.001 | < 0.0005 | 0.032 | NA | 0.0087 | 1.99 | < 0.0025 | NA |
| | 11/14/2019 | 0.48 | 110 | 170 | 0.33 | 7.33 | 170 | 830 | NA | < 0.0100 | 0.042 | NA | NA | NA | < 0.001 | < 0.0005 | 0.034 | NA | 0.0100 | 2.89 | < 0.010 | NA |
| | 6/26/2020 | 0.62 | 130 | 220 | 0.33 | 7.21 | 240 | 970 | NA | 0.011 | 0.049 | NA | NA | NA | < 0.001 | < 0.0005 | 0.039 | NA | 0.0088 | 3.1 | < 0.0025 | NA |
| | 12/11/2020 | 0.70 | 120 | 180 | 0.38 | 7.16 | 220 | 760 | NA | 0.011 | 0.042 | NA | NA | NA | < 0.001 | ^+ < 0.0005 | 0.038 | NA | 0.012 | 1.88 | < 0.0025 | NA |
| | 6/28/2021 | 0.44 | 91 | 110 | 0.35 | 7.20 | 150 | 680 | < 3.0 | 0.01 | 0.034 | < 1.0 | < 0.50 | < 5.00 | < 0.001 | < 0.0005 | 0.031 | < 0.0002 | 0.0083 | 2.14 | < 0.0025 | < 2.0 |
| | 9/23/2021 | 0.39 | 85 | 110 | 0.35 | 7.43 | 140 | 690 | < 0.003 | 0.01 | 0.36 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.030 | < 0.0002 | 0.0076 | 2.77 | < 0.0025 | < 0.002 |
| | 12/16/2021 | 0.34 | 84 | 87 | 0.36 | 7.35 | 130 | 510 | < 0.003 | 0.0092 | 0.037 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.0005 | 0.028 | < 0.0002 | 0.0073 | 1.74 | < 0.0025 | < 0.002 |
| T03S up-gradient | 11/19/2015 | 0.5 | 110 | 75 | 0.22 | 7.07 | 250 | 710 | < 0.003 | 0.0019 | 0.063 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.019 | < 0.0002 | 0.0260 | 1.101 | < 0.0025 | < 0.002 |
| | 5/5/2016 | 0.84 | 100 | 100 | 0.21 | 7.16 | 190 | 820 | < 0.003 | 0.0013 | 0.081 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.018 | < 0.0002 | 0.03 | 1.43 | < 0.0025 | < 0.002 |
| | 6/28/2016 | 0.98 | 100 | 94 | 0.19 | 7.30 | 180 | 910 | < 0.003 | 0.0011 | 0.086 | < 0.001 | < 0.0005 | < 0.005 | 0.0011 | < 0.0005 | 0.017 | < 0.0002 | 0.037 | 1.18 | < 0.0025 | < 0.002 |
| | 8/25/2016 | 1.1 | 110 | 99 | 0.20 | 7.32 | 180 | 880 | < 0.003 | < 0.001 | 0.086 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.016 | < 0.0002 | 0.043 | 1.54 | < 0.0025 | < 0.002 |
| | 11/17/2016 | 1.3 | 120 | 100 | 0.19 | 7.14 | 150 | 860 | < 0.003 | 0.0012 | 0.096 | < 0.001 | < 0.0005 | < 0.005 | 0.0012 | < 0.0005 | 0.022 | < 0.0002 | 0.14 | 1.61 | < 0.0025 | < 0.002 |
| | 2/15/2017 | 1.0 | 98 | 110 | 0.19 | 7.36 | 230 | 810 | < 0.003 | 0.0011 | 0.086 | < 0.001 | < 0.0005 | < 0.005 | 0.0013 | < 0.0005 | < 0.05 | < 0.0002 | 0.12 | 0.938 | < 0.0025 | < 0.002 |
| | 5/22/2017 | 1.4 | 110 | 78 | 0.23 | 7.25 | 160 | 740 | < 0.003 | 0.0017 | B 0.088 | ^ < 0.001 | < 0.0005 | < 0.005 | 0.0015 | 0.0023 | 0.019 | < 0.0002 | 0.13 | 1.21 | < 0.0025 | < 0.002 |
| | 7/7/2017 | 1.1 | 100 | F1 71 | < 0.1 | 7.32 | 180 | 710 | < 0.003 | < 0.001 | 0.078 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.019 | < 0.0002 | 0.099 | 1.11 | < 0.0025 | < 0.002 |
| | 9/26/2017 | 1.3 | 110 | 80 | 0.21 | 7.19 | 240 | 790 | < 0.003 | 0.0011 | 0.086 | < 0.001 | < 0.0005 | < 0.005 | 0.0013 | < 0.0005 | 0.018 | < 0.0002 | 0.14 | 1.33 | < 0.0025 | < 0.002 |
| | 11/20/2017 | 1.7 | 98 | 90 | 0.24 | 7.13 | 230 | 770 | < 0.003 | 0.0014 | 0.087 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.02 | < 0.0002 | 0.20 | 1.59 | < 0.0025 | < 0.002 |
| | 3/7/2018 | 1.5 | 110 | 110 | 0.23 | 7.34 | 250 | 900 | < 0.003 | 0.0023 | 0.093 | < 0.001 | < 0.0005 | < 0.005 | 0.0013 | < 0.0005 | 0.022 | < 0.0002 | 0.26 | 1.30 | < 0.0025 | < 0.002 |
| | 5/17/2018 | 1.8 | 100 | 82 | 0.24 | 7.07 | 210 | 890 | NA | 0.001 | 0.087 | NA | NA | NA | 0.0013 | < 0.0005 | 0.021 | NA | 0.240 | 1.25 | < 0.0025 | NA |
| | 12/11/2018 | 1.8 | 100 | 140 | 0.23 | 6.96 | 160 | 890 | NA | 0.0014 | 0.095 | NA | NA | NA | 0.0012 | < 0.0005 | 0.021 | NA | 0.270 | 1.31 | < 0.0025 | NA |
| | 6/24/2019 | 2.7 | 100 | 89 | 0.27 | 7.17 | 260 | 830 | NA | 0.0020 | 0.090 | NA | NA | NA | 0.0010 | < 0.0005 | 0.027 | NA | 0.370 | 1.33 | < 0.0025 | NA |
| | 10/28/2019 | 1.5 | 100 | 73 | 0.25 | 7.19 | < 500 | 780 | NA | < 0.0100 | 0.088 | NA | NA | NA | 0.0011 | < 0.0050 | 0.026 | NA | 0.210 | 1.38 | < 0.0100 | NA |
| | 6/23/2020 | 2.3 | 97 | 74 | 0.33 | 7.29 | 240 | 770 | NA | 0.0024 | 0.093 | NA | NA | NA | < 0.001 | < 0.0005 | 0.025 | NA | 0.23 | 1.65 | < 0.0025 | NA |
| | 12/15/2020 | 1.4 | 140 | F1 170 | 0.27 | 7.01 | 280 | 960 | NA | 0.0013 | 0.11 | NA | NA | NA | 0.0015 | < 0.0005 | 0.031 | NA | 0.14 | 1.74 | < 0.0025 | NA |
| | 6/22/2021 | 0.92 | 120 | 130 | 0.23 | 6.94 | 220 | 980 | < 0.003 | 0.0016 | 0.085 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.029 | H < 0.0002 | 0.071 | 1.34 | < 0.0025 | < 0.002 |
| | 9/20/2021 | 1.2 | 110 | 110 | 0.21 | 7.45 | 250 | 640 | < 0.003 | 0.0014 | 0.083 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.029 | < 0.0002 | 0.12 | 1.31 | < 0.0025 | < 0.002 |
| | 12/9/2021 | 2.4 | 130 | 110 | 0.23 | 7.48 | F1 280 | 870 | < 0.003 | 0.0011 | 0.085 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.026 | < 0.0002 | 0.22 | 1.44 | < 0.0025 | < 0.002 |
| R08S down-gradient | 11/23/2015 | 6.9 | 130 | 77 | 0.19 | 7.80 | 520 | 740 | < 0.003 | 0.0019 | 0.052 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.14 | < 0.0002 | 0.410 | 1.608 | 0.0061 | < 0.002 |
| | 5/6/2016 | 6.1 | 120 | 80 | 0.19 | 7.70 | 380 | 820 | < 0.003 | 0.0013 | 0.052 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.14 | < 0.0002 | 0.390 | 1.08 | 0.0079 | < 0.002 |
| | 6/28/2016 | 6.8 | 130 | 89 | 0.18 | 7.49 | 320 | 960 | < 0.003 | 0.0019 | 0.056 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.14 | < 0.0002 | 0.37 | 1.87 | F1 0.0074 | < 0.002 |
| | 8/25/2016 | 6.3 | 120 | 84 | 0.19 | 7.54 | 350 | 890 | < 0.003 | 0.0015 | 0.053 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.13 | < 0.0002 | 0.33 | 1.50 | 0.0032 | < 0.002 |
| | 11/21/2016 | 6.4 | 120 | 86 | 0.17 | 7.53 | 280 | 790 | < 0.003 | 0.0016 | 0.052 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.140 | < 0.0002 | 0.36 | 2.13 | 0.0037 | < 0.002 |
| | 2/14/2017 | 5.4 | 150 | 220 | 0.17 | 7.60 | 280 | 1,000 | < 0.003 | 0.002 | 0.081 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.120 | < 0.0002 | 0.3 | 2.71 | 0.0029 | < 0.002 |
| | 5/25/2017 | 12 | 250 | 90 | 0.17 | 7.56 | 340 | 830 | < 0.006 | 0.0028 | 0.092 | ^ < 0.002 | < 0.001 | < 0.01 | < 0.002 | < 0.001 | 0.250 | < 0.0002 | 0.64 | 0.821 | 0.021 | < 0.004 |
| | 7/6/2017 | 6.3 | 140 | 87 | 0.17 | 7.62 | 350 | 830 | < 0.003 | 0.002 | 0.052 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | ^ < 0.0005 | 0.140 | < 0.0002 | 0.35 | 1.15 | 0.0054 | ^ < 0.002 |
| | 9/25/2017 | 7.3 | 140 | 81 | 0.15 | 7.57 | 390 | 840 | < 0.003 | 0.002 | 0.048 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00067 | 0.130 | < 0.0002 | 0.38 | 1.27 | 0.0079 | < 0.002 |
| | 11/21/2017 | 7.3 | 130 | 89 | 0.15 | 8.05 | 380 | 800 | < 0.003 | 0.0017 | 0.046 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.140 | < 0.0002 | 0.34 | 1.09 | 0.015 | < 0.002 |
| | 3/8/2018 | 7.4 | 150 | 83 | 0.14 | 8.62 | 420 | 850 | < 0.003 | 0.0016 | 0.05 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.150 | < 0.0002 | 0.37 | 1.55 | 0.012 | < 0.002 |
| | 5/18/2018 | 7.7 | 140 | 82 | 0.14 | 8.25 | 320 | 920 | NA | 0.0013 | 0.046 | NA | NA | NA | < 0.001 | < 0.0005 | 0.150 | NA | 0.35 | 1.22 | 0.017 | NA |
| | 12/13/2018 | 7.7 | 140 | 79 | 0.15 | 8.11 | 240 | 800 | NA | 0.0012 | 0.046 | NA | NA | NA | < 0.001 | < 0.0005 | 0.150 | NA | 0.370 | 1.450 | 0.0170 | NA |
| | 6/19/2019 | 8.5 | 140 | 83 | 0.14 | 8.10 | 360 | 820 | NA | 0.0013 | 0.044 | NA | NA | NA | < 0.001 | < 0.0005 | 0.160 | NA | 0.370 | 1.5 | 0.0150 | NA |
| | 11/11/2019 | 6.4 | 140 | 84 | 0.15 | 7.91 | 360 | 730 | NA | < 0.010 | 0.044 | NA | NA | NA | < 0.001 | < 0.0005 | 0.15 | NA | 0.340 | 1.31 | 0.0130 | NA |
| | 6/26/2020 | 7.9 | 140 | 83 | 0.15 | 8.32 | 370 | 750 | NA | 0.0011 | 0.043 | NA | NA | NA | < 0.001 | < 0.0005 | 0.14 | NA | 0.36 | 1.68 | 0.017 | NA |
| | 12/14/2020 | 8.0 | 130 | 88 | 0.18 | 8.15 | 400 | 700 | NA | 0.0015 | 0.040 | NA | NA | NA | < 0.001 | < 0.0005 | 0.14 | NA | 0.38 | 1.53 | 0.0081 | NA |
| | 6/23/2021 | 7.6 | 140 | 79 | 0.16 | 8.07 | 430 | 810 | < 0.003 | 0.0011 | 0.042 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.15 | H < 0.0002 | 0.37 | 1.46 | 0.011 | < 0.002 |
| | 9/27/2021 | 0.41 | 150 | 80 | 0.15 | 8.27 | 430 | 740 | < 0.003 | 0.0015 | 0.042 | ^+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.0079 | < 0.0002 | 0.40 | 1.23 | 0.013 | < 0.002 |
| | 12/14/2021 | 7.8 | 150 | 77 | 0.15 | 8.37 | 410 | 830 | < 0.003 | < 0.001 | 0.042 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.14 | < 0.0002 | 0.39 | 1.81 | 0.012 | < 0.002 |
| G20S down-gradient | 11/19/2015 | 1.2 | 59 | 12 | 0.82 | 7.73 | 110 | 410 | < 0.003 | < 0.001 | 0.049 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.036 | < 0.0002 | 0.0068 | 2.078 | < 0.0025 | < 0.002 |
| | 5/11/2016 | 1.2 | 53 | 12 | 0.81 | 7.52 | 77 | 410 | < 0.003 | < 0.001 | 0.049 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.037 | 0.00027 | 0.011 | 2.52 | < 0.0025 | < 0.002 |
| | 6/29/2016 | 1.2 | 54 | 12 | 0.82 | 7.38 | 69 | 460 | < 0.003 | < 0.001 | 0.051 | < 0.001 | < 0.0005 | < 0.005 | 0.0011 | < 0.0005 | 0.04 | < 0.0002 | 0.014 | 2.79 | < 0.0025 | < 0.002 |
| | 8/23/2016 | 1.3 | 56 | 13 | 0.81 | 7.41 | 67 | 420 | < 0.003 | < 0.001 | 0.047 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.039 | < 0.0002 | 0.017 | 3.67 | < 0.0025 | < 0.002 |
| | 11/17/2016 | 1.3 | 59 | 11 | 0.74 | 7.44 | 55 | 420 | < 0.003 | < 0.001 | 0.056 | < 0.001 | < 0.0005 | < 0.005 | 0.0018 | < 0.0005 | 0.042 | < 0.0002 | 0.019 | 1.98 | < 0.0025 | < 0.002 |
| | 2/13/2017 | 1.2 | 54 | 13 | 0.69 | 7.30 | 93 | 400 | < 0.003 | < 0.001 | 0.046 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | 0.04 | < 0.0002 | 0.018 | 2.44 | < 0.0025 | < 0.002 |
| | 5/24/2017 | 1.3 | 55 | 12 | 0.81 | 7.45 | 66 | 430 | < 0.003 | < 0.001 | 0.046 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | 0.038 | < 0.0002 | 0.017 | 2.15 | < 0.0025 | < 0.002 |
| | 7/5/2017 | 1.3 | 61 | 12 | 0.76 | 7.37 | 70 | 400 | < 0.003 | < 0.001 | 0.054 | < 0.001 | < 0.0005 | < 0.005 | 0.0021 | ^ < 0.0005 | 0.04 | < 0.0002 | 0.019 | 1.83 | < 0.0025 | ^ < 0.002 |
| | 9/25/2017 | 1.3 | 60 | 12 | 0.78 | 7.30 | 76 | 440 | < 0.003 | < 0.001 | 0.051 | < 0.001 | < 0.0005 | < 0.005 | 0.0015 | < 0.0005 | 0.036 | < 0.0002 | 0.022 | 2.19 | < 0.0025 | < 0.002 |
| | 11/20/2017 | 1.3 | 59 | 13 | 0.78 | 7.06 | 85 | 390 | < 0.003 | < 0.001 | 0.051 | < 0.001 | < 0.0005 | < 0.005 | 0.0022 | < 0.0005 | 0.041 | < 0.0002 | 0.021 | 2.50 | < 0.0025 | < 0.002 |
| | 3/6/2018 | 1.4 | 63 | 12 | 0.76 | 7.32 | 88 | 460 | < 0.003 | < 0.001 | 0.049 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | 0.042 | < 0.0002 | 0.021 | 2.83 | < 0.0025 | < 0.002 |
| | 5/16/2018 | 1.2 | 61 | 12 | 0.75 | 7.06 | 87 | 410 | NA | < 0.001 | 0.049 | NA | NA | NA | 0.0024 | ^ < 0.0005 | 0.04 | NA | 0.019 | 2.12 | < 0.0025 | NA |
| | 12/7/2018 | 1.2 | 58 | 12 | 0.76 | 7.41 | 65 | 480 | NA | < 0.001 | 0.048 | NA | NA | NA | 0.0010 | 0.0048 | 0.042 | NA | 0.0230 | 2.26 | < 0.0025 | NA |
| | 6/18/2019 | 1.3 | 62 | 13 | 0.75 | 7.18 | 65 | 440 | NA | < 0.001 | 0.051 | NA | NA | NA | 0.0018 | < 0.0005 | 0.041 | NA | 0.017 | 2.11 | < 0.0025 | NA |
| | 11/5/2019 | 1.2 | 58 | 13 | 0.74 | 7.88 | 71 | 410 | NA | < 0.010 | 0.050 | NA | NA | NA | 0.0023 | < 0.0005 | 0.044 | NA | 0.021 | 1.74 | < 0.0100 | NA |
| | 6/24/2020 | 1.3 | 58 | 13 | 0.79 | 7.81 | 63 | 360 | NA | < 0.010 | 0.045 | NA | NA | NA | < 0.001 | < 0.0005 | 0.038 | NA | 0.019 | 2.07 | < 0.0025 | NA |
| | 12/11/2020 | 1.4 | 61 | 14 | 0.89 | 7.41 | 69 | 390 | NA | < 0.001 | 0.043 | NA | NA | NA | < 0.001 | ^+ < 0.0005 | 0.042 | NA | 0.022 | 2.16 | < 0.0025 | NA |
| | 6/23/2021 | 1.3 | 60 | 14 | 0.77 | 7.46 | 70 | 390 | < 0.003 | < 0.001 | 0.047 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.047 | H < 0.0002 | 0.022 | 2.06 | < 0.0025 | < 0.002 |
| | 9/23/2021 | 1.3 | 57 | 14 | 0.76 | 7.79 | 69 | 320 | < 0.003 | < 0.001 | 0.050 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.042 | < 0.0002 | 0.024 | 1.97 | < 0.0025 | < 0.002 |
| | 12/10/2021 | 1.4 | 60 | 14 | 0.77 | 8.33 | 69 | 360 | < 0.003 | 0.0019 | 0.045 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.041 | < 0.0002 | 0.025 | 2.26 | < 0.0025 | < 0.002 |
| G30S down-gradient | 11/20/2015 | 5.80 | 63 | 190 | 1.3 | 7.46 | 580 | 1,000 | < 0.003 | 0.014 | 0.041 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.022 | < 0.0002 | 0.33 | 1.484 | < 0.0025 | < 0.002 |
| | 5/10/2016 | 5.4 | 53 | 190 | 1.30 | 7.68 | 390 | 1,100 | < 0.003 | 0.017 | 0.039 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.021 | < 0.0002 | 0.3 | 1.41 | < 0.0025 | < 0.002 |
| | 6/30/2016 | 5.2 | 60 | F1 180 | 1.30 | 7.73 | 410 | 990 | < 0.003 | 0.013 | 0.04 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.023 | < 0.0002 | 0.3 | 1.17 | < 0.0025 | < 0.002 |
| | 8/25/2016 | 5.7 | 59 | F1 180 | 1.30 | 7.70 | 390 | 1,100 | < 0.003 | 0.015 | 0.039 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.02 | < 0.0002 | 0.31 | 1.87 | < 0.0025 | < 0.002 |
| | 11/18/2016 | 6.4 | 57 | 170 | 1.2 | 8.04 | 320 | 1,100 | < 0.003 | 0.016 | 0.043 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.023 | < 0.0002 | 0.33 | 2.36 | < 0.0025 | < 0.002 |
| | 2/14/2017 | 5.4 | 62 | 190 | 1.2 | 7.70 | 450 | 1,000 | < 0.003 | 0.011 | 0.042 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.021 | < 0.0002 | 0.24 | 1.84 | < 0.0025 | < 0.002 |
| | 5/25/2017 | 11 | 110 | 180 | 1.4 | 7.67 | 430 | 1,100 | < 0.006 | 0.019 | 0.078 | ^ < 0.002 | < 0.001 | < 0.01 | < 0.002 | < 0.001 | 0.04 | < 0.0002 | 0.45 | 1.76 | < 0.005 | < 0.004 |
| | 7/7/2017 | 6.6 | 54 | 190 | 1.3 | 7.48 | 410 | 1,100 | < 0.003 | 0.011 | 0.039 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.021 | < 0.0002 | 0.26 | 1.59 | < 0.0025 | < 0.002 |
| | 9/26/2017 | 6.7 | 62 | 190 | 1.3 | 8.07 | 460 | 1,100 | < 0.003 | 0.011 | 0.041 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.021 | < 0.0002 | 0.2 | 1.41 | < 0.0025 | < 0.002 |
| | 11/20/2017 | 6.1 | 52 | 210 | 1.3 | 7.77 | 440 | 1,100 | < 0.003 | 0.01 | 0.04 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.019 | < 0.0002 | 0.19 | 1.73 | < 0.0025 | < 0.002 |
| | 3/7/2018 | 5.1 | 56 | 200 | 1.3 | 7.97 | 470 | 1,100 | < 0.003 | 0.011 | 0.043 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.019 | < 0.0002 | 0.14 | 1.94 | < 0.0025 | < 0.002 |
| | 5/17/2018 | 5.7 | 55 | 210 | 1.2 | 7.77 | 540 | 1,100 | NA | 0.011 | 0.043 | NA | NA | NA | < 0.001 | < 0.0005 | 0.021 | NA | 0.13 | 1.57 | F1 < 0.0025 | NA |
| | 12/15/2018 | 5.8 | 57 | 200 | 1.2 | 7.99 | 200 | 1,100 | NA | 0.0069 | 0.041 | NA | NA | NA | < 0.001 | < 0.0005 | 0.022 | NA | 0.065 | 2.04 | < 0.0025 | NA |
| | 6/26/2019 | 5.4 | 57 | 220 | 1.1 | 7.98 | 350 | 1,100 | NA | 0.0074 | 0.041 | NA | NA | NA | < 0.001 | < 0.0005 | 0.018 | NA | 0.065 | 1.18 | F1 < 0.0025 | NA |
| | 11/6/2019 | 4.5 | 58 | 210 | 1.1 | 7.99 | 350 | 1,100 | NA | 0.01 | 0.041 | NA | NA | NA | < 0.001 | < 0.0005 | 0.019 | NA | 0.013 | 1.620 | 0.01 | NA |
| | 6/25/2020 | 4.9 | 57 | 220 | 1.1 | 8.33 | 410 | 1,100 | NA | 0.0053 | 0.042 | NA | NA | NA | < 0.001 | < 0.0005 | 0.019 | NA | 0.02 | 2.19 | < 0.0025 | NA |
| | 12/7/2020 | 5.3 | 57 | 220 | 1.2 | 7.83 | 450 | 1,100 | NA | 0.0044 | 0.043 | NA | NA | NA | < 0.001 | < 0.0005 | 0.024 | NA | 0.018 | 2.16 | < 0.0025 | NA |
| | 6/30/2021 | B 5.9 | 61 | 200 | 1.1 | 7.88 | 470 | 1,100 | < 3.0 | < 0.017 | 0.048 | ^1+ < 1.0 | < 0.5 | < 5.0 | < 0.001 | < 0.0005 | 0.024 | < 0.0002 | 0.017 | 2.57 | < 0.0025 | < 2.0 |
| | 9/24/2021 | 0.26 | 60 | 210 | 0.99 | 8.16 | 460 | 1,100 | < 0.003 | 0.0038 | 0.047 | ^+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.024 | < 0.0002 | 0.012 | 2.23 | < 0.0025 | < 0.002 |
| | 12/15/2021 | 5.1 | 63 | 200 | 1.0 | 7.95 | 450 | 1,200 | < 0.003 | 0.0028 | 0.045 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.022 | < 0.0002 | 0.01 | 2.45 | < 0.0025 | < 0.002 |

Notes: All units are in mg/l except pH is in standard units and radium is in pCi/L
B - Compound was found in the blank and sample.
H - Sample was prepped or analyzed beyond the specified holding time
NA - Not analyzed. No confirmation resample required.

^ - Instrument related QC is outside acceptance limits.
* - LCS or LCSD is outside acceptance limits.
^1+ or ^+ - Initial or Continuing Calibration Verification limits is outside acceptable limits, high biased.
F1 - MS and/or MSD Recovery outside of limits.

Table 1. Groundwater Analytical Results - Midwest Generation, LLC, Joliet Station #9, Joliet, IL.

| Well | Date | Boron | Calcium | Chloride | Fluoride | pH | Sulfate | Total Dissolved Solids | Antimony | Arsenic | Barium | Beryllium | Cadmium | Chromium | Cobalt | Lead | Lithium | Mercury | Molybdenum | Radium 226 + 228 Combined | Selenium | Thallium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R32S down-gradient | 11/19/2015 | 1.3 | 99 | 88 | 0.28 | 7.32 | 210 | 640 | < 0.003 | 0.0018 | 0.033 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.04 | < 0.0002 | 0.16 | 1.928 | < 0.0025 | < 0.002 |
| | 5/5/2016 | 1.9 | 100 | 140 | 0.32 | 7.38 | 210 | 810 | < 0.003 | 0.0034 | 0.039 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.0005 | 0.069 | < 0.0002 | 0.29 | 2.26 | < 0.0025 | < 0.002 |
| | 6/29/2016 | 2.5 | 110 | 110 | 0.35 | 7.53 | 280 | 860 | < 0.003 | 0.0021 | 0.042 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.065 | < 0.0002 | 0.43 | 2.12 | < 0.0025 | < 0.002 |
| | 8/26/2016 | 3.0 | 120 | 100 | 0.4 | 7.30 | 330 | 850 | < 0.003 | 0.0014 | 0.043 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.056 | < 0.0002 | 0.48 | 2.39 | < 0.0025 | < 0.002 |
| | 11/18/2016 | 3.3 | 120 | 99 | 0.34 | 7.38 | 270 | 830 | < 0.003 | 0.0016 | 0.042 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.063 | < 0.0002 | 0.55 | 3.17 | < 0.0025 | < 0.002 |
| | 2/16/2017 | F1 4.0 | 120 | 99 | 0.34 | 7.39 | 340 | 830 | < 0.003 | 0.002 | 0.039 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.064 | < 0.0002 | 0.57 | 1.76 | F1 < 0.0025 | < 0.002 |
| | 5/25/2017 | 8.3 | 240 | 88 | 0.42 | 7.54 | 320 | 850 | < 0.006 | 0.0042 | 0.075 | ^ < 0.002 | < 0.001 | < 0.01 | < 0.002 | < 0.001 | 0.14 | < 0.0002 | 1.4 | 1.82 | < 0.005 | < 0.004 |
| | 7/7/2017 | 6.2 | 120 | 96 | 0.42 | 7.61 | 360 | 830 | < 0.003 | 0.0043 | 0.04 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.1 | < 0.0002 | 0.87 | 2.08 | < 0.0025 | < 0.002 |
| | 9/28/2017 | 4.8 | 140 | 78 | 0.36 | 7.29 | 290 | 870 | < 0.003 | 0.003 | 0.044 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.086 | < 0.0002 | 0.57 | 1.79 | < 0.0025 | < 0.002 |
| | 11/21/2017 | 5.7 | 120 | 97 | 0.38 | 7.50 | 390 | 900 | < 0.003 | 0.0037 | 0.041 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.11 | < 0.0002 | 0.74 | 1.82 | < 0.0025 | < 0.002 |
| | 3/7/2018 | 5.8 | 130 | 86 | 0.32 | 7.57 | 350 | 880 | < 0.003 | 0.0029 | 0.042 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.11 | < 0.0002 | 0.67 | 2.56 | < 0.0025 | < 0.002 |
| | 5/21/2018 | 4.4 | 120 | 77 | 0.29 | 7.13 | 310 | 1,000 | NA | 0.0024 | 0.04 | NA | NA | NA | < 0.001 | < 0.0005 | 0.1 | NA | 0.64 | 2.22 | < 0.0025 | NA |
| | 12/13/2018 | 3.5 | 120 | F1 72 | 0.26 | 7.43 | 280 | 880 | NA | 0.0019 | 0.043 | NA | NA | NA | < 0.001 | 0.0017 | 0.080 | NA | 0.560 | 2.23 | < 0.0025 | NA |
| | 6/27/2019 | 6.3 | 140 | 74 | 0.27 | 7.33 | 380 | 880 | NA | 0.0027 | 0.041 | NA | NA | NA | < 0.001 | < 0.0005 | 0.090 | NA | 0.810 | 2.67 | < 0.0025 | NA |
| | 11/6/2019 | 4.8 | 150 | 69 | 0.27 | 7.45 | 360 | 820 | NA | < 0.01 | 0.039 | NA | NA | NA | < 0.001 | < 0.0005 | 0.13 | NA | 0.580 | 2.370 | < 0.0100 | NA |
| | 6/29/2020 | 6.0 | 130 | 71 | 0.28 | 7.47 | 400 | 790 | NA | 0.0021 | 0.038 | NA | NA | NA | < 0.001 | < 0.0005 | 0.11 | NA | 0.64 | 3.92 | < 0.0025 | NA |
| | 12/16/2020 | 6.1 | 150 | F1 66 | 0.34 | 7.43 | 430 | 840 | NA | 0.0025 | 0.038 | NA | NA | NA | < 0.001 | ^+ < 0.0005 | 0.11 | NA | 0.75 | 3.22 | F1 < 0.0025 | NA |
| | 6/28/2021 | B 4.0 | 130 | 56 | 0.30 | 7.16 | 430 | 790 | < 3.0 | < 0.001 | 0.036 | < 1.0 | < 0.5 | < 5.0 | < 0.001 | < 0.0005 | 0.071 | < 0.0002 | 0.53 | 2.10 | < 0.0025 | < 2.0 |
| | 9/30/2021 | 6.0 | 160 | 62 | 0.31 | 7.47 | 520 | 970 | < 0.003 | 0.0029 | 0.037 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.12 | < 0.0002 | 0.95 | 2.45 | < 0.0025 | < 0.002 |
| | 12/15/2021 | 4.9 | 150 | 59 | 0.32 | 7.42 | 490 | 930 | < 0.003 | 0.0016 | 0.037 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.097 | < 0.0002 | 0.75 | 2.68 | < 0.0025 | < 0.002 |
| G44S down-gradient | 11/20/2015 | 1.0 | 120 | 43 | 0.21 | 7.11 | 220 | 640 | < 0.003 | 0.0012 | 0.053 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.017 | < 0.0002 | 0.1000 | 1.161 | < 0.0025 | < 0.002 |
| | 5/9/2016 | 0.91 | 110 | 37 | 0.18 | 7.39 | 120 | 690 | < 0.003 | < 0.001 | 0.049 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.015 | < 0.0002 | 0.046 | < 0.415 | < 0.0025 | < 0.002 |
| | 6/30/2016 | 0.69 | 100 | 32 | 0.18 | 7.59 | 99 | 620 | < 0.003 | < 0.001 | 0.044 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 0.025 | 0.879 | < 0.0025 | < 0.002 |
| | 8/26/2016 | 0.89 | 120 | 36 | 0.19 | 7.12 | 110 | 710 | < 0.003 | < 0.001 | 0.053 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 0.047 | 0.816 | < 0.0025 | < 0.002 |
| | 11/16/2016 | 0.82 | 120 | 26 | 0.17 | 7.15 | 88 | 530 | < 0.003 | < 0.001 | 0.048 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.011 | < 0.0002 | 0.041 | 0.475 | < 0.0025 | < 0.002 |
| | 2/16/2017 | 0.86 | 120 | 30 | 0.15 | 7.38 | 120 | 620 | < 0.003 | < 0.001 | 0.051 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 0.044 | 0.729 | < 0.0025 | < 0.002 |
| | 5/24/2017 | 0.83 | 120 | 31 | 0.19 | 7.08 | 95 | 600 | < 0.003 | < 0.001 | 0.048 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.011 | < 0.0002 | 0.031 | 1.02 | < 0.0025 | < 0.002 |
| | 7/10/2017 | 0.83 | 110 | 30 | < 0.1 | 7.00 | 110 | 700 | < 0.003 | < 0.001 | 0.049 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.012 | < 0.0002 | 0.061 | 0.667 | < 0.0025 | < 0.002 |
| | 9/28/2017 | 0.99 | 130 | 30 | 0.19 | 7.13 | 100 | 730 | < 0.003 | < 0.001 | 0.048 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 0.081 | 0.614 | < 0.0025 | < 0.002 |
| | 11/21/2017 | 0.79 | 110 | 35 | 0.18 | 7.06 | 120 | 640 | < 0.003 | < 0.001 | 0.051 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.016 | < 0.0002 | 0.055 | 0.913 | < 0.0025 | < 0.002 |
| | 3/7/2018 | 0.91 | 120 | 36 | 0.18 | 7.19 | 110 | 670 | < 0.003 | 0.0014 | 0.053 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.017 | < 0.0002 | 0.049 | 1.31 | < 0.0025 | < 0.002 |
| | 5/17/2018 | 0.98 | 120 | 35 | 0.18 | 7.02 | 96 | 780 | NA | < 0.001 | 0.054 | NA | NA | NA | < 0.001 | < 0.0005 | 0.016 | NA | 0.071 | 0.714 | < 0.0025 | NA |
| | 12/10/2018 | 1.1 | 120 | 43 | 0.19 | 7.41 | 78 | 630 | NA | < 0.001 | 0.057 | NA | NA | NA | < 0.001 | < 0.0005 | 0.019 | NA | 0.14 | 0.454 | < 0.0025 | NA |
| | 6/19/2019 | 1.3 | 130 | 59 | 0.19 | 7.02 | 140 | 720 | NA | < 0.001 | 0.062 | NA | NA | NA | < 0.001 | < 0.0005 | 0.023 | NA | 0.13 | 0.841 | < 0.0025 | NA |
| | 11/12/2019 | 1.3 | 140 | 53 | 0.21 | 7.22 | 160 | 670 | NA | < 0.01 | 0.065 | NA | NA | NA | < 0.001 | < 0.0005 | 0.026 | NA | 0.20 | 1.01 | < 0.01 | NA |
| | 6/29/2020 | 1.4 | 130 | 52 | 0.21 | 7.30 | 160 | 670 | NA | < 0.001 | 0.06 | NA | NA | NA | < 0.001 | < 0.0005 | 0.024 | NA | 0.15 | 1.860 | < 0.0025 | NA |
| | 12/15/2020 | 1.7 | 140 | 52 | 0.25 | 7.17 | 180 | 650 | NA | < 0.001 | 0.062 | NA | NA | NA | < 0.001 | < 0.0005 | 0.03 | NA | 0.28 | 1.18 | < 0.0025 | NA |
| | 6/30/2021 | B 1.9 | 120 | 65 | 0.21 | 7.00 | 170 | 730 | < 3.0 | < 0.001 | 0.058 | ^1+ < 1.0 | < 0.5 | < 5.0 | < 0.001 | < 0.0005 | 0.026 | < 0.0002 | 0.22 | 1.29 | < 0.0025 | < 2.0 |
| | 9/27/2021 | 0.39 | 130 | 62 | 0.20 | 7.30 | 180 | 650 | < 0.003 | < 0.001 | 0.065 | ^+ < 0.001 | < 0.0005 | < 0.0005 | < 0.001 | < 0.0005 | 0.0056 | < 0.0002 | 0.29 | 1.19 | < 0.0025 | < 0.002 |
| | 12/16/2021 | 1.9 | 140 | 62 | 0.20 | 7.21 | 170 | 690 | < 0.003 | < 0.001 | 0.066 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.027 | < 0.0002 | 0.29 | 1.12 | < 0.0025 | < 0.002 |
| G46S down-gradient | 11/23/2015 | 6.0 | 110 | 80 | 0.27 | 7.32 | 430 | 780 | < 0.003 | 0.0033 | 0.064 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.073 | < 0.0002 | 0.5 | 1.468 | < 0.0025 | < 0.002 |
| | 5/9/2016 | 7.7 | 100 | 100 | 0.28 | 7.77 | 360 | 940 | < 0.003 | 0.0018 | 0.099 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.0005 | 0.11 | < 0.0002 | 0.7 | 1.85 | < 0.0025 | < 0.002 |
| | 6/30/2016 | 7.9 | 100 | 99 | 0.29 | 8.26 | 290 | 880 | < 0.003 | 0.0014 | 0.098 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.13 | < 0.0002 | 0.71 | 1.94 | < 0.0025 | < 0.002 |
| | 8/26/2016 | 7.2 | 100 | 120 | 0.35 | 7.48 | 350 | 1,000 | < 0.003 | 0.0027 | 0.054 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.12 | < 0.0002 | 1.2 | 1.17 | < 0.0025 | < 0.002 |
| | 11/18/2016 | 6.5 | 110 | 120 | 0.39 | 7.56 | 330 | 1,000 | < 0.003 | 0.0025 | 0.051 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | 0.13 | < 0.0002 | 1.8 | < 0.601 | < 0.0025 | < 0.002 |
| | 2/16/2017 | 6.1 | 100 | 150 | 0.41 | 7.94 | 410 | 1,000 | < 0.003 | 0.0024 | 0.053 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | 0.091 | < 0.0002 | 1.4 | 1.07 | < 0.0025 | < 0.002 |
| | 5/22/2017 | 6.8 | 100 | 130 | 0.44 | 7.37 | 350 | 970 | < 0.003 | 0.0033 | B 0.046 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | 0.11 | < 0.0002 | 1.4 | 0.683 | < 0.0025 | < 0.002 |
| | 7/6/2017 | 4.9 | 100 | 150 | 0.41 | 7.33 | 290 | 880 | < 0.003 | 0.0034 | 0.044 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | ^ < 0.0005 | 0.076 | < 0.0002 | 0.92 | 0.709 | < 0.0025 | ^< 0.002 |
| | 9/27/2017 | 4.9 | 88 | 160 | 0.40 | 7.28 | 270 | 890 | < 0.003 | 0.0043 | 0.031 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | 0.091 | < 0.0002 | 0.63 | 0.754 | < 0.0025 | < 0.002 |
| | 11/21/2017 | 5.3 | 78 | 170 | 0.43 | 7.73 | 270 | 800 | < 0.003 | 0.0055 | 0.032 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | 0.11 | < 0.0002 | 0.68 | 0.776 | < 0.0025 | < 0.002 |
| | 3/8/2018 | 5.9 | 110 | 140 | 0.41 | 7.75 | 350 | 940 | < 0.003 | 0.0039 | 0.049 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | 0.00053 | 0.093 | < 0.0002 | 0.82 | 1.29 | < 0.0025 | < 0.002 |
| | 5/18/2018 | 5.9 | 110 | 120 | 0.40 | 7.66 | 260 | 1,100 | NA | 0.0028 | 0.048 | NA | NA | NA | < 0.0010 | < 0.0005 | 0.073 | NA | 0.84 | 1.07 | < 0.0025 | NA |
| | 12/11/2018 | 7.60 | 120 | 110 | 0.38 | 7.66 | 270 | 1,100 | NA | 0.0023 | 0.055 | NA | NA | NA | < 0.001 | < 0.0005 | 0.096 | NA | 1.20 | 1.22 | < 0.0025 | NA |
| | 6/19/2019 | 13 | 89 | 69 | 0.33 | 7.64 | 440 | 1,000 | NA | 0.014 | 0.040 | NA | NA | NA | < 0.001 | < 0.0005 | 0.22 | NA | 1.80 | 1.37 | < 0.0025 | NA |
| | 11/13/2019 | 10 | 120 | 68 | 0.37 | 7.68 | 470 | 1,000 | NA | < 0.050 | 0.041 | NA | NA | NA | < 0.001 | < 0.0050 | 0.11 | NA | 1.60 | 1.3 | < 0.0100 | NA |
| | 6/29/2020 | 13 | 96 | 74 | 0.34 | 8.06 | 510 | 980 | NA | 0.075 | 0.05 | NA | NA | NA | < 0.001 | < 0.0050 | 0.23 | NA | 1.7 | 2.780 | < 0.0025 | NA |
| | 12/15/2020 | 10 | 120 | 73 | 0.35 | 7.74 | 540 | 1,000 | NA | 0.27 | 0.075 | NA | NA | NA | < 0.001 | < 0.00085 | 0.21 | NA | 1.5 | 2.16 | < 0.0025 | NA |
| | 6/30/2021 | B 15 | 120 | 67 | 0.30 | 7.40 | 590 | 1,000 | < 3.0 | 0.044 | 0.05 | ^1+ < 1.0 | < 0.5 | < 5.0 | < 0.001 | < 0.0005 | 0.21 | < 0.0002 | 1.6 | 2.17 | < 0.0025 | < 2.0 |
| | 9/27/2021 | 0.24 | 130 | 66 | 0.25 | 7.80 | 560 | 1,000 | < 0.003 | 0.046 | 0.043 | ^+ < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | 0.0042 | < 0.0002 | 1.6 | 1.54 | < 0.0025 | < 0.002 |
| | 12/15/2021 | 11 | 140 | 66 | 0.27 | 7.53 | 500 | 990 | < 0.003 | 0.18 | 0.067 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.16 | < 0.0002 | 1.4 | 2.61 | < 0.0025 | < 0.002 |
| G47S down-gradient | 11/23/2015 | 4.6 | 11 | 160 | 0.45 | 9.22 | 480 | 700 | < 0.003 | 0.018 | 0.018 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.036 | < 0.0002 | 0.32 | 0.898 | 0.003 | < 0.002 |
| | 5/6/2016 | 5.0 | 7.8 | 140 | 0.72 | 9.86 | 410 | 910 | < 0.003 | 0.034 | 0.017 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.033 | < 0.0002 | 0.41 | 0.736 | 0.0033 | < 0.002 |
| | 7/1/2016 | 6.4 | 8.4 | 150 | 0.68 | 9.32 | 340 | 860 | < 0.003 | 0.022 | 0.019 | < 0.001 | ^ < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.038 | < 0.0002 | 0.53 | 1.01 | < 0.0025 | < 0.002 |
| | 8/24/2016 | 9.3 | 9.2 | 140 | 0.67 | 9.19 | 300 | 830 | < 0.003 | 0.017 | 0.023 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.028 | < 0.0002 | 0.41 | 1.06 | < 0.0025 | < 0.002 |
| | 11/16/2016 | 15 | 1.3 | F1 150 | 1.8 | 10.08 | 620 | 1,700 | < 0.003 | 0.14 | 0.0091 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.015 | < 0.0002 | 1.4 | < 1.38 | 0.0038 | < 0.002 |
| | 2/15/2017 | 7.6 | 4.4 | 160 | 1.1 | 9.26 | 540 | 1,200 | < 0.003 | 0.059 | 0.016 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.05 | < 0.0002 | 0.57 | 0.716 | 0.0035 | < 0.002 |
| | 5/23/2017 | 18 | 0.93 | 160 | 2.2 | 10.03 | 720 | 1,800 | < 0.003 | 0.18 | 0.0081 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.013 | < 0.0002 | 1.3 | < 0.361 | 0.0025 | < 0.002 |
| | 7/10/2017 | 18 | 1.2 | 150 | 2.1 | 10.06 | 780 | 1,800 | < 0.003 | 0.17 | 0.0085 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.013 | < 0.0002 | 1.2 | 0.733 | < 0.0025 | < 0.002 |
| | 9/27/2017 | 18 | 1.1 | 150 | 2.0 | 10.15 | 750 | 1,900 | < 0.003 | 0.21 | 0.0085 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 1.3 | 0.836 | 0.0027 | < 0.002 |
| | 11/22/2017 | 21 | 1.1 | 150 | 2.1 | 10.56 | 710 | 1,800 | < 0.003 | 0.23 | 0.009 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.012 | < 0.0002 | 1.5 | 0.692 | 0.0044 | < 0.002 |
| | 3/8/2018 | 18 | 1.1 | 170 | 2.1 | 10.67 | 780 | 1,900 | < 0.003 | 0.25 | 0.009 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 1.4 | 0.790 | 0.0042 | < 0.002 |
| | 5/18/2018 | 3.7 | 1.1 | 160 | 1.7 | 7.79 | 570 | 1,800 | NA | 0.23 | 0.0087 | NA | NA | NA | < 0.001 | < 0.0005 | 0.015 | NA | 1.5 | 1.01 | 0.0039 | NA |
| | 12/11/2018 | 13 | 2.8 | 140 | 1.1 | 10.14 | 440 | 1,300 | NA | 0.140 | 0.0110 | NA | NA | NA | < 0.001 | < 0.0005 | 0.023 | NA | 1.10 | 0.597 | 0.0031 | NA |
| | 6/28/2019 | 13 | 2.9 | 130 | 1.3 | 9.95 | 450 | 1,400 | NA | 0.13 | 0.0120 | NA | NA | NA | < 0.001 | < 0.0005 | 0.028 | NA | 1.00 | 0.566 | < 0.0025 | NA |
| | 11/7/2019 | 4.3 | 15 | 140 | 0.55 | 8.39 | 410 | 1,100 | NA | 0.029 | 0.0170 | NA | NA | NA | < 0.001 | < 0.0050 | 0.053 | NA | 0.38 | 1.02 | < 0.0100 | NA |
| | 6/30/2020 | 5.2 | 16 | 120 | 0.59 | 9.04 | F1 440 | 1,000 | NA | 0.037 | 0.015 | NA | NA | NA | < 0.001 | < 0.0050 | 0.052 | NA | 0.46 | 1.240 | 0.004 | NA |
| | 12/7/2020 | 7.6 | 11 | 120 | 1.1 | 9.13 | 500 | 1,100 | NA | 0.066 | 0.012 | NA | NA | NA | < 0.001 | < 0.0005 | 0.047 | NA | 0.62 | < 0.466 | < 0.003 | NA |
| | 6/24/2021 | B 6.1 | 12 | 110 | 0.66 | 8.68 | 470 | 1,000 | < 0.003 | 0.04 | 0.013 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.05 | H < 0.0002 | 0.48 | 0.871 | 0.0027 | < 0.002 |
| | 9/22/2021 | 6.5 | 11 | 100 | 0.62 | 8.83 | 440 | 910 | < 0.003 | 0.041 | 0.014 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.053 | < 0.0002 | 0.52 | 0.764 | 0.0030 | < 0.002 |
| | 12/16/2021 | 6.7 | 11 | 98 | 0.65 | 8.63 | 440 | 900 | < 0.003 | 0.039 | 0.014 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.046 | < 0.0002 | 0.54 | 1.16 | 0.0031 | < 0.002 |
| G48S down-gradient | 11/20/2015 | 11.00 | 6.9 | 120 | 1.5 | 9.08 | 760 | 1,100 | < 0.003 | 0.03 | 0.015 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.015 | < 0.0002 | 1.4 | 0.8512 | < 0.0025 | < 0.002 |
| | 5/5/2016 | 9.30 | 5.9 | 120 | 1.5 | 9.53 | 560 | 1,200 | < 0.003 | 0.046 | 0.014 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.016 | < 0.0002 | 1.2 | 0.800 | < 0.0025 | < 0.002 |
| | 7/1/2016 | 9.50 | 4.2 | 120 | 1.4 | 9.60 | 480 | 1,100 | < 0.003 | 0.038 | 0.011 | < 0.001 | ^ < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.013 | < 0.0002 | 1.2 | 1.01 | < 0.0025 | < 0.002 |
| | 8/24/2016 | 10.00 | 5.5 | 120 | 1.4 | 9.31 | 420 | 1,100 | < 0.003 | 0.032 | 0.014 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.012 | < 0.0002 | 1.1 | 1.16 | < 0.0025 | < 0.002 |
| | 11/16/2016 | 9.80 | 10 | 110 | 1.4 | 9.61 | 340 | 1,100 | < 0.003 | 0.03 | 0.018 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.016 | < 0.0002 | 1.1 | 1.65 | < 0.0025 | < 0.002 |
| | 2/15/2017 | 8.40 | 8.3 | 120 | 1.2 | 9.63 | 490 | 1,100 | < 0.003 | 0.038 | 0.015 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 0.79 | 0.824 | < 0.0025 | < 0.002 |
| | 5/23/2017 | 9.20 | 8.1 | 120 | 1.3 | 9.49 | 470 | 1,100 | < 0.003 | 0.03 | 0.014 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.016 | < 0.0002 | 0.95 | 0.661 | < 0.0025 | < 0.002 |
| | 7/10/2017 | 7.80 | 11 | 110 | 1.2 | 8.77 | 460 | 1,000 | < 0.003 | 0.022 | 0.017 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.016 | < 0.0002 | 0.84 | 1.39 | < 0.0025 | < 0.002 |
| | 9/27/2017 | 7.60 | 18 | 100 | 1.1 | 8.94 | 480 | 1,100 | < 0.003 | 0.024 | 0.019 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.019 | < 0.0002 | 0.72 | 1.32 | < 0.0025 | < 0.002 |
| | 11/22/2017 | 8.60 | 12 | 120 | 1.2 | 9.42 | 450 | 1,000 | < 0.003 | 0.027 | 0.015 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.016 | < 0.0002 | 0.77 | 1.27 | < 0.0025 | < 0.002 |
| | 3/8/2018 | 5.30 | 62 | 100 | 0.85 | 8.13 | 450 | 1,000 | < 0.003 | 0.017 | 0.031 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.023 | < 0.0002 | 0.51 | 2.30 | < 0.0025 | < 0.002 |
| | 5/18/2018 | 5.90 | 53 | 100 | 0.92 | 7.79 | 370 | 1,100 | NA | 0.022 | 0.023 | NA | NA | NA | < 0.001 | < 0.0005 | 0.023 | NA | 0.49 | 0.962 | < 0.0025 | NA |
| | 12/11/2018 | 7.30 | 23 | 110 | 1.1 | 8.42 | 310 | 1,000 | NA | 0.023 | 0.016 | NA | NA | NA | < 0.001 | 0.0049 | 0.019 | NA | 0.79 | 0.921 | < 0.0025 | NA |
| | 6/25/2019 | 7.10 | 28 | 110 | 1.0 | 8.07 | 390 | 1,000 | NA | 0.022 | 0.018 | NA | NA | NA | < 0.001 | < 0.0005 | 0.022 | NA | 0.73 | 1.33 | < 0.0025 | NA |
| | 11/7/2019 | 5.80 | 18 | 100 | 0.89 | 7.83 | 380 | 1,000 | NA | 0.012 | 0.027 | NA | NA | NA | < 0.001 | < 0.005 | 0.019 | NA | 0.59 | 1.24 | < 0.01 | NA |
| | 6/26/2020 | 7.10 | 16 | 110 | 1.0 | 9.20 | 400 | 940 | NA | 0.022 | 0.017 | NA | NA | NA | < 0.001 | < 0.005 | 0.021 | NA | 0.54 | 0.971 | < 0.0025 | NA |
| | 12/7/2020 | 6.00 | 29 | 110 | 1.1 | 8.4 | 410 | 890 | NA | 0.016 | 0.02 | NA | NA | NA | < 0.001 | < 0.0005 | 0.026 | NA | 0.41 | 2.00 | < 0.0025 | NA |
| | 6/24/2021 | B 4.30 | 96 | 96 | 0.71 | 7.27 | 480 | 1,100 | < 0.003 | 0.0026 | 0.035 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.032 | H < 0.0002 | 0.26 | 3.89 | < 0.0025 | < 0.002 |
| | 9/22/2021 | 5.40 | 45 | 100 | 0.74 | 7.68 | 440 | 1,000 | < 0.003 | 0.0061 | 0.027 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.030 | < 0.0002 | 0.46 | 2.15 | < 0.0025 | < 0.002 |
| | 12/16/2021 | 6.00 | 46 | 99 | 0.91 | 7.02 | 430 | 880 | < 0.003 | 0.0076 | 0.023 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.024 | < 0.0002 | 0.52 | 1.87 | < 0.0025 | < 0.002 |

Notes: All units are in mg/l except pH is in standard units and radium is in pCi/L.

B - Compound was found in the blank and sample.

H - Sample was prepped or analyzed beyond the specified holding time

NA - Not analyzed. No confirmation resample required.

^ - Instrument related QC is outside acceptance limits.

* - LCS or LCSD is outside acceptance limits.

^1+ or ^+ - Initial or Continuing Calibration Verification limits is outside acceptable limits, high biased.

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

Table 2. Groundwater Turbidity - Midwest Generation, LLC, Joliet #9 Generating Station

| Well ID | Date | Turbidity (NTU) |
|---|---|---|
| G45S | 3/12/2021 | 0.87 |
| | 4/5/2021 | 0.33 |
| | 4/23/2021 | 0.54 |
| | 5/18/2021 | 0.36 |
| | 6/8/2021 | 0.64 |
| | 7/2/2021 | 1.4 |
| | 8/12/2021 | 0.36 |
| | 9/2/2021 | 0.46 |
| | 12/16/2021 | 0.89 |
| T03S | 3/15/2021 | 2.42 |
| | 4/1/2021 | 0.44 |
| | 4/22/2021 | 94 |
| | 5/17/2021 | 0.47 |
| | 6/7/2021 | 0.47 |
| | 7/1/2021 | 0.3 |
| | 8/12/2021 | 0.34 |
| | 9/1/2021 | 0.67 |
| | 12/9/2021 | 0.56 |
| R08S | 3/12/2021 | 0.19 |
| | 4/1/2021 | 0.46 |
| | 4/23/2021 | 0.34 |
| | 5/18/2021 | 0.24 |
| | 6/8/2021 | 0.2 |
| | 7/1/2021 | 0.17 |
| | 8/12/2021 | 0.58 |
| | 9/2/2021 | 0.42 |
| | 12/14/2021 | 0.57 |
| G20S | 3/12/2021 | 0.32 |
| | 4/1/2021 | 0.29 |
| | 4/22/2021 | 0.14 |
| | 5/18/2021 | 0.63 |
| | 6/8/2021 | 0.2 |
| | 7/1/2021 | 0.29 |
| | 8/12/2021 | 0.32 |
| | 9/2/2021 | 0.48 |
| | 12/10/2021 | 1.28 |
| G30S | 3/12/2021 | 0.05 |
| | 4/2/2021 | 0.14 |
| | 4/23/2021 | 0.25 |
| | 5/18/2021 | 0.43 |
| | 6/8/2021 | 0.61 |
| | 7/2/2021 | 0.48 |
| | 8/13/2021 | 0.31 |
| | 9/2/2021 | 0.48 |
| | 12/15/2021 | 0.09 |

Table 2. Groundwater Turbidity - Midwest Generation, LLC, Joliet #9 Generating Station

| Well ID | Date | Turbidity (NTU) |
|---|---|---|
| R32S | 3/12/2021 | 0.42 |
| | 4/5/2021 | 0.81 |
| | 4/23/2021 | 1.23 |
| | 5/18/2021 | 1.78 |
| | 6/8/2021 | 1.14 |
| | 7/2/2021 | 0.42 |
| | 8/13/2021 | 0.57 |
| | 9/30/2021 | 0.39 |
| | 12/15/2021 | 0.84 |
| G44S | 3/15/2021 | 3.66 |
| | 4/5/2021 | 3.89 |
| | 4/23/2021 | 3.31 |
| | 5/18/2021 | 1.41 |
| | 6/8/2021 | 1.42 |
| | 7/2/2021 | 1.37 |
| | 8/12/2021 | 1.56 |
| | 9/2/2021 | 1.38 |
| | 12/16/2021 | 1.29 |
| G46S | 3/15/2021 | 18.4 |
| | 4/5/2021 | 106.5 |
| | 4/23/2021 | 59.2 |
| | 5/18/2021 | 181 |
| | 6/8/2021 | 3140 |
| | 7/1/2021 | 11.6 |
| | 8/12/2021 | 112 |
| | 9/2/2021 | 43.3 |
| | 12/15/2021 | 73.1 |
| G47S | 3/15/2021 | 0.12 |
| | 4/5/2021 | 0.1 |
| | 4/22/2021 | 0.16 |
| | 5/18/2021 | 0.14 |
| | 6/8/2021 | 0.53 |
| | 7/1/2021 | 0.3 |
| | 8/13/2021 | 0.18 |
| | 9/2/2021 | 0.68 |
| | 12/16/2021 | 0.59 |
| G48S | 3/15/2021 | 0.47 |
| | 4/5/2021 | 0.14 |
| | 4/22/2021 | 0.22 |
| | 5/18/2021 | 0.44 |
| | 6/8/2021 | 0.24 |
| | 7/1/2021 | 0.91 |
| | 8/13/2021 | 0.23 |
| | 9/2/2021 | 0.63 |
| | 12/16/2021 | 0.62 |

eurofins | Environment Testing America

# ANALYTICAL REPORT

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

Laboratory Job ID: 500-209450-1
Client Project/Site: Joliet #9 (Quarry) CCR 4Q21

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

Attn: Richard Gnat

Diana Mockler

*Authorized for release by:*
*1/3/2022 9:54:45 AM*

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

# Table of Contents

# Case Narrative

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Job ID: 500-209450-1

### Laboratory: Eurofins North Central, Chicago

**Narrative**

**Job Narrative**
**500-209450-1**

**Comments**
No sample collected on 12/15/21 for sample 500-209450-16 due to property development/excavation.
No additional comments.

**Receipt**
The samples were received on 12/8/2021 2:29 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 1.0º C, 2.1º C, 3.0º C, 3.2º C, 3.7º C, 3.8º C and 3.9º C.

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

**General Chemistry**
Method SM 2540C: The matrix spike (MS) recovery for analytical batch 500-633495 was outside control limits for TDS. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. (500-209450-E-3 MS)

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

# Method Summary

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9  (Quarry) CCR 4Q21

Job ID: 500-209450-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 6020A | Metals (ICP/MS) | SW846 | TAL CHI |
| 7470A | Mercury (CVAA) | 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 |
| 7470A | Preparation, Mercury | 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 North Central, 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 4Q21

Job ID: 500-209450-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 500-209450-1 | T09S | Water | 12/08/21 11:28 | 12/08/21 14:29 |
| 500-209450-2 | T06S | Water | 12/08/21 13:06 | 12/08/21 14:29 |
| 500-209450-3 | T02S | Water | 12/09/21 09:39 | 12/09/21 14:48 |
| 500-209450-4 | T08S | Water | 12/09/21 11:48 | 12/09/21 14:48 |
| 500-209450-5 | T03S | Water | 12/09/21 13:42 | 12/09/21 14:48 |
| 500-209450-6 | T05S | Water | 12/10/21 09:55 | 12/10/21 14:07 |
| 500-209450-7 | G20S | Water | 12/10/21 11:25 | 12/10/21 14:07 |
| 500-209450-8 | T01S | Water | 12/13/21 10:42 | 12/13/21 15:10 |
| 500-209450-9 | G33S | Water | 12/13/21 13:06 | 12/13/21 15:10 |
| 500-209450-10 | G31S | Water | 12/13/21 14:14 | 12/13/21 15:10 |
| 500-209450-11 | R08S | Water | 12/14/21 13:05 | 12/14/21 14:00 |
| 500-209450-12 | G30S | Water | 12/15/21 09:03 | 12/15/21 14:15 |
| 500-209450-13 | R32S | Water | 12/15/21 10:44 | 12/15/21 14:15 |
| 500-209450-14 | DUP | Water | 12/15/21 10:44 | 12/15/21 14:15 |
| 500-209450-15 | G46S | Water | 12/15/21 12:19 | 12/15/21 14:15 |
| 500-209450-16 | T04S | Water | 12/15/21 13:20 | 12/15/21 14:15 |
| 500-209450-17 | G44S | GW | 12/16/21 09:07 | 12/16/21 14:26 |
| 500-209450-18 | G45S | GW | 12/16/21 10:01 | 12/16/21 14:26 |
| 500-209450-19 | G48S | GW | 12/16/21 11:13 | 12/16/21 14:26 |
| 500-209450-20 | G47S | GW | 12/16/21 13:10 | 12/16/21 14:26 |

# Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T09S

**Date Collected: 12/08/21 11:28**
**Date Received: 12/08/21 14:29**

## Lab Sample ID: 500-209450-1

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| **Arsenic** | **0.0035** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 18:56 | 1 |
| **Barium** | **0.067** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| **Boron** | **9.0** | | 1.0 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:19 | 20 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| **Calcium** | **130** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| **Cobalt** | **0.0011** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| **Lead** | **0.00084** | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| **Lithium** | **0.10** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| **Molybdenum** | **1.3** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:15 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 08:49 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **1100** | | 10 | | mg/L | | | 12/09/21 07:35 | 1 |
| **Chloride** | **64** | | 6.0 | | mg/L | | | 12/13/21 16:35 | 3 |
| **Fluoride** | **0.38** | | 0.10 | | mg/L | | | 12/20/21 17:47 | 1 |
| **Sulfate** | **570** | | 100 | | mg/L | | | 12/13/21 18:32 | 20 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **91.72** | | | | ft | | | 12/08/21 11:28 | 1 |
| **Depth to Water (ft from MP)** | **94.12** | | | | ft | | | 12/08/21 11:28 | 1 |
| **Elevation of well (ft from MP)** | **603.69** | | | | ft | | | 12/08/21 11:28 | 1 |
| **Field pH** | **7.23** | | | | SU | | | 12/08/21 11:28 | 1 |
| **Field Temperature** | **44.8** | | | | Degrees F | | | 12/08/21 11:28 | 1 |
| **Ground Water Elevation** | **509.57** | | | | ft | | | 12/08/21 11:28 | 1 |
| **Specific Conductance** | **1300** | | | | umhos/cm | | | 12/08/21 11:28 | 1 |
| **Well bottom elevation** | **444.80** | | | | ft | | | 12/08/21 11:28 | 1 |
| **Field Turbidity** | **13.0** | | | | NTU | | | 12/08/21 11:28 | 1 |

# Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T06S

**Date Collected: 12/08/21 13:06**
**Date Received: 12/08/21 14:29**

## Lab Sample ID: 500-209450-2

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| Arsenic | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:13 | 1 |
| **Barium** | **0.035** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| **Boron** | **0.81** | | 0.10 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:43 | 2 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| **Calcium** | **94** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| **Lithium** | **0.027** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| **Molybdenum** | **0.014** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:39 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 08:51 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **550** | | 10 | | mg/L | | | 12/09/21 07:38 | 1 |
| **Chloride** | **14** | | 2.0 | | mg/L | | | 12/13/21 16:34 | 1 |
| **Fluoride** | **0.42** | | 0.10 | | mg/L | | | 12/20/21 17:51 | 1 |
| **Sulfate** | **100** | | 15 | | mg/L | | | 12/13/21 18:32 | 3 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **111.07** | | | | ft | | | 12/08/21 13:06 | 1 |
| **Depth to Water (ft from MP)** | **113.37** | | | | ft | | | 12/08/21 13:06 | 1 |
| **Elevation of well (ft from MP)** | **620.99** | | | | ft | | | 12/08/21 13:06 | 1 |
| **Field pH** | **7.44** | | | | SU | | | 12/08/21 13:06 | 1 |
| **Field Temperature** | **51.8** | | | | Degrees F | | | 12/08/21 13:06 | 1 |
| **Ground Water Elevation** | **507.62** | | | | ft | | | 12/08/21 13:06 | 1 |
| **Specific Conductance** | **694** | | | | umhos/cm | | | 12/08/21 13:06 | 1 |
| **Well bottom elevation** | **447.94** | | | | ft | | | 12/08/21 13:06 | 1 |
| **Field Turbidity** | **1.96** | | | | NTU | | | 12/08/21 13:06 | 1 |

# Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T02S

**Date Collected: 12/09/21 09:39**
**Date Received: 12/09/21 14:48**

## Lab Sample ID: 500-209450-3

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.0082 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Arsenic | 0.0097 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:16 | 1 |
| Barium | 0.078 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Boron | 5.1 | | 0.50 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:47 | 10 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Calcium | 69 | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Cobalt | 0.0041 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Lead | 0.0027 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Lithium | 0.034 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Molybdenum | 0.54 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:43 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 08:54 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 890 | F1 | 10 | | mg/L | | | 12/14/21 04:40 | 1 |
| Chloride | 99 | | 6.0 | | mg/L | | | 12/13/21 16:38 | 3 |
| Fluoride | 0.41 | | 0.10 | | mg/L | | | 12/20/21 17:54 | 1 |
| Sulfate | 360 | | 50 | | mg/L | | | 12/13/21 18:33 | 10 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Depth to water from land surface | 132.72 | | | | ft | | | 12/09/21 09:39 | 1 |
| Depth to Water (ft from MP) | 135.05 | | | | ft | | | 12/09/21 09:39 | 1 |
| Elevation of well (ft from MP) | 626.12 | | | | ft | | | 12/09/21 09:39 | 1 |
| Field pH | 7.77 | | | | SU | | | 12/09/21 09:39 | 1 |
| Field Temperature | 46.4 | | | | Degrees F | | | 12/09/21 09:39 | 1 |
| Ground Water Elevation | 491.07 | | | | ft | | | 12/09/21 09:39 | 1 |
| Specific Conductance | 1169 | | | | umhos/cm | | | 12/09/21 09:39 | 1 |
| Well bottom elevation | 453.40 | | | | ft | | | 12/09/21 09:39 | 1 |
| Field Turbidity | 8.77 | | | | NTU | | | 12/09/21 09:39 | 1 |

# Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T08S

**Date Collected: 12/09/21 11:48**
**Date Received: 12/09/21 14:48**

## Lab Sample ID: 500-209450-4

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| **Arsenic** | **0.015** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:20 | 1 |
| **Barium** | **0.044** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| **Boron** | **9.2** | | 1.0 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:50 | 20 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| **Calcium** | **36** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| **Lithium** | **0.034** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| **Molybdenum** | **0.98** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:46 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 08:56 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **1100** | | 10 | | mg/L | | | 12/14/21 04:47 | 1 |
| **Chloride** | **90** | | 6.0 | | mg/L | | | 12/13/21 16:37 | 3 |
| Fluoride | <0.10 | | 0.10 | | mg/L | | | 12/20/21 18:11 | 1 |
| **Sulfate** | **550** | | 100 | | mg/L | | | 12/13/21 18:33 | 20 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **127.87** | | | | ft | | | 12/09/21 11:48 | 1 |
| **Depth to Water (ft from MP)** | **130.25** | | | | ft | | | 12/09/21 11:48 | 1 |
| **Elevation of well (ft from MP)** | **627.50** | | | | ft | | | 12/09/21 11:48 | 1 |
| **Field pH** | **8.50** | | | | SU | | | 12/09/21 11:48 | 1 |
| **Field Temperature** | **48.9** | | | | Degrees F | | | 12/09/21 11:48 | 1 |
| **Ground Water Elevation** | **497.25** | | | | ft | | | 12/09/21 11:48 | 1 |
| **Specific Conductance** | **1395** | | | | umhos/cm | | | 12/09/21 11:48 | 1 |
| **Well bottom elevation** | **447.38** | | | | ft | | | 12/09/21 11:48 | 1 |
| **Field Turbidity** | **2.48** | | | | NTU | | | 12/09/21 11:48 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T03S

**Date Collected: 12/09/21 13:42**
**Date Received: 12/09/21 14:48**

## Lab Sample ID: 500-209450-5

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| **Arsenic** | **0.0011** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:30 | 1 |
| **Barium** | **0.085** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| **Boron** | **2.4** | | 0.50 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:54 | 10 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| **Calcium** | **130** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| **Lithium** | **0.026** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| **Molybdenum** | **0.22** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:49 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 08:58 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **870** | | 10 | | mg/L | | | 12/14/21 04:53 | 1 |
| **Chloride** | **110** | | 10 | | mg/L | | | 12/13/21 16:39 | 5 |
| **Fluoride** | **0.23** | | 0.10 | | mg/L | | | 12/20/21 18:19 | 1 |
| **Sulfate** | **280** | **F1** | 50 | | mg/L | | | 12/13/21 18:33 | 10 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **136.32** | | | | ft | | | 12/09/21 13:42 | 1 |
| **Depth to Water (ft from MP)** | **139.40** | | | | ft | | | 12/09/21 13:42 | 1 |
| **Elevation of well (ft from MP)** | **629.74** | | | | ft | | | 12/09/21 13:42 | 1 |
| **Field pH** | **7.48** | | | | SU | | | 12/09/21 13:42 | 1 |
| **Field Temperature** | **53.2** | | | | Degrees F | | | 12/09/21 13:42 | 1 |
| **Ground Water Elevation** | **490.34** | | | | ft | | | 12/09/21 13:42 | 1 |
| **Specific Conductance** | **1159** | | | | umhos/cm | | | 12/09/21 13:42 | 1 |
| **Well bottom elevation** | **456.70** | | | | ft | | | 12/09/21 13:42 | 1 |
| **Field Turbidity** | **0.56** | | | | NTU | | | 12/09/21 13:42 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T05S

**Date Collected: 12/10/21 09:55**
**Date Received: 12/10/21 14:07**

## Lab Sample ID: 500-209450-6

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| **Arsenic** | **0.12** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:33 | 1 |
| **Barium** | **0.0098** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| **Boron** | **14** | | 5.0 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:57 | 100 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| **Calcium** | **2.7** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| **Lithium** | **0.019** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| **Molybdenum** | **0.96** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| **Selenium** | **0.0041** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:53 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 09:00 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **1500** | | 10 | | mg/L | | | 12/14/21 04:55 | 1 |
| **Chloride** | **140** | | 10 | | mg/L | | | 12/13/21 17:03 | 5 |
| **Fluoride** | **1.8** | | 0.10 | | mg/L | | | 12/20/21 18:33 | 1 |
| **Sulfate** | **630** | | 100 | | mg/L | | | 12/13/21 18:44 | 20 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **123.63** | | | | ft | | | 12/10/21 09:55 | 1 |
| **Depth to Water (ft from MP)** | **126.03** | | | | ft | | | 12/10/21 09:55 | 1 |
| **Elevation of well (ft from MP)** | **623.46** | | | | ft | | | 12/10/21 09:55 | 1 |
| **Field pH** | **9.41** | | | | SU | | | 12/10/21 09:55 | 1 |
| **Field Temperature** | **52.5** | | | | Degrees F | | | 12/10/21 09:55 | 1 |
| **Ground Water Elevation** | **497.43** | | | | ft | | | 12/10/21 09:55 | 1 |
| **Specific Conductance** | **2070** | | | | umhos/cm | | | 12/10/21 09:55 | 1 |
| **Well bottom elevation** | **448.35** | | | | ft | | | 12/10/21 09:55 | 1 |
| **Field Turbidity** | **3.71** | | | | NTU | | | 12/10/21 09:55 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G20S

**Date Collected: 12/10/21 11:25**
**Date Received: 12/10/21 14:07**

## Lab Sample ID: 500-209450-7

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| **Arsenic** | **0.0019** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:37 | 1 |
| **Barium** | **0.045** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| **Boron** | **1.4** | | 0.25 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:01 | 5 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| **Calcium** | **60** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| **Lithium** | **0.041** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| **Molybdenum** | **0.025** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 14:56 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 09:02 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **360** | | 10 | | mg/L | | | 12/14/21 04:58 | 1 |
| **Chloride** | **14** | | 2.0 | | mg/L | | | 12/13/21 16:40 | 1 |
| **Fluoride** | **0.77** | | 0.10 | | mg/L | | | 12/20/21 18:36 | 1 |
| **Sulfate** | **69** | | 15 | | mg/L | | | 12/13/21 18:35 | 3 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **126.58** | | | | ft | | | 12/10/21 11:25 | 1 |
| **Depth to Water (ft from MP)** | **129.36** | | | | ft | | | 12/10/21 11:25 | 1 |
| **Elevation of well (ft from MP)** | **580.94** | | | | ft | | | 12/10/21 11:25 | 1 |
| **Field pH** | **8.33** | | | | SU | | | 12/10/21 11:25 | 1 |
| **Field Temperature** | **56.5** | | | | Degrees F | | | 12/10/21 11:25 | 1 |
| **Ground Water Elevation** | **451.58** | | | | ft | | | 12/10/21 11:25 | 1 |
| **Specific Conductance** | **589** | | | | umhos/cm | | | 12/10/21 11:25 | 1 |
| **Well bottom elevation** | **442.28** | | | | ft | | | 12/10/21 11:25 | 1 |
| **Field Turbidity** | **1.28** | | | | NTU | | | 12/10/21 11:25 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T01S

**Date Collected: 12/13/21 10:42**
**Date Received: 12/13/21 15:10**

## Lab Sample ID: 500-209450-8

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| **Arsenic** | **0.023** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:40 | 1 |
| **Barium** | **0.10** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| **Boron** | **4.8** | | 0.50 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:04 | 10 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| **Calcium** | **62** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| **Chromium** | **0.019** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| **Cobalt** | **0.0078** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| **Lead** | **0.0078** | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| **Lithium** | **0.021** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| **Molybdenum** | **0.35** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:00 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 09:29 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **910** | | 10 | | mg/L | | | 12/14/21 05:00 | 1 |
| **Chloride** | **97** | | 6.0 | | mg/L | | | 12/28/21 15:52 | 3 |
| **Fluoride** | **1.1** | | 0.10 | | mg/L | | | 12/20/21 18:39 | 1 |
| **Sulfate** | **410** | | 50 | | mg/L | | | 12/28/21 16:19 | 10 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **122.67** | | | | ft | | | 12/13/21 10:42 | 1 |
| **Depth to Water (ft from MP)** | **125.15** | | | | ft | | | 12/13/21 10:42 | 1 |
| **Elevation of well (ft from MP)** | **621.71** | | | | ft | | | 12/13/21 10:42 | 1 |
| **Field pH** | **7.67** | | | | SU | | | 12/13/21 10:42 | 1 |
| **Field Temperature** | **49.1** | | | | Degrees F | | | 12/13/21 10:42 | 1 |
| **Ground Water Elevation** | **496.56** | | | | ft | | | 12/13/21 10:42 | 1 |
| **Specific Conductance** | **1234** | | | | umhos/cm | | | 12/13/21 10:42 | 1 |
| **Well bottom elevation** | **451.46** | | | | ft | | | 12/13/21 10:42 | 1 |
| **Field Turbidity** | **138** | | | | NTU | | | 12/13/21 10:42 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G33S

**Date Collected: 12/13/21 13:06**
**Date Received: 12/13/21 15:10**

## Lab Sample ID: 500-209450-9

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| **Arsenic** | **0.0015** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:43 | 1 |
| **Barium** | **0.075** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| **Boron** | **0.71** | | 0.10 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:08 | 2 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| **Calcium** | **52** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| **Lead** | **0.0014** | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| **Lithium** | **0.031** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| Molybdenum | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:03 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 09:50 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **380** | | 10 | | mg/L | | | 12/14/21 05:03 | 1 |
| **Chloride** | **13** | | 2.0 | | mg/L | | | 12/28/21 15:53 | 1 |
| **Fluoride** | **0.56** | | 0.10 | | mg/L | | | 12/20/21 18:41 | 1 |
| **Sulfate** | **66** | | 15 | | mg/L | | | 12/28/21 16:19 | 3 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **31.25** | | | | ft | | | 12/13/21 13:06 | 1 |
| **Depth to Water (ft from MP)** | **32.98** | | | | ft | | | 12/13/21 13:06 | 1 |
| **Elevation of well (ft from MP)** | **535.65** | | | | ft | | | 12/13/21 13:06 | 1 |
| **Field pH** | **7.52** | | | | SU | | | 12/13/21 13:06 | 1 |
| **Field Temperature** | **56.7** | | | | Degrees F | | | 12/13/21 13:06 | 1 |
| **Ground Water Elevation** | **502.67** | | | | ft | | | 12/13/21 13:06 | 1 |
| **Specific Conductance** | **628** | | | | umhos/cm | | | 12/13/21 13:06 | 1 |
| **Well bottom elevation** | **452.72** | | | | ft | | | 12/13/21 13:06 | 1 |
| **Field Turbidity** | **9.78** | | | | NTU | | | 12/13/21 13:06 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G31S

**Date Collected: 12/13/21 14:14**
**Date Received: 12/13/21 15:10**

## Lab Sample ID: 500-209450-10

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| **Arsenic** | **0.0036** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:47 | 1 |
| **Barium** | **0.050** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| **Boron** | **4.9** | | 0.50 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:11 | 10 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| **Calcium** | **150** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| **Lithium** | **0.094** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| **Molybdenum** | **0.75** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:07 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 09:52 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **1100** | | 10 | | mg/L | | | 12/14/21 05:06 | 1 |
| **Chloride** | **160** | | 10 | | mg/L | | | 12/28/21 15:53 | 5 |
| **Fluoride** | **0.24** | | 0.10 | | mg/L | | | 12/20/21 18:45 | 1 |
| **Sulfate** | **450** | | 50 | | mg/L | | | 12/28/21 16:20 | 10 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **26.00** | | | | ft | | | 12/13/21 14:14 | 1 |
| **Depth to Water (ft from MP)** | **28.58** | | | | ft | | | 12/13/21 14:14 | 1 |
| **Elevation of well (ft from MP)** | **535.77** | | | | ft | | | 12/13/21 14:14 | 1 |
| **Field pH** | **7.29** | | | | SU | | | 12/13/21 14:14 | 1 |
| **Field Temperature** | **56.7** | | | | Degrees F | | | 12/13/21 14:14 | 1 |
| **Ground Water Elevation** | **507.19** | | | | ft | | | 12/13/21 14:14 | 1 |
| **Specific Conductance** | **1490** | | | | umhos/cm | | | 12/13/21 14:14 | 1 |
| **Well bottom elevation** | **453.36** | | | | ft | | | 12/13/21 14:14 | 1 |
| **Field Turbidity** | **1.21** | | | | NTU | | | 12/13/21 14:14 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: R08S

**Date Collected: 12/14/21 13:05**
**Date Received: 12/14/21 14:00**

## Lab Sample ID: 500-209450-11

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| Arsenic | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:50 | 1 |
| **Barium** | **0.042** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| **Boron** | **7.8** | | 1.0 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:14 | 20 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| **Calcium** | **150** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| **Lithium** | **0.14** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| **Molybdenum** | **0.39** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| **Selenium** | **0.012** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:10 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/15/21 10:20 | 12/16/21 08:59 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **830** | | 10 | | mg/L | | | 12/21/21 17:13 | 1 |
| **Chloride** | **77** | | 6.0 | | mg/L | | | 12/28/21 15:54 | 3 |
| **Fluoride** | **0.15** | | 0.10 | | mg/L | | | 12/20/21 18:48 | 1 |
| **Sulfate** | **410** | | 50 | | mg/L | | | 12/28/21 16:20 | 10 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **66.90** | | | | ft | | | 12/14/21 13:05 | 1 |
| **Depth to Water (ft from MP)** | **69.45** | | | | ft | | | 12/14/21 13:05 | 1 |
| **Elevation of well (ft from MP)** | **578.51** | | | | ft | | | 12/14/21 13:05 | 1 |
| **Field pH** | **8.37** | | | | SU | | | 12/14/21 13:05 | 1 |
| **Field Temperature** | **54.7** | | | | Degrees F | | | 12/14/21 13:05 | 1 |
| **Ground Water Elevation** | **509.06** | | | | ft | | | 12/14/21 13:05 | 1 |
| **Specific Conductance** | **968** | | | | umhos/cm | | | 12/14/21 13:05 | 1 |
| **Well bottom elevation** | **453.08** | | | | ft | | | 12/14/21 13:05 | 1 |
| **Field Turbidity** | **0.57** | | | | NTU | | | 12/14/21 13:05 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G30S

**Date Collected: 12/15/21 09:03**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-12

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| **Arsenic** | **0.0028** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:54 | 1 |
| **Barium** | **0.045** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| **Boron** | **5.1** | | 0.50 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:25 | 10 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| **Calcium** | **63** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| **Lithium** | **0.022** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| **Molybdenum** | **0.010** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:20 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/16/21 10:45 | 12/17/21 08:46 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **1200** | | 10 | | mg/L | | | 12/22/21 15:31 | 1 |
| **Chloride** | **200** | | 10 | | mg/L | | | 12/28/21 15:54 | 5 |
| **Fluoride** | **1.0** | | 0.10 | | mg/L | | | 12/20/21 18:51 | 1 |
| **Sulfate** | **450** | | 50 | | mg/L | | | 12/28/21 16:21 | 10 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **-0.10** | | | | ft | | | 12/15/21 09:03 | 1 |
| **Depth to Water (ft from MP)** | **2.21** | | | | ft | | | 12/15/21 09:03 | 1 |
| **Elevation of well (ft from MP)** | **524.69** | | | | ft | | | 12/15/21 09:03 | 1 |
| **Field pH** | **7.95** | | | | SU | | | 12/15/21 09:03 | 1 |
| **Field Temperature** | **52.3** | | | | Degrees F | | | 12/15/21 09:03 | 1 |
| **Ground Water Elevation** | **522.48** | | | | ft | | | 12/15/21 09:03 | 1 |
| **Specific Conductance** | **1590** | | | | umhos/cm | | | 12/15/21 09:03 | 1 |
| **Well bottom elevation** | **462.58** | | | | ft | | | 12/15/21 09:03 | 1 |
| **Field Turbidity** | **0.09** | | | | NTU | | | 12/15/21 09:03 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: R32S

**Date Collected: 12/15/21 10:44**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-13

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| **Arsenic** | **0.0016** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 19:57 | 1 |
| **Barium** | **0.037** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| **Boron** | **4.9** | | 0.50 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:28 | 10 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| **Calcium** | **150** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| **Lithium** | **0.097** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| **Molybdenum** | **0.75** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:24 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/16/21 10:45 | 12/17/21 08:48 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **930** | | 10 | | mg/L | | | 12/22/21 15:37 | 1 |
| **Chloride** | **59** | | 6.0 | | mg/L | | | 12/28/21 15:54 | 3 |
| **Fluoride** | **0.32** | | 0.10 | | mg/L | | | 12/20/21 18:54 | 1 |
| **Sulfate** | **490** | | 100 | | mg/L | | | 12/28/21 16:21 | 20 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **19.71** | | | | ft | | | 12/15/21 10:44 | 1 |
| **Depth to Water (ft from MP)** | **21.74** | | | | ft | | | 12/15/21 10:44 | 1 |
| **Elevation of well (ft from MP)** | **536.91** | | | | ft | | | 12/15/21 10:44 | 1 |
| **Field pH** | **7.42** | | | | SU | | | 12/15/21 10:44 | 1 |
| **Field Temperature** | **53.6** | | | | Degrees F | | | 12/15/21 10:44 | 1 |
| **Ground Water Elevation** | **515.17** | | | | ft | | | 12/15/21 10:44 | 1 |
| **Specific Conductance** | **975** | | | | umhos/cm | | | 12/15/21 10:44 | 1 |
| **Well bottom elevation** | **457.84** | | | | ft | | | 12/15/21 10:44 | 1 |
| **Field Turbidity** | **0.84** | | | | NTU | | | 12/15/21 10:44 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: DUP

**Date Collected: 12/15/21 10:44**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-14

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| **Arsenic** | **0.0027** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 20:00 | 1 |
| **Barium** | **0.040** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| **Boron** | **6.2** | | 1.0 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:32 | 20 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| **Calcium** | **170** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| **Lithium** | **0.12** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| **Molybdenum** | **0.99** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:27 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/16/21 10:45 | 12/17/21 08:51 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **1200** | | 10 | | mg/L | | | 12/22/21 15:39 | 1 |
| **Chloride** | **63** | | 6.0 | | mg/L | | | 12/28/21 15:55 | 3 |
| **Fluoride** | **0.32** | | 0.10 | | mg/L | | | 12/20/21 18:57 | 1 |
| **Sulfate** | **530** | | 100 | | mg/L | | | 12/28/21 16:22 | 20 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **19.71** | | | | ft | | | 12/15/21 10:44 | 1 |
| **Depth to Water (ft from MP)** | **21.74** | | | | ft | | | 12/15/21 10:44 | 1 |
| **Elevation of well (ft from MP)** | **536.91** | | | | ft | | | 12/15/21 10:44 | 1 |
| **Field pH** | **7.42** | | | | SU | | | 12/15/21 10:44 | 1 |
| **Field Temperature** | **53.6** | | | | Degrees F | | | 12/15/21 10:44 | 1 |
| **Ground Water Elevation** | **515.17** | | | | ft | | | 12/15/21 10:44 | 1 |
| **Specific Conductance** | **975** | | | | umhos/cm | | | 12/15/21 10:44 | 1 |
| **Well bottom elevation** | **457.84** | | | | ft | | | 12/15/21 10:44 | 1 |
| **Field Turbidity** | **0.84** | | | | NTU | | | 12/15/21 10:44 | 1 |

# Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G46S

**Date Collected: 12/15/21 12:19**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-15

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| **Arsenic** | **0.18** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 20:11 | 1 |
| **Barium** | **0.067** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| **Boron** | **11** | | 5.0 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:35 | 100 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| **Calcium** | **140** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| **Lithium** | **0.16** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| **Molybdenum** | **1.4** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:31 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/16/21 10:45 | 12/17/21 08:53 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **990** | | 10 | | mg/L | | | 12/22/21 15:43 | 1 |
| **Chloride** | **66** | | 6.0 | | mg/L | | | 12/28/21 15:55 | 3 |
| **Fluoride** | **0.27** | | 0.10 | | mg/L | | | 12/20/21 19:00 | 1 |
| **Sulfate** | **500** | | 100 | | mg/L | | | 12/28/21 16:23 | 20 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **102.58** | | | | ft | | | 12/15/21 12:19 | 1 |
| **Depth to Water (ft from MP)** | **105.28** | | | | ft | | | 12/15/21 12:19 | 1 |
| **Elevation of well (ft from MP)** | **601.34** | | | | ft | | | 12/15/21 12:19 | 1 |
| **Field pH** | **7.53** | | | | SU | | | 12/15/21 12:19 | 1 |
| **Field Temperature** | **56.8** | | | | Degrees F | | | 12/15/21 12:19 | 1 |
| **Ground Water Elevation** | **496.06** | | | | ft | | | 12/15/21 12:19 | 1 |
| **Specific Conductance** | **1254** | | | | umhos/cm | | | 12/15/21 12:19 | 1 |
| **Well bottom elevation** | **453.62** | | | | ft | | | 12/15/21 12:19 | 1 |
| **Field Turbidity** | **73.1** | | | | NTU | | | 12/15/21 12:19 | 1 |

# Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T04S

**Date Collected: 12/15/21 13:20**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-16

**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 | | | 12/15/21 13:20 | 1 |
| Depth to Water (ft from MP) | 0 | | | | ft | | | 12/15/21 13:20 | 1 |
| Elevation of well (ft from MP) | 631.35 | | | | ft | | | 12/15/21 13:20 | 1 |
| Field pH | 0 | | | | SU | | | 12/15/21 13:20 | 1 |
| Field Temperature | 0 | | | | Degrees F | | | 12/15/21 13:20 | 1 |
| Ground Water Elevation | 0 | | | | ft | | | 12/15/21 13:20 | 1 |
| Specific Conductance | 0 | | | | umhos/cm | | | 12/15/21 13:20 | 1 |
| Well bottom elevation | 458.07 | | | | ft | | | 12/15/21 13:20 | 1 |
| Field Turbidity | 0 | | | | NTU | | | 12/15/21 13:20 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G44S

**Date Collected: 12/16/21 09:07**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-17

**Matrix: GW**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| Arsenic | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 20:14 | 1 |
| **Barium** | **0.066** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| **Boron** | **1.9** | | 0.25 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:39 | 5 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| **Calcium** | **140** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| **Lithium** | **0.027** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| **Molybdenum** | **0.29** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:34 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/17/21 10:05 | 12/20/21 08:39 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **690** | | 10 | | mg/L | | | 12/22/21 16:50 | 1 |
| **Chloride** | **62** | | 6.0 | | mg/L | | | 12/28/21 15:56 | 3 |
| **Fluoride** | **0.20** | | 0.10 | | mg/L | | | 12/20/21 19:14 | 1 |
| **Sulfate** | **170** | | 50 | | mg/L | | | 12/28/21 16:23 | 10 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **80.53** | | | | ft | | | 12/16/21 09:07 | 1 |
| **Depth to Water (ft from MP)** | **82.71** | | | | ft | | | 12/16/21 09:07 | 1 |
| **Elevation of well (ft from MP)** | **586.49** | | | | ft | | | 12/16/21 09:07 | 1 |
| **Field pH** | **7.21** | | | | SU | | | 12/16/21 09:07 | 1 |
| **Field Temperature** | **52.2** | | | | Degrees F | | | 12/16/21 09:07 | 1 |
| **Ground Water Elevation** | **503.78** | | | | ft | | | 12/16/21 09:07 | 1 |
| **Specific Conductance** | **987** | | | | umhos/cm | | | 12/16/21 09:07 | 1 |
| **Well bottom elevation** | **455.11** | | | | ft | | | 12/16/21 09:07 | 1 |
| **Field Turbidity** | **1.29** | | | | NTU | | | 12/16/21 09:07 | 1 |

# Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G45S

**Date Collected: 12/16/21 10:01**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-18

**Matrix: GW**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| **Arsenic** | **0.0092** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 20:17 | 1 |
| **Barium** | **0.037** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| **Boron** | **0.34** | | 0.050 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| **Calcium** | **84** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| **Lithium** | **0.028** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| **Molybdenum** | **0.0073** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:42 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/17/21 10:05 | 12/20/21 08:41 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **510** | | 10 | | mg/L | | | 12/22/21 16:57 | 1 |
| **Chloride** | **87** | | 6.0 | | mg/L | | | 12/28/21 15:56 | 3 |
| **Fluoride** | **0.36** | | 0.10 | | mg/L | | | 12/20/21 19:17 | 1 |
| **Sulfate** | **130** | | 25 | | mg/L | | | 12/28/21 16:23 | 5 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **63.18** | | | | ft | | | 12/16/21 10:01 | 1 |
| **Depth to Water (ft from MP)** | **66.15** | | | | ft | | | 12/16/21 10:01 | 1 |
| **Elevation of well (ft from MP)** | **603.94** | | | | ft | | | 12/16/21 10:01 | 1 |
| **Field pH** | **7.35** | | | | SU | | | 12/16/21 10:01 | 1 |
| **Field Temperature** | **53.6** | | | | Degrees F | | | 12/16/21 10:01 | 1 |
| **Ground Water Elevation** | **537.79** | | | | ft | | | 12/16/21 10:01 | 1 |
| **Specific Conductance** | **808** | | | | umhos/cm | | | 12/16/21 10:01 | 1 |
| **Well bottom elevation** | **471.05** | | | | ft | | | 12/16/21 10:01 | 1 |
| **Field Turbidity** | **0.89** | | | | NTU | | | 12/16/21 10:01 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G48S

**Date Collected: 12/16/21 11:13**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-19

**Matrix: GW**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| **Arsenic** | **0.0076** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 20:21 | 1 |
| **Barium** | **0.023** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| **Boron** | **6.0** | | 1.0 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:46 | 20 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| **Calcium** | **46** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| **Lithium** | **0.024** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| **Molybdenum** | **0.52** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:38 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/17/21 10:05 | 12/20/21 08:44 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **880** | | 10 | | mg/L | | | 12/22/21 17:00 | 1 |
| **Chloride** | **99** | | 6.0 | | mg/L | | | 12/28/21 15:56 | 3 |
| **Fluoride** | **0.91** | | 0.10 | | mg/L | | | 12/28/21 10:38 | 1 |
| **Sulfate** | **430** | | 100 | | mg/L | | | 12/28/21 16:24 | 20 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **102.64** | | | | ft | | | 12/16/21 11:13 | 1 |
| **Depth to Water (ft from MP)** | **105.09** | | | | ft | | | 12/16/21 11:13 | 1 |
| **Elevation of well (ft from MP)** | **620.74** | | | | ft | | | 12/16/21 11:13 | 1 |
| **Field pH** | **7.02** | | | | SU | | | 12/16/21 11:13 | 1 |
| **Field Temperature** | **47.8** | | | | Degrees F | | | 12/16/21 11:13 | 1 |
| **Ground Water Elevation** | **515.65** | | | | ft | | | 12/16/21 11:13 | 1 |
| **Specific Conductance** | **1318** | | | | umhos/cm | | | 12/16/21 11:13 | 1 |
| **Well bottom elevation** | **468.32** | | | | ft | | | 12/16/21 11:13 | 1 |
| **Field Turbidity** | **0.62** | | | | NTU | | | 12/16/21 11:13 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G47S

**Date Collected: 12/16/21 13:10**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-20

**Matrix: GW**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| **Arsenic** | **0.039** | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 20:24 | 1 |
| **Barium** | **0.014** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| **Boron** | **6.7** | | 1.0 | | mg/L | | 12/29/21 10:14 | 12/30/21 13:49 | 20 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| **Calcium** | **11** | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| **Lithium** | **0.046** | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| **Molybdenum** | **0.54** | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| **Selenium** | **0.0031** | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 15:41 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/17/21 10:05 | 12/20/21 08:46 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **900** | | 10 | | mg/L | | | 12/22/21 17:02 | 1 |
| **Chloride** | **98** | | 6.0 | | mg/L | | | 12/28/21 15:57 | 3 |
| **Fluoride** | **0.65** | | 0.10 | | mg/L | | | 12/28/21 10:41 | 1 |
| **Sulfate** | **440** | | 50 | | mg/L | | | 12/28/21 16:40 | 10 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Depth to water from land surface** | **93.48** | | | | ft | | | 12/16/21 13:10 | 1 |
| **Depth to Water (ft from MP)** | **95.98** | | | | ft | | | 12/16/21 13:10 | 1 |
| **Elevation of well (ft from MP)** | **612.04** | | | | ft | | | 12/16/21 13:10 | 1 |
| **Field pH** | **8.63** | | | | SU | | | 12/16/21 13:10 | 1 |
| **Field Temperature** | **52.0** | | | | Degrees F | | | 12/16/21 13:10 | 1 |
| **Ground Water Elevation** | **516.06** | | | | ft | | | 12/16/21 13:10 | 1 |
| **Specific Conductance** | **1334** | | | | umhos/cm | | | 12/16/21 13:10 | 1 |
| **Well bottom elevation** | **459.84** | | | | ft | | | 12/16/21 13:10 | 1 |
| **Field Turbidity** | **0.59** | | | | NTU | | | 12/16/21 13:10 | 1 |

# Definitions/Glossary

Client: KPRG and Associates, Inc. Job ID: 500-209450-1
Project/Site: Joliet #9 (Quarry) CCR 4Q21

## Qualifiers

### Metals

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

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
| F1 | MS and/or MSD recovery exceeds control limits. |
| F3 | Duplicate RPD exceeds the control 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 |

## Metals

### Prep Batch: 633682

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total/NA | Water | 7470A | |
| 500-209450-2 | T06S | Total/NA | Water | 7470A | |
| 500-209450-3 | T02S | Total/NA | Water | 7470A | |
| 500-209450-4 | T08S | Total/NA | Water | 7470A | |
| 500-209450-5 | T03S | Total/NA | Water | 7470A | |
| 500-209450-6 | T05S | Total/NA | Water | 7470A | |
| 500-209450-7 | G20S | Total/NA | Water | 7470A | |
| 500-209450-8 | T01S | Total/NA | Water | 7470A | |
| 500-209450-9 | G33S | Total/NA | Water | 7470A | |
| 500-209450-10 | G31S | Total/NA | Water | 7470A | |
| MB 500-633682/12-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 500-633682/13-A | Lab Control Sample | Total/NA | Water | 7470A | |
| 500-209450-8 MS | T01S | Total/NA | Water | 7470A | |
| 500-209450-8 MSD | T01S | Total/NA | Water | 7470A | |
| 500-209450-8 DU | T01S | Total/NA | Water | 7470A | |

### Prep Batch: 633818

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-11 | R08S | Total/NA | Water | 7470A | |
| MB 500-633818/12-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 500-633818/13-A | Lab Control Sample | Total/NA | Water | 7470A | |

### Analysis Batch: 633847

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total/NA | Water | 7470A | 633682 |
| 500-209450-2 | T06S | Total/NA | Water | 7470A | 633682 |
| 500-209450-3 | T02S | Total/NA | Water | 7470A | 633682 |
| 500-209450-4 | T08S | Total/NA | Water | 7470A | 633682 |
| 500-209450-5 | T03S | Total/NA | Water | 7470A | 633682 |
| 500-209450-6 | T05S | Total/NA | Water | 7470A | 633682 |
| 500-209450-7 | G20S | Total/NA | Water | 7470A | 633682 |
| 500-209450-8 | T01S | Total/NA | Water | 7470A | 633682 |
| 500-209450-9 | G33S | Total/NA | Water | 7470A | 633682 |
| 500-209450-10 | G31S | Total/NA | Water | 7470A | 633682 |
| MB 500-633682/12-A | Method Blank | Total/NA | Water | 7470A | 633682 |
| LCS 500-633682/13-A | Lab Control Sample | Total/NA | Water | 7470A | 633682 |
| 500-209450-8 MS | T01S | Total/NA | Water | 7470A | 633682 |
| 500-209450-8 MSD | T01S | Total/NA | Water | 7470A | 633682 |
| 500-209450-8 DU | T01S | Total/NA | Water | 7470A | 633682 |

### Prep Batch: 634059

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-12 | G30S | Total/NA | Water | 7470A | |
| 500-209450-13 | R32S | Total/NA | Water | 7470A | |
| 500-209450-14 | DUP | Total/NA | Water | 7470A | |
| 500-209450-15 | G46S | Total/NA | Water | 7470A | |
| MB 500-634059/12-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 500-634059/13-A | Lab Control Sample | Total/NA | Water | 7470A | |

## Metals

### Analysis Batch: 634083

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-11 | R08S | Total/NA | Water | 7470A | 633818 |
| MB 500-633818/12-A | Method Blank | Total/NA | Water | 7470A | 633818 |
| LCS 500-633818/13-A | Lab Control Sample | Total/NA | Water | 7470A | 633818 |

### Prep Batch: 634255

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-17 | G44S | Total/NA | GW | 7470A | |
| 500-209450-18 | G45S | Total/NA | GW | 7470A | |
| 500-209450-19 | G48S | Total/NA | GW | 7470A | |
| 500-209450-20 | G47S | Total/NA | GW | 7470A | |
| MB 500-634255/12-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 500-634255/13-A | Lab Control Sample | Total/NA | Water | 7470A | |

### Analysis Batch: 634283

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-12 | G30S | Total/NA | Water | 7470A | 634059 |
| 500-209450-13 | R32S | Total/NA | Water | 7470A | 634059 |
| 500-209450-14 | DUP | Total/NA | Water | 7470A | 634059 |
| 500-209450-15 | G46S | Total/NA | Water | 7470A | 634059 |
| MB 500-634059/12-A | Method Blank | Total/NA | Water | 7470A | 634059 |
| LCS 500-634059/13-A | Lab Control Sample | Total/NA | Water | 7470A | 634059 |

### Analysis Batch: 634589

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-17 | G44S | Total/NA | GW | 7470A | 634255 |
| 500-209450-18 | G45S | Total/NA | GW | 7470A | 634255 |
| 500-209450-19 | G48S | Total/NA | GW | 7470A | 634255 |
| 500-209450-20 | G47S | Total/NA | GW | 7470A | 634255 |
| MB 500-634255/12-A | Method Blank | Total/NA | Water | 7470A | 634255 |
| LCS 500-634255/13-A | Lab Control Sample | Total/NA | Water | 7470A | 634255 |

### Prep Batch: 635936

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total Recoverable | Water | 3005A | |
| 500-209450-2 | T06S | Total Recoverable | Water | 3005A | |
| 500-209450-3 | T02S | Total Recoverable | Water | 3005A | |
| 500-209450-4 | T08S | Total Recoverable | Water | 3005A | |
| 500-209450-5 | T03S | Total Recoverable | Water | 3005A | |
| 500-209450-6 | T05S | Total Recoverable | Water | 3005A | |
| 500-209450-7 | G20S | Total Recoverable | Water | 3005A | |
| 500-209450-8 | T01S | Total Recoverable | Water | 3005A | |
| 500-209450-9 | G33S | Total Recoverable | Water | 3005A | |
| 500-209450-10 | G31S | Total Recoverable | Water | 3005A | |
| 500-209450-11 | R08S | Total Recoverable | Water | 3005A | |
| 500-209450-12 | G30S | Total Recoverable | Water | 3005A | |
| 500-209450-13 | R32S | Total Recoverable | Water | 3005A | |
| 500-209450-14 | DUP | Total Recoverable | Water | 3005A | |
| 500-209450-15 | G46S | Total Recoverable | Water | 3005A | |
| 500-209450-17 | G44S | Total Recoverable | GW | 3005A | |
| 500-209450-18 | G45S | Total Recoverable | GW | 3005A | |
| 500-209450-19 | G48S | Total Recoverable | GW | 3005A | |

## Metals (Continued)

### Prep Batch: 635936 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-20 | G47S | Total Recoverable | GW | 3005A | |
| MB 500-635936/1-A | Method Blank | Total Recoverable | Water | 3005A | |
| LCS 500-635936/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |
| 500-209450-1 MS | T09S | Total Recoverable | Water | 3005A | |
| 500-209450-1 MSD | T09S | Total Recoverable | Water | 3005A | |
| 500-209450-1 DU | T09S | Total Recoverable | Water | 3005A | |

### Analysis Batch: 636088

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-2 | T06S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-3 | T02S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-4 | T08S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-5 | T03S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-6 | T05S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-7 | G20S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-8 | T01S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-9 | G33S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-10 | G31S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-11 | R08S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-12 | G30S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-13 | R32S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-14 | DUP | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-15 | G46S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-17 | G44S | Total Recoverable | GW | 6020A | 635936 |
| 500-209450-18 | G45S | Total Recoverable | GW | 6020A | 635936 |
| 500-209450-19 | G48S | Total Recoverable | GW | 6020A | 635936 |
| 500-209450-20 | G47S | Total Recoverable | GW | 6020A | 635936 |
| MB 500-635936/1-A | Method Blank | Total Recoverable | Water | 6020A | 635936 |
| LCS 500-635936/2-A | Lab Control Sample | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-1 MS | T09S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-1 MSD | T09S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-1 DU | T09S | Total Recoverable | Water | 6020A | 635936 |

### Analysis Batch: 636170

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-1 | T09S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-2 | T06S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-2 | T06S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-3 | T02S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-3 | T02S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-4 | T08S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-4 | T08S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-5 | T03S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-5 | T03S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-6 | T05S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-6 | T05S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-7 | G20S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-7 | G20S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-8 | T01S | Total Recoverable | Water | 6020A | 635936 |

## Metals (Continued)

### Analysis Batch: 636170 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-8 | T01S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-9 | G33S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-9 | G33S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-10 | G31S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-10 | G31S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-11 | R08S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-11 | R08S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-12 | G30S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-12 | G30S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-13 | R32S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-13 | R32S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-14 | DUP | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-14 | DUP | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-15 | G46S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-15 | G46S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-17 | G44S | Total Recoverable | GW | 6020A | 635936 |
| 500-209450-17 | G44S | Total Recoverable | GW | 6020A | 635936 |
| 500-209450-18 | G45S | Total Recoverable | GW | 6020A | 635936 |
| 500-209450-19 | G48S | Total Recoverable | GW | 6020A | 635936 |
| 500-209450-19 | G48S | Total Recoverable | GW | 6020A | 635936 |
| 500-209450-20 | G47S | Total Recoverable | GW | 6020A | 635936 |
| 500-209450-20 | G47S | Total Recoverable | GW | 6020A | 635936 |
| MB 500-635936/1-A | Method Blank | Total Recoverable | Water | 6020A | 635936 |
| LCS 500-635936/2-A | Lab Control Sample | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-1 MS | T09S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-1 MS | T09S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-1 MSD | T09S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-1 MSD | T09S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-1 DU | T09S | Total Recoverable | Water | 6020A | 635936 |
| 500-209450-1 DU | T09S | Total Recoverable | Water | 6020A | 635936 |

## General Chemistry

### Analysis Batch: 632819

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total/NA | Water | SM 2540C | |
| 500-209450-2 | T06S | Total/NA | Water | SM 2540C | |
| MB 500-632819/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 500-632819/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |

### Analysis Batch: 633483

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-2 | T06S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-3 | T02S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-4 | T08S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-5 | T03S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-6 | T05S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-7 | G20S | Total/NA | Water | SM 4500 Cl- E | |
| MB 500-633483/63 | Method Blank | Total/NA | Water | SM 4500 Cl- E | |
| LCS 500-633483/64 | Lab Control Sample | Total/NA | Water | SM 4500 Cl- E | |

## General Chemistry (Continued)

### Analysis Batch: 633483 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-5 MS | T03S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-5 MSD | T03S | Total/NA | Water | SM 4500 Cl- E | |

### Analysis Batch: 633484

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-2 | T06S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-3 | T02S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-4 | T08S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-5 | T03S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-6 | T05S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-7 | G20S | Total/NA | Water | SM 4500 SO4 E | |
| MB 500-633484/41 | Method Blank | Total/NA | Water | SM 4500 SO4 E | |
| LCS 500-633484/42 | Lab Control Sample | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-5 MS | T03S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-5 MSD | T03S | Total/NA | Water | SM 4500 SO4 E | |

### Analysis Batch: 633495

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-3 | T02S | Total/NA | Water | SM 2540C | |
| 500-209450-4 | T08S | Total/NA | Water | SM 2540C | |
| 500-209450-5 | T03S | Total/NA | Water | SM 2540C | |
| 500-209450-6 | T05S | Total/NA | Water | SM 2540C | |
| 500-209450-7 | G20S | Total/NA | Water | SM 2540C | |
| 500-209450-8 | T01S | Total/NA | Water | SM 2540C | |
| 500-209450-9 | G33S | Total/NA | Water | SM 2540C | |
| 500-209450-10 | G31S | Total/NA | Water | SM 2540C | |
| MB 500-633495/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 500-633495/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| 500-209450-3 MS | T02S | Total/NA | Water | SM 2540C | |
| 500-209450-3 DU | T02S | Total/NA | Water | SM 2540C | |
| 500-209450-4 DU | T08S | Total/NA | Water | SM 2540C | |

### Analysis Batch: 634708

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total/NA | Water | SM 4500 F C | |
| 500-209450-2 | T06S | Total/NA | Water | SM 4500 F C | |
| 500-209450-3 | T02S | Total/NA | Water | SM 4500 F C | |
| 500-209450-4 | T08S | Total/NA | Water | SM 4500 F C | |
| 500-209450-5 | T03S | Total/NA | Water | SM 4500 F C | |
| 500-209450-6 | T05S | Total/NA | Water | SM 4500 F C | |
| 500-209450-7 | G20S | Total/NA | Water | SM 4500 F C | |
| 500-209450-8 | T01S | Total/NA | Water | SM 4500 F C | |
| 500-209450-9 | G33S | Total/NA | Water | SM 4500 F C | |
| 500-209450-10 | G31S | Total/NA | Water | SM 4500 F C | |
| 500-209450-11 | R08S | Total/NA | Water | SM 4500 F C | |
| 500-209450-12 | G30S | Total/NA | Water | SM 4500 F C | |
| 500-209450-13 | R32S | Total/NA | Water | SM 4500 F C | |
| 500-209450-14 | DUP | Total/NA | Water | SM 4500 F C | |
| 500-209450-15 | G46S | Total/NA | Water | SM 4500 F C | |
| 500-209450-17 | G44S | Total/NA | GW | SM 4500 F C | |

## General Chemistry (Continued)

### Analysis Batch: 634708 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-18 | G45S | Total/NA | GW | SM 4500 F C | |
| MB 500-634708/3 | Method Blank | Total/NA | Water | SM 4500 F C | |
| MB 500-634708/31 | Method Blank | Total/NA | Water | SM 4500 F C | |
| LCS 500-634708/32 | Lab Control Sample | Total/NA | Water | SM 4500 F C | |
| LCS 500-634708/4 | Lab Control Sample | Total/NA | Water | SM 4500 F C | |
| 500-209450-4 MS | T08S | Total/NA | Water | SM 4500 F C | |
| 500-209450-4 MSD | T08S | Total/NA | Water | SM 4500 F C | |

### Analysis Batch: 634880

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-11 | R08S | Total/NA | Water | SM 2540C | |
| MB 500-634880/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 500-634880/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |

### Analysis Batch: 635089

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-12 | G30S | Total/NA | Water | SM 2540C | |
| 500-209450-13 | R32S | Total/NA | Water | SM 2540C | |
| 500-209450-14 | DUP | Total/NA | Water | SM 2540C | |
| 500-209450-15 | G46S | Total/NA | Water | SM 2540C | |
| MB 500-635089/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 500-635089/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| 500-209450-12 MS | G30S | Total/NA | Water | SM 2540C | |
| 500-209450-12 DU | G30S | Total/NA | Water | SM 2540C | |
| 500-209450-14 DU | DUP | Total/NA | Water | SM 2540C | |

### Analysis Batch: 635119

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-17 | G44S | Total/NA | GW | SM 2540C | |
| 500-209450-18 | G45S | Total/NA | GW | SM 2540C | |
| 500-209450-19 | G48S | Total/NA | GW | SM 2540C | |
| 500-209450-20 | G47S | Total/NA | GW | SM 2540C | |
| MB 500-635119/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 500-635119/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| 500-209450-17 MS | G44S | Total/NA | GW | SM 2540C | |
| 500-209450-17 DU | G44S | Total/NA | GW | SM 2540C | |
| 500-209450-20 DU | G47S | Total/NA | GW | SM 2540C | |

### Analysis Batch: 635765

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-19 | G48S | Total/NA | GW | SM 4500 F C | |
| 500-209450-20 | G47S | Total/NA | GW | SM 4500 F C | |
| MB 500-635765/3 | Method Blank | Total/NA | Water | SM 4500 F C | |
| LCS 500-635765/4 | Lab Control Sample | Total/NA | Water | SM 4500 F C | |
| 500-209450-19 MS | G48S | Total/NA | GW | SM 4500 F C | |
| 500-209450-19 MSD | G48S | Total/NA | GW | SM 4500 F C | |

### Analysis Batch: 635832

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-8 | T01S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-9 | G33S | Total/NA | Water | SM 4500 Cl- E | |

## General Chemistry (Continued)

### Analysis Batch: 635832 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-10 | G31S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-11 | R08S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-12 | G30S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-13 | R32S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-14 | DUP | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-15 | G46S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-17 | G44S | Total/NA | GW | SM 4500 Cl- E | |
| 500-209450-18 | G45S | Total/NA | GW | SM 4500 Cl- E | |
| 500-209450-19 | G48S | Total/NA | GW | SM 4500 Cl- E | |
| 500-209450-20 | G47S | Total/NA | GW | SM 4500 Cl- E | |
| MB 500-635832/82 | Method Blank | Total/NA | Water | SM 4500 Cl- E | |
| LCS 500-635832/83 | Lab Control Sample | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-10 MS | G31S | Total/NA | Water | SM 4500 Cl- E | |
| 500-209450-10 MSD | G31S | Total/NA | Water | SM 4500 Cl- E | |

### Analysis Batch: 635833

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-8 | T01S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-9 | G33S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-10 | G31S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-11 | R08S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-12 | G30S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-13 | R32S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-14 | DUP | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-15 | G46S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-17 | G44S | Total/NA | GW | SM 4500 SO4 E | |
| 500-209450-18 | G45S | Total/NA | GW | SM 4500 SO4 E | |
| 500-209450-19 | G48S | Total/NA | GW | SM 4500 SO4 E | |
| 500-209450-20 | G47S | Total/NA | GW | SM 4500 SO4 E | |
| MB 500-635833/15 | Method Blank | Total/NA | Water | SM 4500 SO4 E | |
| LCS 500-635833/16 | Lab Control Sample | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-10 MS | G31S | Total/NA | Water | SM 4500 SO4 E | |
| 500-209450-10 MSD | G31S | Total/NA | Water | SM 4500 SO4 E | |

## Field Service / Mobile Lab

### Analysis Batch: 632892

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total/NA | Water | Field Sampling | |
| 500-209450-2 | T06S | Total/NA | Water | Field Sampling | |
| 500-209450-3 | T02S | Total/NA | Water | Field Sampling | |
| 500-209450-4 | T08S | Total/NA | Water | Field Sampling | |
| 500-209450-5 | T03S | Total/NA | Water | Field Sampling | |
| 500-209450-6 | T05S | Total/NA | Water | Field Sampling | |
| 500-209450-7 | G20S | Total/NA | Water | Field Sampling | |
| 500-209450-8 | T01S | Total/NA | Water | Field Sampling | |
| 500-209450-9 | G33S | Total/NA | Water | Field Sampling | |
| 500-209450-10 | G31S | Total/NA | Water | Field Sampling | |
| 500-209450-11 | R08S | Total/NA | Water | Field Sampling | |
| 500-209450-12 | G30S | Total/NA | Water | Field Sampling | |
| 500-209450-13 | R32S | Total/NA | Water | Field Sampling | |

## Field Service / Mobile Lab (Continued)

### Analysis Batch: 632892 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-14 | DUP | Total/NA | Water | Field Sampling | |
| 500-209450-15 | G46S | Total/NA | Water | Field Sampling | |
| 500-209450-16 | T04S | Total/NA | Water | Field Sampling | |
| 500-209450-17 | G44S | Total/NA | GW | Field Sampling | |
| 500-209450-18 | G45S | Total/NA | GW | Field Sampling | |
| 500-209450-19 | G48S | Total/NA | GW | Field Sampling | |
| 500-209450-20 | G47S | Total/NA | GW | Field Sampling | |

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

**Lab Sample ID: MB 500-635936/1-A**
**Matrix: Water**
**Analysis Batch: 636088**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/29/21 18:49 | 1 |

**Lab Sample ID: MB 500-635936/1-A**
**Matrix: Water**
**Analysis Batch: 636170**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Barium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Boron | <0.050 | | 0.050 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Calcium | <0.20 | | 0.20 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Lithium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Molybdenum | <0.0050 | | 0.0050 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/29/21 10:14 | 12/30/21 12:12 | 1 |

**Lab Sample ID: LCS 500-635936/2-A**
**Matrix: Water**
**Analysis Batch: 636088**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Arsenic | 0.100 | 0.0998 | | mg/L | | 100 | 80 - 120 |

**Lab Sample ID: LCS 500-635936/2-A**
**Matrix: Water**
**Analysis Batch: 636170**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Antimony | 0.500 | 0.521 | | mg/L | | 104 | 80 - 120 |
| Barium | 0.500 | 0.534 | | mg/L | | 107 | 80 - 120 |
| Beryllium | 0.0500 | 0.0531 | | mg/L | | 106 | 80 - 120 |
| Boron | 1.00 | 1.05 | | mg/L | | 105 | 80 - 120 |
| Cadmium | 0.0500 | 0.0516 | | mg/L | | 103 | 80 - 120 |
| Calcium | 10.0 | 10.4 | | mg/L | | 104 | 80 - 120 |
| Chromium | 0.200 | 0.217 | | mg/L | | 108 | 80 - 120 |
| Cobalt | 0.500 | 0.532 | | mg/L | | 106 | 80 - 120 |
| Lead | 0.100 | 0.106 | | mg/L | | 106 | 80 - 120 |
| Lithium | 0.100 | 0.106 | | mg/L | | 106 | 80 - 120 |
| Molybdenum | 1.00 | 1.01 | | mg/L | | 101 | 80 - 120 |
| Selenium | 0.100 | 0.105 | | mg/L | | 105 | 80 - 120 |
| Thallium | 0.100 | 0.108 | | mg/L | | 108 | 80 - 120 |

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

**Lab Sample ID: 500-209450-1 MS**
**Matrix: Water**
**Analysis Batch: 636088**

**Client Sample ID: T09S**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0035 | | 0.100 | 0.107 | | mg/L | | 103 | 75 - 125 |

**Lab Sample ID: 500-209450-1 MS**
**Matrix: Water**
**Analysis Batch: 636170**

**Client Sample ID: T09S**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Boron | 9.0 | | 1.00 | 10.9 | 4 | mg/L | | 186 | 75 - 125 |

**Lab Sample ID: 500-209450-1 MS**
**Matrix: Water**
**Analysis Batch: 636170**

**Client Sample ID: T09S**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.500 | 0.534 | | mg/L | | 107 | 75 - 125 |
| Barium | 0.067 | | 0.500 | 0.582 | | mg/L | | 103 | 75 - 125 |
| Beryllium | <0.0010 | | 0.0500 | 0.0489 | | mg/L | | 98 | 75 - 125 |
| Cadmium | <0.00050 | | 0.0500 | 0.0505 | | mg/L | | 101 | 75 - 125 |
| Calcium | 130 | | 10.0 | 139 | 4 | mg/L | | 45 | 75 - 125 |
| Chromium | <0.0050 | | 0.200 | 0.203 | | mg/L | | 101 | 75 - 125 |
| Cobalt | 0.0011 | | 0.500 | 0.497 | | mg/L | | 99 | 75 - 125 |
| Lead | 0.00084 | | 0.100 | 0.106 | | mg/L | | 105 | 75 - 125 |
| Lithium | 0.10 | | 0.100 | 0.203 | | mg/L | | 99 | 75 - 125 |
| Molybdenum | 1.3 | | 1.00 | 2.29 | | mg/L | | 99 | 75 - 125 |
| Selenium | <0.0025 | | 0.100 | 0.108 | | mg/L | | 108 | 75 - 125 |
| Thallium | <0.0020 | | 0.100 | 0.107 | | mg/L | | 107 | 75 - 125 |

**Lab Sample ID: 500-209450-1 MSD**
**Matrix: Water**
**Analysis Batch: 636088**

**Client Sample ID: T09S**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0035 | | 0.100 | 0.110 | | mg/L | | 107 | 75 - 125 | 3 | 20 |

**Lab Sample ID: 500-209450-1 MSD**
**Matrix: Water**
**Analysis Batch: 636170**

**Client Sample ID: T09S**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Boron | 9.0 | | 1.00 | 9.97 | 4 | mg/L | | 93 | 75 - 125 | 9 | 20 |

**Lab Sample ID: 500-209450-1 MSD**
**Matrix: Water**
**Analysis Batch: 636170**

**Client Sample ID: T09S**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.500 | 0.529 | | mg/L | | 106 | 75 - 125 | 1 | 20 |
| Barium | 0.067 | | 0.500 | 0.586 | | mg/L | | 104 | 75 - 125 | 1 | 20 |
| Beryllium | <0.0010 | | 0.0500 | 0.0474 | | mg/L | | 95 | 75 - 125 | 3 | 20 |
| Cadmium | <0.00050 | | 0.0500 | 0.0503 | | mg/L | | 101 | 75 - 125 | 1 | 20 |

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

**Lab Sample ID: 500-209450-1 MSD**
**Matrix: Water**
**Analysis Batch: 636170**

**Client Sample ID: T09S**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Calcium | 130 | | 10.0 | 142 | 4 | mg/L | | 73 | 75 - 125 | 2 | 20 |
| Chromium | <0.0050 | | 0.200 | 0.206 | | mg/L | | 103 | 75 - 125 | 1 | 20 |
| Cobalt | 0.0011 | | 0.500 | 0.508 | | mg/L | | 101 | 75 - 125 | 2 | 20 |
| Lead | 0.00084 | | 0.100 | 0.108 | | mg/L | | 107 | 75 - 125 | 2 | 20 |
| Lithium | 0.10 | | 0.100 | 0.208 | | mg/L | | 104 | 75 - 125 | 3 | 20 |
| Molybdenum | 1.3 | | 1.00 | 2.28 | | mg/L | | 97 | 75 - 125 | 1 | 20 |
| Selenium | <0.0025 | | 0.100 | 0.105 | | mg/L | | 105 | 75 - 125 | 2 | 20 |
| Thallium | <0.0020 | | 0.100 | 0.108 | | mg/L | | 108 | 75 - 125 | 1 | 20 |

**Lab Sample ID: 500-209450-1 DU**
**Matrix: Water**
**Analysis Batch: 636088**

**Client Sample ID: T09S**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0035 | | 0.00342 | | mg/L | | 3 | 20 |

**Lab Sample ID: 500-209450-1 DU**
**Matrix: Water**
**Analysis Batch: 636170**

**Client Sample ID: T09S**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Boron | 9.0 | | 8.89 | | mg/L | | 2 | 20 |

**Lab Sample ID: 500-209450-1 DU**
**Matrix: Water**
**Analysis Batch: 636170**

**Client Sample ID: T09S**
**Prep Type: Total Recoverable**
**Prep Batch: 635936**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | <0.0030 | | mg/L | | NC | 20 |
| Barium | 0.067 | | 0.0685 | | mg/L | | 2 | 20 |
| Beryllium | <0.0010 | | <0.0010 | | mg/L | | NC | 20 |
| Cadmium | <0.00050 | | <0.00050 | | mg/L | | NC | 20 |
| Calcium | 130 | | 134 | | mg/L | | 0.2 | 20 |
| Chromium | <0.0050 | | <0.0050 | | mg/L | | NC | 20 |
| Cobalt | 0.0011 | | 0.00101 | | mg/L | | 9 | 20 |
| Lead | 0.00084 | | 0.000783 | | mg/L | | 7 | 20 |
| Lithium | 0.10 | | 0.107 | | mg/L | | 3 | 20 |
| Molybdenum | 1.3 | | 1.29 | | mg/L | | 2 | 20 |
| Selenium | <0.0025 | | <0.0025 | | mg/L | | NC | 20 |
| Thallium | <0.0020 | | <0.0020 | | mg/L | | NC | 20 |

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-633682/12-A**
**Matrix: Water**
**Analysis Batch: 633847**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 633682**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/14/21 14:20 | 12/15/21 08:45 | 1 |

## Method: 7470A - Mercury (CVAA) (Continued)

**Lab Sample ID: LCS 500-633682/13-A**
**Matrix: Water**
**Analysis Batch: 633847**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 633682**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 0.00200 | 0.00210 | | mg/L | | 105 | 80 - 120 | | |

**Lab Sample ID: 500-209450-8 MS**
**Matrix: Water**
**Analysis Batch: 633847**

**Client Sample ID: T01S**
**Prep Type: Total/NA**
**Prep Batch: 633682**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00100 | 0.00101 | | mg/L | | 101 | 75 - 125 | | |

**Lab Sample ID: 500-209450-8 MSD**
**Matrix: Water**
**Analysis Batch: 633847**

**Client Sample ID: T01S**
**Prep Type: Total/NA**
**Prep Batch: 633682**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00100 | 0.000965 | | mg/L | | 97 | 75 - 125 | 4 | 20 |

**Lab Sample ID: 500-209450-8 DU**
**Matrix: Water**
**Analysis Batch: 633847**

**Client Sample ID: T01S**
**Prep Type: Total/NA**
**Prep Batch: 633682**

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

**Lab Sample ID: MB 500-633818/12-A**
**Matrix: Water**
**Analysis Batch: 634083**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 633818**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/15/21 10:20 | 12/16/21 08:44 | 1 |

**Lab Sample ID: LCS 500-633818/13-A**
**Matrix: Water**
**Analysis Batch: 634083**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 633818**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 0.00200 | 0.00204 | | mg/L | | 102 | 80 - 120 | | |

**Lab Sample ID: MB 500-634059/12-A**
**Matrix: Water**
**Analysis Batch: 634283**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 634059**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/16/21 10:45 | 12/17/21 08:38 | 1 |

**Lab Sample ID: LCS 500-634059/13-A**
**Matrix: Water**
**Analysis Batch: 634283**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 634059**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 0.00200 | 0.00201 | | mg/L | | 101 | 80 - 120 | | |

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-634255/12-A**
**Matrix: Water**
**Analysis Batch: 634589**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 634255**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 12/17/21 10:05 | 12/20/21 08:31 | 1 |

**Lab Sample ID: LCS 500-634255/13-A**
**Matrix: Water**
**Analysis Batch: 634589**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 634255**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 0.00200 | 0.00197 | | mg/L | | 98 | 80 - 120 |

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

**Lab Sample ID: MB 500-632819/1**
**Matrix: Water**
**Analysis Batch: 632819**

**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 | | | 12/09/21 06:39 | 1 |

**Lab Sample ID: LCS 500-632819/2**
**Matrix: Water**
**Analysis Batch: 632819**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 250 | 272 | | mg/L | | 109 | 80 - 120 |

**Lab Sample ID: MB 500-633495/1**
**Matrix: Water**
**Analysis Batch: 633495**

**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 | | | 12/14/21 04:35 | 1 |

**Lab Sample ID: LCS 500-633495/2**
**Matrix: Water**
**Analysis Batch: 633495**

**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 |

**Lab Sample ID: 500-209450-3 MS**
**Matrix: Water**
**Analysis Batch: 633495**

**Client Sample ID: T02S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 890 | F1 | 250 | 1230 | F1 | mg/L | | 136 | 75 - 125 |

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

**Lab Sample ID: 500-209450-3 DU**
**Matrix: Water**
**Analysis Batch: 633495**

**Client Sample ID: T02S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 890 | F1 | | 878 | | mg/L | | | | 1 | 5 |

**Lab Sample ID: 500-209450-4 DU**
**Matrix: Water**
**Analysis Batch: 633495**

**Client Sample ID: T08S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 1100 | | | 1020 | | mg/L | | | | 4 | 5 |

**Lab Sample ID: MB 500-634880/1**
**Matrix: Water**
**Analysis Batch: 634880**

**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 | | | 12/21/21 17:10 | 1 |

**Lab Sample ID: LCS 500-634880/2**
**Matrix: Water**
**Analysis Batch: 634880**

**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: MB 500-635089/1**
**Matrix: Water**
**Analysis Batch: 635089**

**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 | | | 12/22/21 15:25 | 1 |

**Lab Sample ID: LCS 500-635089/2**
**Matrix: Water**
**Analysis Batch: 635089**

**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 | 200 | | mg/L | | 80 | 80 - 120 | | |

**Lab Sample ID: 500-209450-12 MS**
**Matrix: Water**
**Analysis Batch: 635089**

**Client Sample ID: G30S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 1200 | | 250 | 1460 | 4 | mg/L | | 121 | 75 - 125 | | |

**Lab Sample ID: 500-209450-12 DU**
**Matrix: Water**
**Analysis Batch: 635089**

**Client Sample ID: G30S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 1200 | | | 1200 | | mg/L | | | | 4 | 5 |

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

**Lab Sample ID: 500-209450-14 DU**
**Matrix: Water**
**Analysis Batch: 635089**

**Client Sample ID: DUP**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 1200 | | | 974 | F3 | mg/L | | | | 18 | 5 |

**Lab Sample ID: MB 500-635119/1**
**Matrix: Water**
**Analysis Batch: 635119**

**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 | | | 12/22/21 16:45 | 1 |

**Lab Sample ID: LCS 500-635119/2**
**Matrix: Water**
**Analysis Batch: 635119**

**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 | 280 | | mg/L | | 112 | 80 - 120 | | |

**Lab Sample ID: 500-209450-17 MS**
**Matrix: GW**
**Analysis Batch: 635119**

**Client Sample ID: G44S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 690 | | 250 | 946 | | mg/L | | 102 | 75 - 125 | | |

**Lab Sample ID: 500-209450-17 DU**
**Matrix: GW**
**Analysis Batch: 635119**

**Client Sample ID: G44S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 690 | | | 674 | | mg/L | | | | 3 | 5 |

**Lab Sample ID: 500-209450-20 DU**
**Matrix: GW**
**Analysis Batch: 635119**

**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 | 900 | | | 934 | | mg/L | | | | 4 | 5 |

## Method: SM 4500 Cl- E - Chloride, Total

**Lab Sample ID: MB 500-633483/63**
**Matrix: Water**
**Analysis Batch: 633483**

**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 | | | 12/13/21 16:30 | 1 |

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

**Lab Sample ID: LCS 500-633483/64**
**Matrix: Water**
**Analysis Batch: 633483**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 20.0 | 20.8 | | mg/L | | 104 | 85 - 115 | | |

**Lab Sample ID: 500-209450-5 MS**
**Matrix: Water**
**Analysis Batch: 633483**

**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 | 110 | | 20.0 | 123 | 4 | mg/L | | 82 | 75 - 125 | | |

**Lab Sample ID: 500-209450-5 MSD**
**Matrix: Water**
**Analysis Batch: 633483**

**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 | 110 | | 20.0 | 121 | 4 | mg/L | | 74 | 75 - 125 | 1 | 20 |

**Lab Sample ID: MB 500-635832/82**
**Matrix: Water**
**Analysis Batch: 635832**

**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 | | | 12/28/21 15:52 | 1 |

**Lab Sample ID: LCS 500-635832/83**
**Matrix: Water**
**Analysis Batch: 635832**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 20.0 | 20.3 | | mg/L | | 101 | 85 - 115 | | |

**Lab Sample ID: 500-209450-10 MS**
**Matrix: Water**
**Analysis Batch: 635832**

**Client Sample ID: G31S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 160 | | 20.0 | 174 | 4 | mg/L | | 67 | 75 - 125 | | |

**Lab Sample ID: 500-209450-10 MSD**
**Matrix: Water**
**Analysis Batch: 635832**

**Client Sample ID: G31S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 160 | | 20.0 | 174 | 4 | mg/L | | 65 | 75 - 125 | 0 | 20 |

## Method: SM 4500 F C - Fluoride

**Lab Sample ID: MB 500-634708/3**
**Matrix: Water**
**Analysis Batch: 634708**

**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 | | | 12/20/21 16:19 | 1 |

**Lab Sample ID: MB 500-634708/31**
**Matrix: Water**
**Analysis Batch: 634708**

**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 | | | 12/20/21 18:01 | 1 |

**Lab Sample ID: LCS 500-634708/32**
**Matrix: Water**
**Analysis Batch: 634708**

**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 | 11.1 | | mg/L | | 111 | 90 - 119 | | |

**Lab Sample ID: LCS 500-634708/4**
**Matrix: Water**
**Analysis Batch: 634708**

**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 | 10.9 | | mg/L | | 109 | 90 - 119 | | |

**Lab Sample ID: 500-209450-4 MS**
**Matrix: Water**
**Analysis Batch: 634708**

**Client Sample ID: T08S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | <0.10 | | 5.00 | 6.10 | | mg/L | | 122 | 75 - 125 | | |

**Lab Sample ID: 500-209450-4 MSD**
**Matrix: Water**
**Analysis Batch: 634708**

**Client Sample ID: T08S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | <0.10 | | 5.00 | 6.10 | | mg/L | | 122 | 75 - 125 | 0 | 20 |

**Lab Sample ID: MB 500-635765/3**
**Matrix: Water**
**Analysis Batch: 635765**

**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 | | | 12/28/21 10:21 | 1 |

**Lab Sample ID: LCS 500-635765/4**
**Matrix: Water**
**Analysis Batch: 635765**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | | | 10.0 | 10.8 | | mg/L | | 108 | 90 - 119 | | |

## Method: SM 4500 F C - Fluoride

**Lab Sample ID: 500-209450-19 MS**
**Matrix: GW**
**Analysis Batch: 635765**

**Client Sample ID: G48S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 0.91 | | 5.00 | 6.29 | | mg/L | | 108 | 75 - 125 | | |

**Lab Sample ID: 500-209450-19 MSD**
**Matrix: GW**
**Analysis Batch: 635765**

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 0.91 | | 5.00 | 6.32 | | mg/L | | 108 | 75 - 125 | 0 | 20 |

## Method: SM 4500 SO4 E - Sulfate, Total

**Lab Sample ID: MB 500-633484/41**
**Matrix: Water**
**Analysis Batch: 633484**

**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 | | | 12/13/21 18:38 | 1 |

**Lab Sample ID: LCS 500-633484/42**
**Matrix: Water**
**Analysis Batch: 633484**

**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 | 20.6 | | mg/L | | 103 | 88 - 123 | | |

**Lab Sample ID: 500-209450-5 MS**
**Matrix: Water**
**Analysis Batch: 633484**

**Client Sample ID: T03S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 280 | F1 | 20.0 | 294 | 4 | mg/L | | 63 | 75 - 125 | | |

**Lab Sample ID: 500-209450-5 MSD**
**Matrix: Water**
**Analysis Batch: 633484**

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 280 | F1 | 20.0 | 299 | 4 | mg/L | | 84 | 75 - 125 | 1 | 20 |

**Lab Sample ID: MB 500-635833/15**
**Matrix: Water**
**Analysis Batch: 635833**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Sulfate | <5.0 | | 5.0 | | mg/L | | | 12/28/21 16:18 | 1 |

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

**Lab Sample ID: LCS 500-635833/16**
**Matrix: Water**
**Analysis Batch: 635833**

**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 | 20.5 | | mg/L | | 103 | 88 - 123 | | |

**Lab Sample ID: 500-209450-10 MS**
**Matrix: Water**
**Analysis Batch: 635833**

**Client Sample ID: G31S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 450 | | 20.0 | 448 | 4 | mg/L | | 8 | 75 - 125 | | |

**Lab Sample ID: 500-209450-10 MSD**
**Matrix: Water**
**Analysis Batch: 635833**

**Client Sample ID: G31S**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 450 | | 20.0 | 446 | 4 | mg/L | | -4 | 75 - 125 | 1 | 20 |

# Chain of Custody Record

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**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: 4R21 GW | ☐ 2 days | | | Job / SDG No: 500-209450 |
| PO # | ☐ 1 day | | | |

500-209450 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | T095 | 12/08/21 | 1128 | | W | 5 | | | / | / | / | / | / | |
| 2 | T065 | 12/08/21 | 1306 | | 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] | TRE | 12/08/21 1429 | | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| Relinquished by | Company | Date/Time | Received in Laboratory by: Paula Buckley | Company: TA CHI | Date/Time: 12/8/21 1429 |

# Chain of Custody Record

555249

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 (Quarry) CCR | ☐ 1 week | | | |
| Site: 4021 GW | ☐ 2 days | | | Job / SDG No |
| P O # | ☐ 1 day | | | 500-209450 |

500-209450 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 TO2S | 12/09/21 | 0939 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 4 TO8S | 12/09/21 | 1148 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 5 TO3S | 12/09/21 | 1342 | | 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 3.2 Corr'd _____ | Therm ID No _____

| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
|---|---|---|---|---|---|
| [signature] | TAL | 12/09/21 1448 | | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| Relinquished by | Company | Date/Time | Received in Laboratory by [signature] | Company EDD | Date/Time 12/9/21 1448 |

# Chain of Custody Record

555250

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 (Quarry) CCR | ☐ 1 week | | | |
| Site 4021 - GW | ☐ 2 days | | | Job / SDG No |
| P O # | ☐ 1 day | | | 500-209450 |

500-209450 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOSS | 12/10/21 | 0955 | | W | 5 | | | / | / | / | / | / | |
| GZOS | 12/10/21 | 1125 | | W | 5 | | | / | / | / | / | / | |
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**Preservation Used:** 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

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

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

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

**Special Instructions/QC Requirements & Comments:**

1.0

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] | TMI | 12/10/21 1407 | | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| Relinquished by | Company | Date/Time | Received in Laboratory by | Company | Date/Time |
| | | | Stephanie Hernandez | ETA-CHI | 12/10/21 1407 |

# Chain of Custody Record

555251

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 (Quarry) CCR | ☐ 1 week | | | |
| Site: 4021 - EQ | ☐ 2 days | | | Job / SDG No |
| P O # | ☐ 1 day | | | 500-209450 |

500-209450 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOIS | 12/13/21 | 1042 | | W | 5 | | | / | / | / | / | / | |
| G33S | 12/13/21 | 1306 | | W | 5 | | | / | / | / | / | / | |
| G31S | 12/13/21 | 1414 | | W | 5 | | | / | / | / | / | / | |
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8 9 10

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

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

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

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

**Special Instructions/QC Requirements & Comments:**

Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd 3.9 Corr'd _____ Therm ID No _____

| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
|---|---|---|---|---|---|
| [signature] | TRC | 12/13/21 1510 | | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| Relinquished by | Company | Date/Time | Received in Laboratory by [signature] | Company ETA | Date/Time 12/13/21 1510 |

# Chain of Custody Record

555252

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 (Quarry) CCR | ☐ 1 week | | | |
| Site: 4021 - GS | ☐ 2 days | | | Job / SDG No |
| P O # | ☐ 1 day | | | 500-209450 |

| 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 ROBS | 12/14/21 | 1305 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ |

500-209450 COC

Sample Specific Notes

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

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

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

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

**Special Instructions/QC Requirements & Comments:**

| Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd: 3.8 | Corr'd _____ | Therm ID No _____ |
|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Relinquished by: | Company: TAL | Date/Time: 12/14/21 1400 | 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: | Date/Time: 12/14/21 1400 |

# Chain of Custody Record

541843

eurofins Environment Testing TestAmerica

Address _____

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

TAL-8210

| Client Contact | Project Manager | Site Contact | Date: |
|---|---|---|---|
| Company Name: Midwest Generation EME LLC | Tel/Email. | Lab Contact | Carrier |
| Address | **Analysis Turnaround Time** | | |
| City/State/Zip: Joliet, IL. | ☐ CALENDAR DAYS ☐ WORKING DAYS | | |
| Phone | TAT if different from Below _____ | | |
| Fax | ☐ 2 weeks | | |
| Project Name: Joliet #9 (Energy) CCR | ☐ 1 week | | |
| Site: 4021 - GW | ☐ 2 days | | |
| P O # | ☐ 1 day | | |

500-209450 COC

| COC No |
|---|
| _____ of _____ COCs |
| Sampler |
| **For Lab Use Only** |
| Walk-in Client |
| Lab Sampling |
| Job / SDG No: 500-209450 |

| | 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | G30S | 12/15/21 | 0903 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 13 | R32S | 12/15/21 | 1044 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 14 | DUP | 12/15/21 | 1044 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | of R32S |
| 15 | G46S | 12/15/21 | 1219 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 16 | T04S | 12/15/21 | 1320 | | — | | | | | | | | | No samples due to property development/excavation |

**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**

30

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 |
|---|---|---|---|---|---|
| | TR2 | 12/15/21 1415 | | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| | | | | | |
| Relinquished by | Company | Date/Time | Received in Laboratory by | Company | Date/Time |
| | | | Stephanie Hernandez | EA-CH1 | 12/15/21 1415 |

# Chain of Custody Record

541854

Environment Testing
TestAmerica

500-209450 COC

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: 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: 4021 - GW | ☐ 2 days | | | Job / SDG No: 500-209450 |
| 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 | Metals 14 elements + Hg | TDS, F, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | G44S | 12/16/21 | 0907 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 18 | G45S | 12/16/21 | 1001 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 19 | G48S | 12/16/21 | 1113 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | | |
| 20 | G47S | 12/16/21 | 1310 | | 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 3.7 Corr'd 3.7 | Therm ID No _____

| | Company | Date/Time | Received by | Company | Date/Time |
|---|---|---|---|---|---|
| Relinquished by: [signature] | TMC | 12/16/21 1426 | Received by: [signature] | CTA | 12/16/21 1426 |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| Relinquished by | Company | Date/Time | Received in Laboratory by | Company | Date/Time |

**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: 500-155261.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@Eurofinset.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-209450-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 12/30/2021 | | | |
| 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 4Q21 | Project #: 50011504 | | | |
| Site: NRG Midwest Generation LSQ Joliet #9 CCR | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

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

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 903.0/PrecSep_21 Standard Target List | 904.0/PrecSep_0 Standard Target List | Ra226Ra228_GFPC | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| T02S (500-209450-3) | 12/9/21 | 09:39 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| T08S (500-209450-4) | 12/9/21 | 11:48 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| T03S (500-209450-5) | 12/9/21 | 13:42 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 | 12/9/21 1030 | EA CHI | FED EX | | |
| 2 | FED EX | | | [signature] | DEC 10 2021 0940 | EA STL |
| 3 | | | | Autumn R. Johns... | | |

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

Ver: 06/08/2021

**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: 500-155261.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@Eurofinset.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-209450-2 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 1/13/2022 | | | |
| 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 4Q21 | 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: | | | | | | | | |
| T09S (500-209450-1) | 12/8/21 | 11:28 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| T06S (500-209450-2) | 12/8/21 | 13:06 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 | 12/9/21 1630 | EMI-CHI | FED EX | | |
| 2 | FED EX | | | [signature] | DEC 10 2021 0940 | EIA STL |
| 3 | | | | Autumn R. Johnson | | |

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

Ver: 06/08/2021

**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: 500-155305.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@Eurofinset.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-209450-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 12/30/2021 | | | |
| 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 4Q21 | 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: | | | | | | | | |
| T05S (500-209450-6) | 12/10/21 | 09:55 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| G20S (500-209450-7) | 12/10/21 | 11:25 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 Hemenway | 12/10/21 1630 | EA-CHI | FED EX | | |
| Relinquished by: FED EX | Date/Time: | Company | Received by: | Date/Time: DEC 11 2021 0910 | Company EA STL |
| Relinquished by: | Date/Time: | Company | Received by: Autumn R. Johnson | Date/Time: | Company |

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

Ver: 06/08/2021

# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-209450-1

**Login Number: 209450**
**List Number: 1**
**Creator: Buckley, Paula M**

**List Source: Eurofins North Central, Chicago**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 2.1,3.2,1.0,3.9,3.8,3.0,3.7 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T09S

**Date Collected: 12/08/21 11:28**
**Date Received: 12/08/21 14:29**

**Lab Sample ID: 500-209450-1**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 20 | 636170 | 12/30/21 12:19 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 14:15 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 18:56 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 633682 | 12/14/21 14:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 633847 | 12/15/21 08:49 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 632819 | 12/09/21 07:35 | CLB | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 633483 | 12/13/21 16:35 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 17:47 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 20 | 633484 | 12/13/21 18:32 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/08/21 11:28 | JVB | TAL CHI |

## Client Sample ID: T06S

**Date Collected: 12/08/21 13:06**
**Date Received: 12/08/21 14:29**

**Lab Sample ID: 500-209450-2**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 2 | 636170 | 12/30/21 12:43 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 14:39 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:13 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 633682 | 12/14/21 14:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 633847 | 12/15/21 08:51 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 632819 | 12/09/21 07:38 | CLB | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 1 | 633483 | 12/13/21 16:34 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 17:51 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 3 | 633484 | 12/13/21 18:32 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/08/21 13:06 | JVB | TAL CHI |

## Client Sample ID: T02S

**Date Collected: 12/09/21 09:39**
**Date Received: 12/09/21 14:48**

**Lab Sample ID: 500-209450-3**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 10 | 636170 | 12/30/21 12:47 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 14:43 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:16 | FXG | TAL CHI |

## Client Sample ID: T02S

**Lab Sample ID: 500-209450-3**

**Date Collected: 12/09/21 09:39**

**Matrix: Water**

**Date Received: 12/09/21 14:48**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7470A | | | 633682 | 12/14/21 14:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 633847 | 12/15/21 08:54 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 633495 | 12/14/21 04:40 | CLB | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 633483 | 12/13/21 16:38 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 17:54 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 633484 | 12/13/21 18:33 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/09/21 09:39 | JVB | TAL CHI |

## Client Sample ID: T08S

**Lab Sample ID: 500-209450-4**

**Date Collected: 12/09/21 11:48**

**Matrix: Water**

**Date Received: 12/09/21 14:48**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 20 | 636170 | 12/30/21 12:50 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 14:46 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:20 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 633682 | 12/14/21 14:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 633847 | 12/15/21 08:56 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 633495 | 12/14/21 04:47 | CLB | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 633483 | 12/13/21 16:37 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:11 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 20 | 633484 | 12/13/21 18:33 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/09/21 11:48 | JVB | TAL CHI |

## Client Sample ID: T03S

**Lab Sample ID: 500-209450-5**

**Date Collected: 12/09/21 13:42**

**Matrix: Water**

**Date Received: 12/09/21 14:48**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 10 | 636170 | 12/30/21 12:54 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 14:49 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:30 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 633682 | 12/14/21 14:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 633847 | 12/15/21 08:58 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 633495 | 12/14/21 04:53 | CLB | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 5 | 633483 | 12/13/21 16:39 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:19 | EAT | TAL CHI |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T03S

**Lab Sample ID: 500-209450-5**

**Date Collected: 12/09/21 13:42**
**Matrix: Water**
**Date Received: 12/09/21 14:48**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 633484 | 12/13/21 18:33 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/09/21 13:42 | JVB | TAL CHI |

## Client Sample ID: T05S

**Lab Sample ID: 500-209450-6**

**Date Collected: 12/10/21 09:55**
**Matrix: Water**
**Date Received: 12/10/21 14:07**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 100 | 636170 | 12/30/21 12:57 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 14:53 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:33 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 633682 | 12/14/21 14:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 633847 | 12/15/21 09:00 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 633495 | 12/14/21 04:55 | CLB | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 5 | 633483 | 12/13/21 17:03 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:33 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 20 | 633484 | 12/13/21 18:44 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/10/21 09:55 | JVB | TAL CHI |

## Client Sample ID: G20S

**Lab Sample ID: 500-209450-7**

**Date Collected: 12/10/21 11:25**
**Matrix: Water**
**Date Received: 12/10/21 14:07**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 5 | 636170 | 12/30/21 13:01 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 14:56 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:37 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 633682 | 12/14/21 14:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 633847 | 12/15/21 09:02 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 633495 | 12/14/21 04:58 | CLB | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 1 | 633483 | 12/13/21 16:40 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:36 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 3 | 633484 | 12/13/21 18:35 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/10/21 11:25 | JVB | TAL CHI |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: T01S

**Lab Sample ID: 500-209450-8**

**Date Collected: 12/13/21 10:42**
**Matrix: Water**
**Date Received: 12/13/21 15:10**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 10 | 636170 | 12/30/21 13:04 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:00 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:40 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 633682 | 12/14/21 14:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 633847 | 12/15/21 09:29 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 633495 | 12/14/21 05:00 | CLB | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 635832 | 12/28/21 15:52 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:39 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 635833 | 12/28/21 16:19 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/13/21 10:42 | JVB | TAL CHI |

## Client Sample ID: G33S

**Lab Sample ID: 500-209450-9**

**Date Collected: 12/13/21 13:06**
**Matrix: Water**
**Date Received: 12/13/21 15:10**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 2 | 636170 | 12/30/21 13:08 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:03 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:43 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 633682 | 12/14/21 14:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 633847 | 12/15/21 09:50 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 633495 | 12/14/21 05:03 | CLB | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 1 | 635832 | 12/28/21 15:53 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:41 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 3 | 635833 | 12/28/21 16:19 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/13/21 13:06 | JVB | TAL CHI |

## Client Sample ID: G31S

**Lab Sample ID: 500-209450-10**

**Date Collected: 12/13/21 14:14**
**Matrix: Water**
**Date Received: 12/13/21 15:10**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 10 | 636170 | 12/30/21 13:11 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:07 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:47 | FXG | TAL CHI |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G31S

**Lab Sample ID: 500-209450-10**

**Date Collected: 12/13/21 14:14**
**Date Received: 12/13/21 15:10**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7470A | | | 633682 | 12/14/21 14:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 633847 | 12/15/21 09:52 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 633495 | 12/14/21 05:06 | CLB | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 5 | 635832 | 12/28/21 15:53 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:45 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 635833 | 12/28/21 16:20 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/13/21 14:14 | JVB | TAL CHI |

## Client Sample ID: R08S

**Lab Sample ID: 500-209450-11**

**Date Collected: 12/14/21 13:05**
**Date Received: 12/14/21 14:00**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 20 | 636170 | 12/30/21 13:14 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:10 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:50 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 633818 | 12/15/21 10:20 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 634083 | 12/16/21 08:59 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 634880 | 12/21/21 17:13 | SMO | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 635832 | 12/28/21 15:54 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:48 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 635833 | 12/28/21 16:20 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/14/21 13:05 | JVB | TAL CHI |

## Client Sample ID: G30S

**Lab Sample ID: 500-209450-12**

**Date Collected: 12/15/21 09:03**
**Date Received: 12/15/21 14:15**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 10 | 636170 | 12/30/21 13:25 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:20 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:54 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 634059 | 12/16/21 10:45 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 634283 | 12/17/21 08:46 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 635089 | 12/22/21 15:31 | SMO | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 5 | 635832 | 12/28/21 15:54 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:51 | EAT | TAL CHI |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G30S

**Lab Sample ID: 500-209450-12**

**Date Collected: 12/15/21 09:03**

**Matrix: Water**

**Date Received: 12/15/21 14:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 635833 | 12/28/21 16:21 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/15/21 09:03 | JVB | TAL CHI |

## Client Sample ID: R32S

**Lab Sample ID: 500-209450-13**

**Date Collected: 12/15/21 10:44**

**Matrix: Water**

**Date Received: 12/15/21 14:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 10 | 636170 | 12/30/21 13:28 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:24 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 19:57 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 634059 | 12/16/21 10:45 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 634283 | 12/17/21 08:48 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 635089 | 12/22/21 15:37 | SMO | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 635832 | 12/28/21 15:54 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:54 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 20 | 635833 | 12/28/21 16:21 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/15/21 10:44 | JVB | TAL CHI |

## Client Sample ID: DUP

**Lab Sample ID: 500-209450-14**

**Date Collected: 12/15/21 10:44**

**Matrix: Water**

**Date Received: 12/15/21 14:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 20 | 636170 | 12/30/21 13:32 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:27 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 20:00 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 634059 | 12/16/21 10:45 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 634283 | 12/17/21 08:51 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 635089 | 12/22/21 15:39 | SMO | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 635832 | 12/28/21 15:55 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 18:57 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 20 | 635833 | 12/28/21 16:22 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/15/21 10:44 | JVB | TAL CHI |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G46S

**Date Collected: 12/15/21 12:19**
**Date Received: 12/15/21 14:15**

**Lab Sample ID: 500-209450-15**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 100 | 636170 | 12/30/21 13:35 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:31 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 20:11 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 634059 | 12/16/21 10:45 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 634283 | 12/17/21 08:53 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 635089 | 12/22/21 15:43 | SMO | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 635832 | 12/28/21 15:55 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 19:00 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 20 | 635833 | 12/28/21 16:23 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/15/21 12:19 | JVB | TAL CHI |

## Client Sample ID: T04S

**Date Collected: 12/15/21 13:20**
**Date Received: 12/15/21 14:15**

**Lab Sample ID: 500-209450-16**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/15/21 13:20 | JVB | TAL CHI |

## Client Sample ID: G44S

**Date Collected: 12/16/21 09:07**
**Date Received: 12/16/21 14:26**

**Lab Sample ID: 500-209450-17**
**Matrix: GW**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 5 | 636170 | 12/30/21 13:39 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:34 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 20:14 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 634255 | 12/17/21 10:05 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 634589 | 12/20/21 08:39 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 635119 | 12/22/21 16:50 | SMO | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 635832 | 12/28/21 15:56 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 19:14 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 635833 | 12/28/21 16:23 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/16/21 09:07 | JVB | TAL CHI |

## Client Sample ID: G45S

**Lab Sample ID: 500-209450-18**

**Date Collected: 12/16/21 10:01**

**Matrix: GW**

**Date Received: 12/16/21 14:26**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 13:42 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 20:17 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 634255 | 12/17/21 10:05 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 634589 | 12/20/21 08:41 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 635119 | 12/22/21 16:57 | SMO | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 635832 | 12/28/21 15:56 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 634708 | 12/20/21 19:17 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 5 | 635833 | 12/28/21 16:23 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/16/21 10:01 | JVB | TAL CHI |

## Client Sample ID: G48S

**Lab Sample ID: 500-209450-19**

**Date Collected: 12/16/21 11:13**

**Matrix: GW**

**Date Received: 12/16/21 14:26**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 20 | 636170 | 12/30/21 13:46 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:38 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 20:21 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 634255 | 12/17/21 10:05 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 634589 | 12/20/21 08:44 | MJG | TAL CHI |
| Total/NA | Analysis | SM 2540C | | 1 | 635119 | 12/22/21 17:00 | SMO | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 635832 | 12/28/21 15:56 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 635765 | 12/28/21 10:38 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 20 | 635833 | 12/28/21 16:24 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/16/21 11:13 | JVB | TAL CHI |

## Client Sample ID: G47S

**Lab Sample ID: 500-209450-20**

**Date Collected: 12/16/21 13:10**

**Matrix: GW**

**Date Received: 12/16/21 14:26**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 20 | 636170 | 12/30/21 13:49 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636170 | 12/30/21 15:41 | FXG | TAL CHI |
| Total Recoverable | Prep | 3005A | | | 635936 | 12/29/21 10:14 | BDE | TAL CHI |
| Total Recoverable | Analysis | 6020A | | 1 | 636088 | 12/29/21 20:24 | FXG | TAL CHI |
| Total/NA | Prep | 7470A | | | 634255 | 12/17/21 10:05 | MJG | TAL CHI |
| Total/NA | Analysis | 7470A | | 1 | 634589 | 12/20/21 08:46 | MJG | TAL CHI |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-1

## Client Sample ID: G47S

**Date Collected: 12/16/21 13:10**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-20

**Matrix: GW**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540C | | 1 | 635119 | 12/22/21 17:02 | SMO | TAL CHI |
| Total/NA | Analysis | SM 4500 Cl- E | | 3 | 635832 | 12/28/21 15:57 | RES | TAL CHI |
| Total/NA | Analysis | SM 4500 F C | | 1 | 635765 | 12/28/21 10:41 | EAT | TAL CHI |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 635833 | 12/28/21 16:40 | RES | TAL CHI |
| Total/NA | Analysis | Field Sampling | | 1 | 632892 | 12/16/21 13:10 | JVB | TAL CHI |

**Laboratory References:**

TAL CHI = Eurofins North Central, 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: T09S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-1

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: 12/08/21 Start Purge: 1110 (2400 Hr. Clock) End Purge: 1128

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 94.12 (ft.)
Ground Water Elev. 509.57 (ft./msl)
Well Bottom Elevation * 444.80 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.22 | 7.23 | 7.23 | (std.) |
| SC | 1,292 | 1,300 | 1,300 | (umhos/cm) |
| Temp. | 7.07 | 7.10 | 7.10 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 32°F, Sunny, NW winds 5-10 mph
Turbidity: 13.0 NTU
Other: *Reference Measurement (updated 02/19/14)
Depth To Water from L.S. = 94.12 - 2.40 = 91.72 (ft.)
Levels were taken on 12/08/21 @ 1050.
* Total Depth: 158.59

(Updated: 10/19/2021 )

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

**TestAmerica Chicago**
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T06S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-2

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: 12/08/21 Start Purge: 1250 (2400 Hr. Clock) End Purge: 1306

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.41

## MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.30 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 620.99 (ft./msl)

Water Level 113.37 (ft.)

Ground Water Elev. 507.62 (ft./msl)

Well Bottom Elevation * 447.94 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.45 | 7.44 | 7.44 | (std.) |
| SC | 695 | 694 | 694 | (umhos/cm) |
| Temp. | 10.99 | 10.98 | 10.98 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 34°F, Sunny, NW winds @ 5-10 mph

Turbidity: 1.96 NTU

Other: *Reference Measurement

Depth To Water from L.S. = 113.37 - 2.30 = 111.07 (ft.)

Levels were taken on 12/08/21 @ 1235

* Total Deth = 173.00

(Updated: 10/19/2021 )

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: T02S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-3

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: 12/09/21 Start Purge: 0920 (2400 Hr. Clock) End Purge: 0939

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 135.05 (ft.)

Ground Water Elev. 491.07 (ft./msl)

Well Bottom Elevation * 453.40 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.77 | 7.77 | 7.77 | (std.) |
| SC | 1167 | 1169 | 1169 | (umhos/cm) |
| Temp. | 8.08 | 8.04 | 8.04 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 38°F, Mostly Cloudy, SE winds @ 15-20 mph

Turbidity: 8.77 NTU

Other: *Reference Measurement

Depth To Water from L.S. = 135.05 - 2.33 = 132.72 ft

Levels were taken on 12/09/21 @ 0905.

* Total Depth = 172.75

(Updated: 10/19/2021 )

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

**TestAmerica Chicago**
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T08S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-4

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: 12/09/21 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 2.38 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 627.50 (ft./msl)
Water Level 130.25 (ft.)
Ground Water Elev. 497.25 (ft./msl)
Well Bottom Elevation * 447.38 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 8.46 | 8.50 | 8.50 | (std.) |
| SC | 1,396 | 1,395 | 1,395 | (umhos/cm) |
| Temp. | 9.41 | 9.42 | 9.42 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Slight Turbidity, No Odor
Weather Conditions: 42°F, Cloudy, S winds e 10-15 mph
Turbidity: 2.48 NTU
Other: *Reference Measurement
Depth To Water from L.S. = 130.25 - 2.38 = 127.87 (ft)
Levels were taken on 12/09/21 @ 1115
* Total Deth = 180.00

(Updated: 10/19/2021 )

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing TestAmerica

**TestAmerica Chicago**
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T03S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-5

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____
Equipment Used: Purging Bladder Pump Dedicated (Y/N)
Sampling Bladder Pump Dedicated (Y/N)

## PURGING INFORMATION

Purge Date: 12/09/21 Start Purge: 1328 (2400 Hr. Clock) End Purge: 1342

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.36

## MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 3.08 (ft)
Ref. Measuring Pt. TIC
Well Elevation * 629.74 (ft./msl)
Water Level 139.40 (ft.)
Ground Water Elev. 490.34 (ft./msl)
Well Bottom Elevation * 456.70 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.50 | 7.48 | 7.48 | (std.) |
| SC | 1,156 | 1,159 | 1159 | (umhos/cm) |
| Temp. | 11.82 | 11.80 | 11.80 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Slight Turbidity, No Odor
Weather Conditions: 46°F, Cloudy, S winds 5-10 mph
Turbidity: 0.56 NTU
Other: *Reference Measurement
Depth To Water from L.S. = 139.40 - 3.08 = 136.32 (ft.)
Levels were taken on 12/09/21 @ 1320
* Total Depth = 172.95

(Updated: 10/19/2021 )

Sampler Name (Print): Noe Lopez Signature: [signature]

FIELD FORM 1

eurofins | Environment Testing TestAmerica

**TestAmerica Chicago**
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: T05S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-1

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: 12/10/21 Start Purge: 0935 (2400 Hr. Clock) End Purge: 0955

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.65

## MEASUREMENTS

Well Diameter 2.0 (inches)

Stick Up 2.40 (ft)

Ref. Measuring Pt. TIC

Well Elevation * 623.46 (ft./msl)

Water Level 126.03 (ft.)

Ground Water Elev. 497.43 (ft./msl)

Well Bottom Elevation * 448.35 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 9.35 | 9.41 | 9.41 | (std.) |
| SC | 2070 | 2070 | 2070 | (umhos/cm) |
| Temp. | 11.43 | 11.41 | 11.41 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 44°F, Sunny, E winds @ 5-10 mph

Turbidity: 3.71 NTU

Other: *Reference Measurement

Depth To Water from L.S. = 126.03 - 2.40 = 123.63 (ft.)

Levels were taken on 12/10/21 @ 0935.

* Total Deth = 175.00

(Updated: 10/19/2021 )

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: G20S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-7

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: 12/10/21 Start Purge: 1105 (2400 Hr. Clock) End Purge: 1125

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 *580.94 (ft./msl)

Water Level 129.36 (ft.)

Ground Water Elev. 451.58 (ft./msl)

Well Bottom Elevation *442.28 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 8.35 | 8.33 | 8.33 | (std.) |
| SC | 592 | 589 | 589 | (umhos/cm) |
| Temp. | 13.52 | 13.55 | 13.55 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 49°F, Fair, E winds @ 10-15 mph

Turbidity: 1.28 NTU

Other: *Reference Measurement

Depth To Water from L.S. = 129.36 - 2.78 = 126.58 (ft.)

Levels were taken on 12/10/21 @ 1100

(Updated: 10/19/2021 )

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: T01S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-8

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: 12/13/21 Start Purge: 1020 (2400 Hr. Clock) End Purge: 1042

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 * 621.71 (ft./msl)

Water Level 125.15 (ft.)

Ground Water Elev. 496.56 (ft./msl)

Well Bottom Elevation * 451.46 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.66 | 7.67 | 7.67 | (std.) |
| SC | 1230 | 1234 | 1234 | (umhos/cm) |
| Temp. | 9.51 | 9.52 | 9.52 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Tan, High Turbidity, Slight Odor

Weather Conditions: 43°F, Sunny, SW winds 5-10 mph

Turbidity: 138 NTU

Other: *Reference Measurement

Depth To Water from L.S. = 125.15 - 2.48 = 122.67 (ft)

Levels were taken on 12/13/21 @ 1005.

* Total Depth = 170.00

(Updated: 10/19/2021 )

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: G33S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-9

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: 12/13/21 Start Purge: 1250 (2400 Hr. Clock) End Purge: 1306

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.41

## MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 1.73 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.65 (ft./msl)
Water Level 32.98 (ft.)
Ground Water Elev. 502.67 (ft./msl)
Well Bottom Elevation *452.72 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.53 | 7.52 | 7.52 | (std.) |
| SC | 629 | 628 | 628 | (umhos/cm) |
| Temp. | 13.69 | 13.70 | 13.70 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Gray, Slight Turbidity, No Odor
Weather Conditions: 49°F, Sunny, SW winds 5-10 mph
Turbidity: 9.78 NTU
Other: *Reference Measurement
Depth To Water from L.S. = 32.98 - 1.73 = 31.25 (ft.)
Levels were taken on 12/13/21 @ 1245.

(Updated: 10/19/2021 )

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 #: 500-209450-10

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: 12/13/21 Start Purge: 1355 (2400 Hr. Clock) End Purge: 1414

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.86

## MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.58 (ft)
Ref. Measuring Pt. TIC
Well Elevation *535.77 (ft./msl)
Water Level 28.58 (ft.)
Ground Water Elev. 507.19 (ft./msl)
Well Bottom Elevation *453.36 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.29 | 7.29 | 7.29 | (std.) |
| SC | 1490 | 1490 | 1490 | (umhos/cm) |
| Temp. | 13.74 | 13.74 | 13.74 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor
Weather Conditions: 49°F, Sunny, SW winds 0-5 mph
Turbidity: 1.21 NTU
Other: *Reference Measurement
Depth To Water from L.S. = 28.58 - 2.58 = 26.00 (ft)
Levels were taken on 12/13/21 @ 1350

(Updated: 10/19/2021 )

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

**TestAmerica Chicago**
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: R08S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-1

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: 12/14/21 Start Purge: 1250 (2400 Hr. Clock) End Purge: 1305

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.77

## MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.55 (ft)
Ref. Measuring Pt. TIC
Well Elevation *578.51 (ft./msl)
Water Level 69.45 (ft.)
Ground Water Elev. 509.06 (ft./msl)
Well Bottom Elevation *453.08 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 8.35 | 8.37 | 8.37 | (std.) |
| SC | 962 | 968 | 968 | (umhos/cm) |
| Temp. | 12.63 | 12.62 | 12.62 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 53° F, Partly Cloudy, SE winds @ 5-10 mph
Turbidity: 0.57 NTU
Other: *Reference Measurement (Well ID updated 11-25-15)
Depth To Water from L.S. = 69.45 - 2.55 = 66.90 (ft)
Levels were taken on 12/14/21 @ 1245.

(Updated: 10/19/2021 )

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 #: 500-209450-12

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: 12/15/21 Start Purge: 0845 (2400 Hr. Clock) End Purge: 0903

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 *524.69 (ft./msl)
Water Level 2.21 (ft.)
Ground Water Elev. 522.48 (ft./msl)
Well Bottom Elevation *462.58 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.95 | 7.95 | 7.95 | (std.) |
| SC | 1600 | 1590 | 1590 | (umhos/cm) |
| Temp. | 11.25 | 11.28 | 11.28 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 57°F, Cloudy, S winds 15-20 m/h
Turbidity: 0.09 NTU
Other: *Reference Measurement
Depth To Water from L.S. = 2.21 - 2.31 = -0.10 (ft)
Levels were taken on 12/15/21 @ 0835.

(Updated: 10/19/2021 )

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: R32S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-13

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: 12/15/21 Start Purge: 1025 (2400 Hr. Clock) End Purge: 1044

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 *536.91 (ft./msl)

Water Level 21.74 (ft.)

Ground Water Elev. 515.17 (ft./msl)

Well Bottom Elevation *457.84 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.44 | 7.42 | 7.42 | (std.) |
| SC | 967 | 975 | 975 | (umhos/cm) |
| Temp. | 11.99 | 12.04 | 12.04 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor

Weather Conditions: 62°F, Cloudy, S winds @ 15-20 mph

Turbidity: 0.84 NTU

Other: *Reference Measurement

Depth To Water from L.S. = 21.74 - 2.03 = 19.71 (ft.)

Levels were taken on 12/15/21 @ 1015

(Updated: 10/19/2021 )

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: R32S Dup
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-14

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: _____ 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 *536.91 (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: _____

Turbidity: _____

Other: *Reference Measurement

Depth To Water from L.S. = _____

Samples ~~Levels were~~ taken on 12/15/21 @ 1044.

(Updated: 10/19/2021 )

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 #: 500-209450-15

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: 12/15/21 Start Purge: 1205 (2400 Hr. Clock) End Purge: 1219

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.54

## MEASUREMENTS

Well Diameter 4.0 (inches)

Stick Up 2.70 (ft)

Ref. Measuring Pt. TIC

Well Elevation *601.34 (ft./msl)

Water Level 105.28 (ft.)

Ground Water Elev. 496.06 (ft./msl)

Well Bottom Elevation *453.62 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.53 | 7.53 | 7.53 | (std.) |
| SC | 1245 | 1254 | 1254 | (umhos/cm) |
| Temp. | 13.84 | 13.82 | 13.82 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Tan, ~~Slight~~ Moderate Turbidity, No Odor

Weather Conditions: 63°F, Cloudy, S winds 15-20 mph

Turbidity: 73.1 NTU

Other: *Reference Measurement

Depth To Water from L.S. = 105.28 - 2.70 = 102.58 (ft.)

Levels were taken on 12/15/21 @ 1200.

(Updated: 10/19/2021 )

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: T04S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-1.10

Type Sample: (circle one) Ground Water Surface Water Leachate Other: _____

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

## PURGING INFORMATION

Purge Date: _____ 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: _____

Turbidity: _____

Other: *Reference Measurement

Depth To Water from L.S. =

Levels were taken on @

* Total Deth = 173.00

* Unable to purge or sample due to Property Development/Excavation on 12/15/21 @ 1320

(Updated: 10/19/2021 )

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing TestAmerica

**TestAmerica Chicago**
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G44S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-17

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: 12/16/21 Start Purge: 0850 (2400 Hr. Clock) End Purge: 0907

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.55

## MEASUREMENTS

Well Diameter 2.0 (inches)
Stick Up 2.18 (ft)
Ref. Measuring Pt. TIC
Well Elevation *586.49 (ft./msl)
Water Level 82.71 (ft.)
Ground Water Elev. 503.78 (ft./msl)
Well Bottom Elevation *455.11 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.24 | 7.21 | 7.21 | (std.) |
| SC | 980 | 987 | 987 | (umhos/cm) |
| Temp. | 11.27 | 11.19 | 11.19 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, No Odor
Weather Conditions: 39°F, Mostly Cloudy, W winds @ 15-20 m/h
Turbidity: 1.29 NTU
Other: *Reference Measurement
Depth To Water from L.S. = 82.71 - 2.18 = 80.53 (ft.)
Levels were taken on 12/16/21 @ 0840.

(Updated: 10/19/2021 )

Sampler Name (Print): Noe Lopez Signature:

FIELD FORM 1

eurofins | Environment Testing TestAmerica

**TestAmerica Chicago**
2417 Bond St
University Park, IL 60484-3182
Tel: 708 534 5200 Fax: 708 534 5211

Sample ID: G45S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-18

Type Sample: (circle one) Ground Water Surface Water Leachate Other:

Equipment Used: Purging Bladder Pump Dedicated (Y/N)

Sampling Bladder Pump Dedicated (Y/N)

## PURGING INFORMATION

Purge Date: 12/16/21 Start Purge: 0945 (2400 Hr. Clock) End Purge: 1001

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 *603.94 (ft./msl)

Water Level 66.15 (ft.)

Ground Water Elev. 537.79 (ft./msl)

Well Bottom Elevation *471.05 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 7.35 | 7.35 | 7.35 | (std.) |
| SC | 813 | 808 | 808 | (umhos/cm) |
| Temp. | 11.89 | 12.00 | 12.00 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor

Weather Conditions: 41°F, Cloudy, SW winds 15-20 mph

Turbidity: 0.89 NTU

Other: *Reference Measurement

Depth To Water from L.S. = 66.15 - 2.97 = 63.18 (ft.)

Levels were taken on 12/16/21 @ 0940.

(Updated: 10/19/2021 )

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: G48S
Facility: Midwest Generation-Joliet #9 CCR
Job #: 500-209450-19

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: 12/16/21 Start Purge: 1055 (2400 Hr. Clock) End Purge: 1113

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.93

## MEASUREMENTS

Well Diameter 4.0 (inches)
Stick Up 2.45 (ft)
Ref. Measuring Pt. TIC
Well Elevation *620.74 (ft./msl)
Water Level 105.09 (ft.)
Ground Water Elev. 515.65 (ft./msl)
Well Bottom Elevation *468.32 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 6.99 | 7.02 | 7.02 | (std.) |
| SC | 1311 | 1318 | 1318 | (umhos/cm) |
| Temp. | 8.82 | 8.84 | 8.84 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, Moderate Odor
Weather Conditions: 40°F, Mostly Cloudy, SW winds 15-20 mph
Turbidity: 0.62 NTU
Other: *Reference Measurement
Depth To Water from L.S. = 105.09 - 2.45 = 102.64 (ft.)
Levels were taken on 12/16/21 @ 1050

(Updated: 10/19/2021 )

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 #: 500-209450-20

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: 12/16/21 Start Purge: 1250 (2400 Hr. Clock) End Purge: 1310

Water Volume in Casing (gallons): N/A Volume Purged (gallons): 0.65

## MEASUREMENTS

Well Diameter 4.0 (inches)

Stick Up 2.50 (ft)

Ref. Measuring Pt. TIC

Well Elevation *612.04 (ft./msl)

Water Level 95.98 (ft.)

Ground Water Elev. 516.06 (ft./msl)

Well Bottom Elevation *459.84 (ft./msl)

| | 1st | 2nd | Final | |
|---|---|---|---|---|
| pH | 8.62 | 8.63 | 8.63 | (std.) |
| SC | 1,342 | 1,334 | 1,334 | (umhos/cm) |
| Temp. | 11.05 | 11.06 | 11.06 | (°C) |

Well Stabilization / Recharge Grid

## COMMENTS

Sample Appearance/Odor: Colorless, Clear, Slight Odor

Weather Conditions: 42°F, Sunny, W winds @ 15-20 mph

Turbidity: 0.59 NTU

Other: *Reference Measurement

Depth To Water from L.S. = 95.98 - 2.50 = 93.48 (ft.)

Levels were taken on 12/16/21 @ 1245.

(Updated: 10/19/2021 )

Sampler Name (Print): Noe Lopez Signature: _____

FIELD FORM 1

eurofins | Environment Testing America

# ANALYTICAL REPORT

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

Laboratory Job ID: 500-209450-2
Client Project/Site: Joliet #9 (Quarry) CCR 4Q21

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

Attn: Richard Gnat

Diana Mockler

*Authorized for release by:*
*2/1/2022 5:06:52 PM*

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

# Table of Contents

## Job ID: 500-209450-2

### Laboratory: Eurofins Chicago

**Narrative**

**Job Narrative**
**500-209450-2**

**Comments**
No additional comments.

**Receipt**
The samples were received on 12/8/2021 2:29 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 1.0º C, 2.1º C, 3.0º C, 3.2º C, 3.7º C, 3.8º C and 3.9º C.

**RAD**
Method 903.0: Radium 226 batch 543783
The Barium carrier recovery is outside the lower control limit (40%) for the following sample: T02S (500-209450-3). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method 903.0: Radium 226 batch 543783
The following sample(s) have Barium carrier recoveries above the 110% QC limit; The LCS (laboratory control sample) have acceptable spike recoveries demonstrating acceptable sample preparation and instrument performance. The sample(s) have been truncated to 100% to reduce any potential bias a high carrier recovery may have. The data have been reported with this narrative.

G31S (500-209450-10)

Method 903.0: Radium 226 batch 543783
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.

The GFPC long monthly backgrounds (ICB) were counted for 800 minutes, but due to current software limitations with the Protean instruments the long monthly backgrounds are calculated at 1000 minutes. This discrepancy has been manually updated, and data is correct, but the raw data printouts still show the incorrect time of 1000 minutes. The ICB raw data includes the correct count time of 800 minutes and counts.
T09S (500-209450-1), T06S (500-209450-2), T02S (500-209450-3), T08S (500-209450-4), T03S (500-209450-5), T05S (500-209450-6), G20S (500-209450-7), T01S (500-209450-8), G33S (500-209450-9), G31S (500-209450-10), R08S (500-209450-11), G30S (500-209450-12), R32S (500-209450-13), DUP (500-209450-14), G46S (500-209450-15), G44S (500-209450-17), G45S (500-209450-18), G48S (500-209450-19), G47S (500-209450-20), (LCS 160-543783/1-A), (MB 160-543783/22-A) and (500-209450-C-20-A DU)

Method 904.0: Ra-228 batch 160-543788:

The radium-228 method blank has activity above the RL of 1. The samples are not ND or >5X the MB activity, therefore samples need to be re-extracted.

T09S (500-209450-1), T06S (500-209450-2), T02S (500-209450-3), T08S (500-209450-4), T03S (500-209450-5), T05S (500-209450-6), G20S (500-209450-7), T01S (500-209450-8), G33S (500-209450-9), G31S (500-209450-10), R08S (500-209450-11), G30S (500-209450-12), R32S (500-209450-13), DUP (500-209450-14), G46S (500-209450-15), G44S (500-209450-17), G45S (500-209450-18), G48S (500-209450-19), G47S (500-209450-20) and (500-209450-C-20-B DU)

Method 904.0: Radium 228 batch 547981
The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: T02S (500-209450-3) and G33S (500-209450-9). Analytical results are reported with the detection limit achieved.

Method 904.0: Radium 228 batch 547981
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is

## Job ID: 500-209450-2 (Continued)

### Laboratory: Eurofins Chicago (Continued)

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 (500-209450-1), T06S (500-209450-2), T02S (500-209450-3), T08S (500-209450-4), T03S (500-209450-5), T05S (500-209450-6), G20S (500-209450-7), T01S (500-209450-8), G33S (500-209450-9), G31S (500-209450-10), R08S (500-209450-11), G30S (500-209450-12), R32S (500-209450-13), DUP (500-209450-14), G46S (500-209450-15), G44S (500-209450-17), G45S (500-209450-18), G48S (500-209450-19), G47S (500-209450-20), (LCS 160-547981/1-A), (LCSD 160-547981/2-A) and (MB 160-547981/22-A)

Method PrecSep_0:

Method PrecSep_0: Radium-226 Prep Batch 160-543783
The barium carrier recovery is outside the <<CHOOSE ONE>> upper control limit (110%) : G31S (500-209450-10). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method PrecSep_0: Radium Prep Batch 160-54378
The Barium carrier recovery is outside the lower control limit (40%) for the following sample: T02S (500-209450-3). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method PrecSep_0: Radium-228 Prep Batch 160-547981

The following samples were prepared at a reduced aliquot due to Matrix: T09S (500-209450-1), T06S (500-209450-2), T02S (500-209450-3), T08S (500-209450-4), T03S (500-209450-5), T05S (500-209450-6), G20S (500-209450-7), T01S (500-209450-8), G33S (500-209450-9), G31S (500-209450-10), R08S (500-209450-11), G30S (500-209450-12), R32S (500-209450-13), DUP (500-209450-14), G46S (500-209450-15), G44S (500-209450-17), G45S (500-209450-18) and G48S (500-209450-19). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: The barium carrier recovery is within limits but lower. The pellets were notably smaller throughout the out of in-growth process, which is likely attributed to the matrix interference noted at precipitation.

Method PrecSep-21:

Method PrecSep-21: Radium-226 Prep Batch 160-543783
The barium carrier recovery is outside the <<CHOOSE ONE>> upper control limit (110%) for the following sample: G31S (500-209450-10). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method PrecSep-21: Radium-226 Prep Batch 160-543783
The barium carrier recovery is outside the lower control limit (40%) for the following sample: T02S (500-209450-3). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

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 4Q21

Job ID: 500-209450-2

| 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 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 4Q21

Job ID: 500-209450-2

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 500-209450-1 | T09S | Water | 12/08/21 11:28 | 12/08/21 14:29 |
| 500-209450-2 | T06S | Water | 12/08/21 13:06 | 12/08/21 14:29 |
| 500-209450-3 | T02S | Water | 12/09/21 09:39 | 12/09/21 14:48 |
| 500-209450-4 | T08S | Water | 12/09/21 11:48 | 12/09/21 14:48 |
| 500-209450-5 | T03S | Water | 12/09/21 13:42 | 12/09/21 14:48 |
| 500-209450-6 | T05S | Water | 12/10/21 09:55 | 12/10/21 14:07 |
| 500-209450-7 | G20S | Water | 12/10/21 11:25 | 12/10/21 14:07 |
| 500-209450-8 | T01S | Water | 12/13/21 10:42 | 12/13/21 15:10 |
| 500-209450-9 | G33S | Water | 12/13/21 13:06 | 12/13/21 15:10 |
| 500-209450-10 | G31S | Water | 12/13/21 14:14 | 12/13/21 15:10 |
| 500-209450-11 | R08S | Water | 12/14/21 13:05 | 12/14/21 14:00 |
| 500-209450-12 | G30S | Water | 12/15/21 09:03 | 12/15/21 14:15 |
| 500-209450-13 | R32S | Water | 12/15/21 10:44 | 12/15/21 14:15 |
| 500-209450-14 | DUP | Water | 12/15/21 10:44 | 12/15/21 14:15 |
| 500-209450-15 | G46S | Water | 12/15/21 12:19 | 12/15/21 14:15 |
| 500-209450-17 | G44S | GW | 12/16/21 09:07 | 12/16/21 14:26 |
| 500-209450-18 | G45S | GW | 12/16/21 10:01 | 12/16/21 14:26 |
| 500-209450-19 | G48S | GW | 12/16/21 11:13 | 12/16/21 14:26 |
| 500-209450-20 | G47S | GW | 12/16/21 13:10 | 12/16/21 14:26 |

## Client Sample ID: T09S

**Date Collected: 12/08/21 11:28**
**Date Received: 12/08/21 14:29**

## Lab Sample ID: 500-209450-1

**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 | 1.85 | | 0.470 | 0.499 | 1.00 | 0.413 | pCi/L | 12/28/21 11:06 | 01/19/22 20:34 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *71.7* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 20:34* | *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 | 0.882 | | 0.344 | 0.354 | 1.00 | 0.474 | pCi/L | 01/25/22 08:29 | 01/31/22 20:30 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *98.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:30* | *1* |
| *Y Carrier* | *84.9* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:30* | *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 | 2.74 | | 0.582 | 0.612 | 5.00 | 0.474 | pCi/L | | 02/01/22 15:09 | 1 |

# Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: T06S

**Date Collected: 12/08/21 13:06**
**Date Received: 12/08/21 14:29**

## Lab Sample ID: 500-209450-2

**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 | 1.18 | | 0.380 | 0.394 | 1.00 | 0.412 | pCi/L | 12/28/21 11:06 | 01/19/22 22:45 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.1* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:45* | *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 | 0.888 | | 0.351 | 0.360 | 1.00 | 0.474 | pCi/L | 01/25/22 08:29 | 01/31/22 20:30 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *85.4* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:30* | *1* |
| *Y Carrier* | *86.7* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:30* | *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 | | 0.517 | 0.534 | 5.00 | 0.474 | pCi/L | | 02/01/22 15:09 | 1 |

# Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: T02S

**Date Collected: 12/09/21 09:39**
**Date Received: 12/09/21 14:48**

## Lab Sample ID: 500-209450-3

**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 | 0.793 | U | 0.589 | 0.593 | 1.00 | 0.878 | pCi/L | 12/28/21 11:06 | 01/19/22 22:45 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *34.3* | *X* | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:45* | *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** | **2.03** | **G** | 1.08 | 1.09 | 1.00 | 1.58 | pCi/L | 01/25/22 08:29 | 01/31/22 20:30 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *43.2* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:30* | *1* |
| *Y Carrier* | *81.1* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:30* | *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** | **2.82** | | 1.23 | 1.24 | 5.00 | 1.58 | pCi/L | | 02/01/22 15:09 | 1 |

## Client Sample ID: T08S

**Date Collected: 12/09/21 11:48**
**Date Received: 12/09/21 14:48**

## Lab Sample ID: 500-209450-4

**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 | 0.388 | | 0.237 | 0.240 | 1.00 | 0.309 | pCi/L | 12/28/21 11:06 | 01/19/22 22:45 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *77.3* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:45* | *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 | 0.872 | | 0.433 | 0.440 | 1.00 | 0.642 | pCi/L | 01/25/22 08:29 | 01/31/22 20:30 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *87.9* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:30* | *1* |
| *Y Carrier* | *82.2* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:30* | *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 | 1.26 | | 0.494 | 0.501 | 5.00 | 0.642 | pCi/L | | 02/01/22 15:09 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: T03S

**Date Collected: 12/09/21 13:42**
**Date Received: 12/09/21 14:48**

## Lab Sample ID: 500-209450-5

**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 | 0.526 | | 0.245 | 0.249 | 1.00 | 0.281 | pCi/L | 12/28/21 11:06 | 01/19/22 22:46 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *88.1* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:46* | *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 | | 0.357 | 0.367 | 1.00 | 0.494 | pCi/L | 01/25/22 08:29 | 01/31/22 20:30 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *94.4* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:30* | *1* |
| *Y Carrier* | *86.4* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:30* | *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 | 1.44 | | 0.433 | 0.443 | 5.00 | 0.494 | pCi/L | | 02/01/22 15:09 | 1 |

## Client Sample ID: T05S

**Date Collected: 12/10/21 09:55**
**Date Received: 12/10/21 14:07**

## Lab Sample ID: 500-209450-6

**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 | 0.391 | | 0.240 | 0.242 | 1.00 | 0.331 | pCi/L | 12/28/21 11:06 | 01/19/22 22:37 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *92.4* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:37* | *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 | 0.975 | | 0.511 | 0.519 | 1.00 | 0.749 | pCi/L | 01/25/22 08:29 | 01/31/22 20:32 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *58.8* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:32* | *1* |
| *Y Carrier* | *86.4* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:32* | *1* |

### Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Combined Radium 226 + 228 | 1.37 | | 0.565 | 0.573 | 5.00 | 0.749 | pCi/L | | 02/01/22 15:09 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: G20S

**Date Collected: 12/10/21 11:25**
**Date Received: 12/10/21 14:07**

## Lab Sample ID: 500-209450-7

**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 | 0.849 | | 0.310 | 0.319 | 1.00 | 0.301 | pCi/L | 12/28/21 11:06 | 01/19/22 22:46 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *78.3* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:46* | *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 | 1.41 | | 0.364 | 0.387 | 1.00 | 0.428 | pCi/L | 01/25/22 08:29 | 01/31/22 20:32 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *96.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:32* | *1* |
| *Y Carrier* | *89.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:32* | *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 | 2.26 | | 0.478 | 0.502 | 5.00 | 0.428 | pCi/L | | 02/01/22 15:09 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: T01S

**Date Collected: 12/13/21 10:42**
**Date Received: 12/13/21 15:10**

## Lab Sample ID: 500-209450-8

**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 | 1.10 | | 0.535 | 0.545 | 1.00 | 0.663 | pCi/L | 12/28/21 11:06 | 01/19/22 22:46 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *63.1* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:46* | *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 | 1.11 | | 0.355 | 0.369 | 1.00 | 0.455 | pCi/L | 01/25/22 08:29 | 01/31/22 20:32 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *96.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:32* | *1* |
| *Y Carrier* | *87.5* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:32* | *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 | 2.22 | | 0.642 | 0.658 | 5.00 | 0.663 | pCi/L | | 02/01/22 15:09 | 1 |

## Client Sample ID: G33S

**Date Collected: 12/13/21 13:06**
**Date Received: 12/13/21 15:10**

## Lab Sample ID: 500-209450-9

**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 | 0.498 | U | 0.562 | 0.563 | 1.00 | 0.910 | pCi/L | 12/28/21 11:06 | 01/19/22 22:42 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *41.2* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:42* | *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 | 0.491 | U G | 0.625 | 0.626 | 1.00 | 1.04 | pCi/L | 01/25/22 08:29 | 01/31/22 20:35 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *71.7* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:35* | *1* |
| *Y Carrier* | *86.7* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:35* | *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 | 0.989 | U | 0.841 | 0.842 | 5.00 | 1.04 | pCi/L | | 02/01/22 15:09 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: G31S

**Date Collected: 12/13/21 14:14**
**Date Received: 12/13/21 15:10**

## Lab Sample ID: 500-209450-10

**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 | 0.740 | | 0.300 | 0.307 | 1.00 | 0.344 | pCi/L | 12/28/21 11:06 | 01/19/22 22:42 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *140* | *X* | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:42* | *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 | 1.28 | | 0.401 | 0.418 | 1.00 | 0.531 | pCi/L | 01/25/22 08:29 | 01/31/22 20:35 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *92.9* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:35* | *1* |
| *Y Carrier* | *88.6* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:35* | *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 | 2.02 | | 0.501 | 0.519 | 5.00 | 0.531 | pCi/L | | 02/01/22 15:09 | 1 |

## Client Sample ID: R08S

**Date Collected: 12/14/21 13:05**
**Date Received: 12/14/21 14:00**

## Lab Sample ID: 500-209450-11

**Matrix: Water**

### Method: 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.683 | | 0.257 | 0.264 | 1.00 | 0.303 | pCi/L | 12/28/21 11:06 | 01/19/22 22:42 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *97.7* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:42* | *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 | 1.13 | | 0.380 | 0.394 | 1.00 | 0.498 | pCi/L | 01/25/22 08:29 | 01/31/22 20:35 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *97.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:35* | *1* |
| *Y Carrier* | *80.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:35* | *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 | 1.81 | | 0.459 | 0.474 | 5.00 | 0.498 | pCi/L | | 02/01/22 15:09 | 1 |

## Client Sample ID: G30S

**Date Collected: 12/15/21 09:03**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-12

**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 | | 0.330 | 0.338 | 1.00 | 0.360 | pCi/L | 12/28/21 11:06 | 01/19/22 22:43 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *74.2* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:43* | *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 | 1.61 | | 0.646 | 0.662 | 1.00 | 0.905 | pCi/L | 01/25/22 08:29 | 01/31/22 20:36 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *54.5* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *1* |
| *Y Carrier* | *86.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *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 | 2.45 | | 0.725 | 0.743 | 5.00 | 0.905 | pCi/L | | 02/01/22 15:09 | 1 |

## Client Sample ID: R32S

**Date Collected: 12/15/21 10:44**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-13

**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 | 1.41 | | 0.447 | 0.465 | 1.00 | 0.457 | pCi/L | 12/28/21 11:06 | 01/19/22 22:43 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *64.9* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:43* | *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 | | 0.391 | 0.408 | 1.00 | 0.503 | pCi/L | 01/25/22 08:29 | 01/31/22 20:36 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *93.4* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *1* |
| *Y Carrier* | *87.1* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *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 | 2.68 | | 0.594 | 0.619 | 5.00 | 0.503 | pCi/L | | 02/01/22 15:09 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: DUP

**Date Collected: 12/15/21 10:44**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-14

**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 | 1.28 | | 0.378 | 0.395 | 1.00 | 0.402 | pCi/L | 12/28/21 11:06 | 01/19/22 22:43 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *93.7* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:43* | *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 | 1.01 | | 0.371 | 0.383 | 1.00 | 0.513 | pCi/L | 01/25/22 08:29 | 01/31/22 20:36 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *97.7* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *1* |
| *Y Carrier* | *87.1* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *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 | 2.29 | | 0.530 | 0.550 | 5.00 | 0.513 | pCi/L | | 02/01/22 15:09 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: G46S

**Date Collected: 12/15/21 12:19**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-15

**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 | 1.25 | | 0.383 | 0.399 | 1.00 | 0.389 | pCi/L | 12/28/21 11:06 | 01/19/22 22:43 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *90.7* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:43* | *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 | 1.36 | | 0.400 | 0.419 | 1.00 | 0.508 | pCi/L | 01/25/22 08:29 | 01/31/22 20:36 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *93.7* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *1* |
| *Y Carrier* | *84.9* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *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 | 2.61 | | 0.554 | 0.579 | 5.00 | 0.508 | pCi/L | | 02/01/22 15:09 | 1 |

## Client Sample ID: G44S

**Date Collected: 12/16/21 09:07**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-17

**Matrix: GW**

### Method: 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-226** | **0.684** | | 0.358 | 0.363 | 1.00 | 0.468 | pCi/L | 12/28/21 11:06 | 01/19/22 22:43 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *68.2* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:43* | *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 | 0.437 | U | 0.334 | 0.336 | 1.00 | 0.525 | pCi/L | 01/25/22 08:29 | 01/31/22 20:36 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *91.9* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *1* |
| *Y Carrier* | *84.5* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *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** | **1.12** | | 0.490 | 0.495 | 5.00 | 0.525 | pCi/L | | 02/01/22 15:09 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: G45S

**Date Collected: 12/16/21 10:01**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-18

**Matrix: GW**

### Method: 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.03 | | 0.347 | 0.359 | 1.00 | 0.378 | pCi/L | 12/28/21 11:06 | 01/19/22 22:43 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *96.5* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:43* | *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 | 0.713 | | 0.356 | 0.362 | 1.00 | 0.524 | pCi/L | 01/25/22 08:29 | 01/31/22 20:36 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *96.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *1* |
| *Y Carrier* | *84.1* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *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 | 1.74 | | 0.497 | 0.510 | 5.00 | 0.524 | pCi/L | | 02/01/22 15:09 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: G48S

**Date Collected: 12/16/21 11:13**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-19

**Matrix: GW**

### Method: 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.821 | | 0.308 | 0.317 | 1.00 | 0.353 | pCi/L | 12/28/21 11:06 | 01/19/22 22:38 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.8* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:38* | *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 | 1.05 | | 0.363 | 0.376 | 1.00 | 0.483 | pCi/L | 01/25/22 08:29 | 01/31/22 20:36 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *97.2* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *1* |
| *Y Carrier* | *86.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *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 | 1.87 | | 0.476 | 0.492 | 5.00 | 0.483 | pCi/L | | 02/01/22 15:09 | 1 |

## Client Sample ID: G47S

**Date Collected: 12/16/21 13:10**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-20

**Matrix: GW**

### Method: 903.0 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-226** | **0.785** | | 0.267 | 0.276 | 1.00 | 0.299 | pCi/L | 12/28/21 11:06 | 01/19/22 22:38 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *83.6* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:38* | *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 | 0.378 | U | 0.262 | 0.264 | 1.00 | 0.409 | pCi/L | 01/25/22 08:29 | 01/31/22 20:36 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *94.4* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *1* |
| *Y Carrier* | *86.7* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *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** | **1.16** | | 0.374 | 0.382 | 5.00 | 0.409 | pCi/L | | 02/01/22 15:09 | 1 |

# Definitions/Glossary

Client: KPRG and Associates, Inc. Job ID: 500-209450-2
Project/Site: Joliet #9 (Quarry) CCR 4Q21

## Qualifiers

### Rad

| Qualifier | Qualifier Description |
|---|---|
| G | The Sample MDC is greater than the requested RL. |
| U | Result is less than the sample detection limit. |
| X | Carrier is outside acceptance limits. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| 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: 543783

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total/NA | Water | PrecSep-21 | |
| 500-209450-2 | T06S | Total/NA | Water | PrecSep-21 | |
| 500-209450-3 | T02S | Total/NA | Water | PrecSep-21 | |
| 500-209450-4 | T08S | Total/NA | Water | PrecSep-21 | |
| 500-209450-5 | T03S | Total/NA | Water | PrecSep-21 | |
| 500-209450-6 | T05S | Total/NA | Water | PrecSep-21 | |
| 500-209450-7 | G20S | Total/NA | Water | PrecSep-21 | |
| 500-209450-8 | T01S | Total/NA | Water | PrecSep-21 | |
| 500-209450-9 | G33S | Total/NA | Water | PrecSep-21 | |
| 500-209450-10 | G31S | Total/NA | Water | PrecSep-21 | |
| 500-209450-11 | R08S | Total/NA | Water | PrecSep-21 | |
| 500-209450-12 | G30S | Total/NA | Water | PrecSep-21 | |
| 500-209450-13 | R32S | Total/NA | Water | PrecSep-21 | |
| 500-209450-14 | DUP | Total/NA | Water | PrecSep-21 | |
| 500-209450-15 | G46S | Total/NA | Water | PrecSep-21 | |
| 500-209450-17 | G44S | Total/NA | GW | PrecSep-21 | |
| 500-209450-18 | G45S | Total/NA | GW | PrecSep-21 | |
| 500-209450-19 | G48S | Total/NA | GW | PrecSep-21 | |
| 500-209450-20 | G47S | Total/NA | GW | PrecSep-21 | |
| MB 160-543783/22-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-543783/1-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| 500-209450-20 DU | G47S | Total/NA | GW | PrecSep-21 | |

### Prep Batch: 547981

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-209450-1 | T09S | Total/NA | Water | PrecSep_0 | |
| 500-209450-2 | T06S | Total/NA | Water | PrecSep_0 | |
| 500-209450-3 | T02S | Total/NA | Water | PrecSep_0 | |
| 500-209450-4 | T08S | Total/NA | Water | PrecSep_0 | |
| 500-209450-5 | T03S | Total/NA | Water | PrecSep_0 | |
| 500-209450-6 | T05S | Total/NA | Water | PrecSep_0 | |
| 500-209450-7 | G20S | Total/NA | Water | PrecSep_0 | |
| 500-209450-8 | T01S | Total/NA | Water | PrecSep_0 | |
| 500-209450-9 | G33S | Total/NA | Water | PrecSep_0 | |
| 500-209450-10 | G31S | Total/NA | Water | PrecSep_0 | |
| 500-209450-11 | R08S | Total/NA | Water | PrecSep_0 | |
| 500-209450-12 | G30S | Total/NA | Water | PrecSep_0 | |
| 500-209450-13 | R32S | Total/NA | Water | PrecSep_0 | |
| 500-209450-14 | DUP | Total/NA | Water | PrecSep_0 | |
| 500-209450-15 | G46S | Total/NA | Water | PrecSep_0 | |
| 500-209450-17 | G44S | Total/NA | GW | PrecSep_0 | |
| 500-209450-18 | G45S | Total/NA | GW | PrecSep_0 | |
| 500-209450-19 | G48S | Total/NA | GW | PrecSep_0 | |
| 500-209450-20 | G47S | Total/NA | GW | PrecSep_0 | |
| MB 160-547981/22-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-547981/1-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| LCSD 160-547981/2-A | Lab Control Sample Dup | Total/NA | Water | PrecSep_0 | |

## Method: 903.0 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-543783/22-A**
**Matrix: Water**
**Analysis Batch: 547143**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 543783**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.01366 | U | 0.168 | 0.168 | 1.00 | 0.326 | pCi/L | 12/28/21 11:06 | 01/19/22 22:39 | 1 |

| *Carrier* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *100* | | *40 - 110* | *12/28/21 11:06* | *01/19/22 22:39* | *1* |

**Lab Sample ID: LCS 160-543783/1-A**
**Matrix: Water**
**Analysis Batch: 547143**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 543783**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | | | 15.1 | 14.99 | | 1.76 | 1.00 | 0.372 | pCi/L | 99 | 75 - 125 | | |

| *Carrier* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *86.6* | | *40 - 110* |

**Lab Sample ID: 500-209450-20 DU**
**Matrix: GW**
**Analysis Batch: 547143**

**Client Sample ID: G47S**
**Prep Type: Total/NA**
**Prep Batch: 543783**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.785 | | | 0.7378 | | 0.249 | 1.00 | 0.250 | pCi/L | | | 0.09 | 1 |

| *Carrier* | *DU %Yield* | *DU Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *95.5* | | *40 - 110* |

## Method: 904.0 - Radium-228 (GFPC)

**Lab Sample ID: MB 160-547981/22-A**
**Matrix: Water**
**Analysis Batch: 548985**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 547981**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.3432 | U | 0.246 | 0.248 | 1.00 | 0.377 | pCi/L | 01/25/22 08:29 | 01/31/22 20:36 | 1 |

| *Carrier* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *79.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *1* |
| *Y Carrier* | *83.0* | | *40 - 110* | *01/25/22 08:29* | *01/31/22 20:36* | *1* |

## Method: 904.0 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: LCS 160-547981/1-A**
**Matrix: Water**
**Analysis Batch: 548987**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 547981**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | | | 8.91 | 10.35 | | 1.21 | 1.00 | 0.382 | pCi/L | 116 | 75 - 125 | | |

| *Carrier* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *88.9* | | *40 - 110* |
| *Y Carrier* | *80.7* | | *40 - 110* |

**Lab Sample ID: LCSD 160-547981/2-A**
**Matrix: Water**
**Analysis Batch: 548987**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 547981**

| Analyte | | | Spike Added | LCSD Result | LCSD Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec. Limits | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | | | 8.91 | 10.21 | | 1.16 | 1.00 | 0.311 | pCi/L | 115 | 75 - 125 | 0.06 | 1 |

| *Carrier* | *LCSD %Yield* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *96.7* | | *40 - 110* |
| *Y Carrier* | *84.5* | | *40 - 110* |

# Chain of Custody Record

555248

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 (Quarry) CCR | ☐ 1 week | | | |
| Site: 4R21 GW | ☐ 2 days | | | Job / SDG No: 500-209450 |
| PO # | ☐ 1 day | | | |

500-209450 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | T095 | 12/08/21 | 1128 | | W | 5 | | | / | / | / | / | / | |
| 2 | T065 | 12/08/21 | 1306 | | 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 _____

| | Company | Date/Time | | Company | Date/Time |
|---|---|---|---|---|---|
| Relinquished by | TRE | 12/08/21 1429 | Received by | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| Relinquished by | Company | Date/Time | Received in Laboratory by: Paula Buckley | Company: STA CHI | Date/Time: 12/8/21 1429 |

# Chain of Custody Record

555249

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 (Quarry) CCR | ☐ 1 week | | | |
| Site: 4021 GW | ☐ 2 days | | | Job / SDG No |
| P O # | ☐ 1 day | | | 500-209450 |

500-209450 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 TO2S | 12/09/21 | 0939 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 4 TO8S | 12/09/21 | 1148 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 5 TO3S | 12/09/21 | 1342 | | 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 3.2 Corr'd _____ Therm ID No _____

| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
|---|---|---|---|---|---|
| [signature] | TRC | 12/09/21 @ 1448 | | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| | | | | | |
| Relinquished by | Company | Date/Time | Received in Laboratory by | Company | Date/Time |
| | | | [signature] | ETA | 12/9/21 1448 |

# Chain of Custody Record

555250

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 (Quarry) CCR | ☐ 1 week | | | |
| Site 4021 - GW | ☐ 2 days | | | Job / SDG No |
| P O # | ☐ 1 day | | | 500-209450 |

500-209450 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOSS | 12/10/21 | 0955 | | W | 5 | | | / | / | / | / | / | |
| GZOS | 12/10/21 | 1125 | | W | 5 | | | / | / | / | / | / | |
| | | | | | | | | | | | | | |
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**Preservation Used:** 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

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

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

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

**Special Instructions/QC Requirements & Comments:**

1.0

| Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd _____ Corr'd _____ Therm ID No _____ | | | |
|---|---|---|---|---|---|
| Relinquished by | Company TRC | Date/Time 12/10/21 1407 | Received by | Company | Date/Time |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| Relinquished by | Company | Date/Time | Received in Laboratory by Stephanie Hernandez | Company ETA-(H) | Date/Time 12/10/21 1407 |

# Chain of Custody Record

555251

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 (Quarry) CCR | ☐ 1 week | | | |
| Site: 4021-EQ | ☐ 2 days | | | Job / SDG No |
| P O # | ☐ 1 day | | | 500-209450 |

500-209450 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOIS | 12/13/21 | 1042 | | W | 5 | | | / | / | / | / | / | |
| G33S | 12/13/21 | 1306 | | W | 5 | | | / | / | / | / | / | |
| G31S | 12/13/21 | 1414 | | W | 5 | | | / | / | / | / | / | |
| | | | | | | | | | | | | | |
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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

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

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

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

**Special Instructions/QC Requirements & Comments:**

Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd 3.9 Corr'd _____ Therm ID No _____

| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
|---|---|---|---|---|---|
| | TRC | 12/13/21 1510 | | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| | | | | | |
| Relinquished by | Company | Date/Time | Received in Laboratory by | Company | Date/Time |
| | | | Shri Koott | ETA | 12/13/21 1510 |

# Chain of Custody Record

555252

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 (Quarry) CCR | ☐ 1 week | | | |
| Site: 4021 - GS | ☐ 2 days | | | Job / SDG No |
| P O # | ☐ 1 day | | | 500-209450 |

| 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 ROBS | 12/14/21 | 1305 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ |

500-209450 COC

Sample Specific Notes

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

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

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

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

**Special Instructions/QC Requirements & Comments:**

| Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd: 3.8 Corr'd _____ Therm ID No _____ | | | |
|---|---|---|---|---|---|
| Relinquished by: | Company: THC | Date/Time: 12/14/21 1400 | 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: EAA | Date/Time: 12/14/21 1400 |

# Chain of Custody Record

541843

eurofins Environment Testing TestAmerica

Address _____

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

TAL-8210

| Client Contact | Project Manager | Site Contact | Date: |
|---|---|---|---|
| Company Name: Midwest Generation EME LLC | Tel/Email. | Lab Contact | Carrier |
| Address | **Analysis Turnaround Time** | | |
| City/State/Zip: Joliet, IL. | ☐ CALENDAR DAYS ☐ WORKING DAYS | | |
| Phone | TAT if different from Below _____ | | |
| Fax | ☐ 2 weeks | | |
| Project Name: Joliet #9 (Energy) CCR | ☐ 1 week | | |
| Site: 4021 - GW | ☐ 2 days | | |
| P O # | ☐ 1 day | | |

500-209450 COC

| COC No |
|---|
| _____ of _____ COCs |
| Sampler |
| **For Lab Use Only** |
| Walk-in Client |
| Lab Sampling |
| Job / SDG No: 500-209450 |

| | 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | G30S | 12/15/21 | 0903 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 13 | R32S | 12/15/21 | 1044 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 14 | DUP | 12/15/21 | 1044 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | of R32S |
| 15 | G46S | 12/15/21 | 1219 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 16 | T04S | 12/15/21 | 1320 | | — | | | | | | | | | No samples due to property development/excavation |

**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**

30

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 |
|---|---|---|---|---|---|
| | TR2 | 12/15/21 1415 | | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| | | | | | |
| Relinquished by | Company | Date/Time | Received in Laboratory by | Company | Date/Time |
| | | | Stephanie Hernandez | EMA-CHI | 12/15/21 1415 |

# Chain of Custody Record

541854

Environment Testing
TestAmerica

500-209450 COC

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: 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: 4021 - GW | ☐ 2 days | | | Job / SDG No: 500-209450 |
| 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 | Metals 14 elements + Hg | TDS, Fl, Cl, SO4 | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | G44S | 12/16/21 | 0907 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 18 | G45S | 12/16/21 | 1001 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 19 | G48S | 12/16/21 | 1113 | | W | 5 | | | ✓ | ✓ | ✓ | ✓ | | |
| 20 | G47S | 12/16/21 | 1310 | | 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 3.7 Corr'd 3.7 | Therm ID No

| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
|---|---|---|---|---|---|
| [signature] | TRC | 12/16/21 1426 | [signature] | CTA | 12/16/21 1426 |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| Relinquished by | Company | Date/Time | Received in Laboratory by | Company | Date/Time |

**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: 500-155261.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@Eurofinset.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-209450-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 12/30/2021 | | | |
| 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 4Q21 | Project #: 50011504 | | | |
| Site: NRG Midwest Generation LSQ Joliet #9 CCR | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

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

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 903.0/PrecSep_21 Standard Target List | 904.0/PrecSep_0 Standard Target List | Ra226Ra228_GFPC | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| T02S (500-209450-3) | 12/9/21 | 09:39 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| T08S (500-209450-4) | 12/9/21 | 11:48 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| T03S (500-209450-5) | 12/9/21 | 13:42 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 | 12/9/21 1030 | EA CHI | FED EX | | |
| 2 | FED EX | | | [signature] | DEC 10 2021 0940 | EA STL |
| 3 | | | | Autumn R. Johns... | | |

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

Ver: 06/08/2021

**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: 500-155261.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@Eurofinset.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-209450-2 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 1/13/2022 | | | |
| 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 4Q21 | 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 (500-209450-1) | 12/8/21 | 11:28 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| T06S (500-209450-2) | 12/8/21 | 13:06 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 | 12/9/21 1630 | EMI-CHI | FED EX | | |
| 2 | FED EX | | | [signature] | DEC 10 2021 0940 | EMI STL |
| 3 | | | | Autumn R. Johnson | | |

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

Ver: 06/08/2021

**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: 500-155305.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@Eurofinset.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-209450-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 12/30/2021 | | | |
| 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 4Q21 | 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: | | | | | | | | |
| T05S (500-209450-6) | 12/10/21 | 09:55 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| G20S (500-209450-7) | 12/10/21 | 11:25 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 Hemenway | 12/10/21 1630 | EA-CHI | FED EX | | |
| Relinquished by: FED EX | Date/Time: | Company | Received by: | Date/Time: DEC 11 2021 0910 | Company EA STL |
| Relinquished by: | Date/Time: | Company | Received by: Autumn R. Johnson | Date/Time: | Company |

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

Ver: 06/08/2021

**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: 500-155420.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@Eurofinset.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-209450-2 |
| Address: 13715 Rider Trail North, . | Due Date Requested: 12/30/2021 | | | |
| 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 4Q21 | Project #: 50011504 | | | |
| Site: NRG Midwest Generation LSQ Joliet #9 CCR | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

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

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 903.0/PrecSep_21 Standard Target List | 904.0/PrecSep_0 Standard Target List | Ra226Ra228_GFPC | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| T01S (500-209450-8) | 12/13/21 | 10:42 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| G33S (500-209450-9) | 12/13/21 | 13:06 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| G31S (500-209450-10) | 12/13/21 | 14:14 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 |
|---|---|---|---|---|---|---|
| 1 | [signature] FED EX | 12/14/21 1515 | ETA | FED EX | | |
| 2 | Relinquished by: | Date/Time: | Company | Received by: [signature] Autumn R. Johnson | DEC 15 2021 1005 | ETA STL |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

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

Ver: 06/08/2021

**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: 500-155420.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@Eurofinset.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-209450-1 |
| Address: 13715 Rider Trail North, . | Due Date Requested: 12/30/2021 | | | |
| 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 4Q21 | 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: | | | | | | | | |
| R08S (500-209450-11) | 12/14/21 | 13:05 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |

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

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

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

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | [signature] FED EX | 12/14/21 1515 | ETA | FED EX | | |
| 2 | Relinquished by: FED EX | Date/Time: | Company | Received by: [signature] Autumn R. Johnson | Date/Time: DEC 15 2021 1005 | Company ETA STL |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

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

Ver: 06/08/2021

**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: 500-155474.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@Eurofinset.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-209450-1 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 12/29/2021 | | | |
| 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 4Q21 | 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: | | | | | | | | |
| G30S (500-209450-12) | 12/15/21 | 09:03 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| R32S (500-209450-13) | 12/15/21 | 10:44 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| DUP (500-209450-14) | 12/15/21 | 10:44 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| G46S (500-209450-15) | 12/15/21 | 12:19 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 | [signature] | 12/15/21 1600 | [illegible] | FED EX | | |
| 2 | FED EX | | | [signature] | DEC 16 2021 1000 | EA STL |
| 3 | | | | Autumn R. Johnson | | |

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

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

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Mockler, Diana J | Carrier Tracking No(s): | COC No: 500-155506.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@Eurofinset.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-209450-2 |
| Address: 13715 Rider Trail North, . | Due Date Requested: 12/29/2021 | | | |
| 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 4Q21 | 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: | | | | | | | | |
| G44S (500-209450-17) | 12/16/21 | 09:07 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| G45S (500-209450-18) | 12/16/21 | 10:01 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| G48S (500-209450-19) | 12/16/21 | 11:13 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| G47S (500-209450-20) | 12/16/21 | 13:10 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 | [signature] | 12/17/21 1000 | FEDEX | FED EX | | |
| 2 | FED EX | | | [signature] | DEC 20 2021 1000 | ETA STL |
| 3 | | | | Autumn R. Johnson | | |

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

Ver: 06/08/2021

# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-209450-2

**Login Number: 209450**
**List Number: 1**
**Creator: Buckley, Paula M**

**List Source: Eurofins Chicago**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 2.1,3.2,1.0,3.9,3.8,3.0,3.7 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-209450-2

**Login Number: 209450**
**List Number: 2**
**Creator: Johnson, Autumn R**

**List Source: Eurofins St. Louis**
**List Creation: 12/10/21 01:40 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. | 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: 500-209450-2

**Login Number: 209450**
**List Number: 3**
**Creator: Johnson, Autumn R**

**List Source: Eurofins St. Louis**
**List Creation: 12/11/21 10:50 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. | 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: 500-209450-2

**Login Number: 209450**
**List Number: 4**
**Creator: Johnson, Autumn R**

**List Source: Eurofins St. Louis**
**List Creation: 12/15/21 12:15 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. | 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: 500-209450-2

**Login Number: 209450**
**List Number: 5**
**Creator: Worthington, Sierra M**

**List Source: Eurofins St. Louis**
**List Creation: 12/17/21 07:27 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. | 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: 500-209450-2

**Login Number: 209450**
**List Number: 6**
**Creator: Johnson, Autumn R**

**List Source: Eurofins St. Louis**
**List Creation: 12/20/21 11:39 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. | 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 | |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: T09S
**Date Collected: 12/08/21 11:28**
**Date Received: 12/08/21 14:29**

## Lab Sample ID: 500-209450-1
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547143 | 01/19/22 20:34 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548987 | 01/31/22 20:30 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: T06S
**Date Collected: 12/08/21 13:06**
**Date Received: 12/08/21 14:29**

## Lab Sample ID: 500-209450-2
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547121 | 01/19/22 22:45 | ANW | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548987 | 01/31/22 20:30 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: T02S
**Date Collected: 12/09/21 09:39**
**Date Received: 12/09/21 14:48**

## Lab Sample ID: 500-209450-3
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547121 | 01/19/22 22:45 | ANW | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548987 | 01/31/22 20:30 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: T08S
**Date Collected: 12/09/21 11:48**
**Date Received: 12/09/21 14:48**

## Lab Sample ID: 500-209450-4
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547121 | 01/19/22 22:45 | ANW | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548987 | 01/31/22 20:30 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: T03S
**Date Collected: 12/09/21 13:42**
**Date Received: 12/09/21 14:48**

## Lab Sample ID: 500-209450-5
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547121 | 01/19/22 22:46 | ANW | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548987 | 01/31/22 20:30 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: T05S
**Date Collected: 12/10/21 09:55**
**Date Received: 12/10/21 14:07**

## Lab Sample ID: 500-209450-6
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547143 | 01/19/22 22:37 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548987 | 01/31/22 20:32 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: G20S
**Date Collected: 12/10/21 11:25**
**Date Received: 12/10/21 14:07**

## Lab Sample ID: 500-209450-7
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547121 | 01/19/22 22:46 | ANW | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548987 | 01/31/22 20:32 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: T01S
**Date Collected: 12/13/21 10:42**
**Date Received: 12/13/21 15:10**

## Lab Sample ID: 500-209450-8
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547121 | 01/19/22 22:46 | ANW | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548987 | 01/31/22 20:32 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: G33S
**Date Collected: 12/13/21 13:06**
**Date Received: 12/13/21 15:10**

## Lab Sample ID: 500-209450-9
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547142 | 01/19/22 22:42 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:35 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: G31S
**Date Collected: 12/13/21 14:14**
**Date Received: 12/13/21 15:10**

## Lab Sample ID: 500-209450-10
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547142 | 01/19/22 22:42 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:35 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: R08S
**Date Collected: 12/14/21 13:05**
**Date Received: 12/14/21 14:00**

## Lab Sample ID: 500-209450-11
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547142 | 01/19/22 22:42 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:35 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: G30S
**Date Collected: 12/15/21 09:03**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-12
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547142 | 01/19/22 22:43 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:36 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: R32S
**Date Collected: 12/15/21 10:44**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-13
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547142 | 01/19/22 22:43 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:36 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: DUP
**Date Collected: 12/15/21 10:44**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-14
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547142 | 01/19/22 22:43 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:36 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: G46S
**Date Collected: 12/15/21 12:19**
**Date Received: 12/15/21 14:15**

## Lab Sample ID: 500-209450-15
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547142 | 01/19/22 22:43 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:36 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: G44S
**Date Collected: 12/16/21 09:07**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-17
**Matrix: GW**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547142 | 01/19/22 22:43 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:36 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Joliet #9 (Quarry) CCR 4Q21

Job ID: 500-209450-2

## Client Sample ID: G45S
**Date Collected: 12/16/21 10:01**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-18
**Matrix: GW**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547142 | 01/19/22 22:43 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:36 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: G48S
**Date Collected: 12/16/21 11:13**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-19
**Matrix: GW**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547143 | 01/19/22 22:38 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:36 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

## Client Sample ID: G47S
**Date Collected: 12/16/21 13:10**
**Date Received: 12/16/21 14:26**

## Lab Sample ID: 500-209450-20
**Matrix: GW**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 543783 | 12/28/21 11:06 | LPS | TAL SL |
| Total/NA | Analysis | 903.0 | | 1 | 547143 | 01/19/22 22:38 | FLC | TAL SL |
| Total/NA | Prep | PrecSep_0 | | | 547981 | 01/25/22 08:29 | LPS | TAL SL |
| Total/NA | Analysis | 904.0 | | 1 | 548985 | 01/31/22 20:36 | FLC | TAL SL |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 549037 | 02/01/22 15:09 | SCB | TAL SL |

**Laboratory References:**

TAL SL = Eurofins 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 4Q21

Job ID: 500-209450-2

## Method: 903.0 - Radium-226 (GFPC)

**Matrix: GW** **Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | Ba (40-110) |
| 500-209450-17 | G44S | 68.2 |
| 500-209450-18 | G45S | 96.5 |
| 500-209450-19 | G48S | 83.8 |
| 500-209450-20 | G47S | 83.6 |
| 500-209450-20 DU | G47S | 95.5 |

**Tracer/Carrier Legend**

Ba = Ba Carrier

## 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) |
| 500-209450-1 | T09S | 71.7 |
| 500-209450-2 | T06S | 83.1 |
| 500-209450-3 | T02S | 34.3 X |
| 500-209450-4 | T08S | 77.3 |
| 500-209450-5 | T03S | 88.1 |
| 500-209450-6 | T05S | 92.4 |
| 500-209450-7 | G20S | 78.3 |
| 500-209450-8 | T01S | 63.1 |
| 500-209450-9 | G33S | 41.2 |
| 500-209450-10 | G31S | 140 X |
| 500-209450-11 | R08S | 97.7 |
| 500-209450-12 | G30S | 74.2 |
| 500-209450-13 | R32S | 64.9 |
| 500-209450-14 | DUP | 93.7 |
| 500-209450-15 | G46S | 90.7 |
| LCS 160-543783/1-A | Lab Control Sample | 86.6 |
| MB 160-543783/22-A | Method Blank | 100 |

**Tracer/Carrier Legend**

Ba = Ba Carrier

## Method: 904.0 - Radium-228 (GFPC)

**Matrix: GW** **Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | Ba (40-110) | Y (40-110) |
| 500-209450-17 | G44S | 91.9 | 84.5 |
| 500-209450-18 | G45S | 96.0 | 84.1 |
| 500-209450-19 | G48S | 97.2 | 86.0 |
| 500-209450-20 | G47S | 94.4 | 86.7 |

**Tracer/Carrier Legend**

Ba = Ba Carrier
Y = Y Carrier

# Tracer/Carrier Summary

Client: KPRG and Associates, Inc.
Job ID: 500-209450-2
Project/Site: Joliet #9 (Quarry) CCR 4Q21

## 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) | | | | | | | | |
| 500-209450-1 | T09S | 98.0 | 84.9 | | | | | | | | |
| 500-209450-2 | T06S | 85.4 | 86.7 | | | | | | | | |
| 500-209450-3 | T02S | 43.2 | 81.1 | | | | | | | | |
| 500-209450-4 | T08S | 87.9 | 82.2 | | | | | | | | |
| 500-209450-5 | T03S | 94.4 | 86.4 | | | | | | | | |
| 500-209450-6 | T05S | 58.8 | 86.4 | | | | | | | | |
| 500-209450-7 | G20S | 96.0 | 89.0 | | | | | | | | |
| 500-209450-8 | T01S | 96.0 | 87.5 | | | | | | | | |
| 500-209450-9 | G33S | 71.7 | 86.7 | | | | | | | | |
| 500-209450-10 | G31S | 92.9 | 88.6 | | | | | | | | |
| 500-209450-11 | R08S | 97.0 | 80.0 | | | | | | | | |
| 500-209450-12 | G30S | 54.5 | 86.0 | | | | | | | | |
| 500-209450-13 | R32S | 93.4 | 87.1 | | | | | | | | |
| 500-209450-14 | DUP | 97.7 | 87.1 | | | | | | | | |
| 500-209450-15 | G46S | 93.7 | 84.9 | | | | | | | | |
| LCS 160-547981/1-A | Lab Control Sample | 88.9 | 80.7 | | | | | | | | |
| LCSD 160-547981/2-A | Lab Control Sample Dup | 96.7 | 84.5 | | | | | | | | |
| MB 160-547981/22-A | Method Blank | 79.0 | 83.0 | | | | | | | | |

**Tracer/Carrier Legend**

Ba = Ba Carrier
Y = Y Carrier