# DATA SUMMARY POSTING

Station: Midwest Generation Will County Generating Station

Regulated Unit(s): Pond 2 S (IEPA ID No. W1978100011-03)
Pond 3 S (IEPA ID No. W1978100011-04)

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 2022 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 Data, Pond 2S and Pond 3S, Midwest Generation, LLC, Will County Generating Station, Romeoville, 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-05 up-gradient | 11/11/2015 | 6.1 | 220 | 110 | 0.31 | 7.24 | 770 | 1,900 | < 0.003 | 0.0014 | 0.071 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.013 | < 0.0002 | 0.0750 | -0.168 | 0.031 | < 0.002 |
| | 2/18/2016 | 4.4 | 230 | 120 | 0.31 | 6.99 | 730 | 1,600 | < 0.003 | 0.0021 | 0.058 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.017 | < 0.0002 | 0.079 | 0.468 | 0.019 | < 0.002 |
| | 5/26/2016 | 3.7 | 170 | 110 | 0.33 | 6.73 | 670 | 1,500 | < 0.003 | 0.0023 | 0.055 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.011 | < 0.0002 | 0.077 | < 0.402 | 0.019 | < 0.002 |
| | 8/10/2016 | 3.6 | 67 | 120 | 0.72 | 8.62 | 480 | 970 | < 0.003 | 0.0044 | 0.043 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.010 | F1 < 0.0002 | 0.14 | < 0.394 | 0.0049 | < 0.002 |
| | 10/26/2016 | 3.6 | 44 | 120 | 0.70 | 9.08 | 410 | 920 | < 0.003 | 0.0047 | 0.033 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.12 | 0.592 | < 0.0025 | < 0.002 |
| | 2/1/2017 | 4.6 | 250 | 48 | 0.35 | 6.81 | 530 | 1,600 | < 0.003 | 0.0015 | 0.058 | * < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.016 | ^ < 0.0002 | 0.048 | < 0.424 | 0.029 | < 0.002 |
| | 5/11/2017 | 4.0 | 140 | 85 | 0.31 | 7.86 | 610 | 1,200 | < 0.003 | 0.0035 | 0.053 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.093 | < 0.388 | < 0.0025 | < 0.002 |
| | 6/27/2017 | 3.8 | 83 | 99 | 0.53 | 7.95 | 500 | 1,000 | < 0.003 | 0.0037 | 0.045 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.11 | 0.412 | < 0.0025 | < 0.002 |
| | *9/8/2017* | 4.8 | 89 | 78 | 0.52 | 9.40 | 490 | 1,000 | < 0.003 | 0.0038 | V 0.069 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.095 | 0.486 | 0.0047 | < 0.002 |
| | *11/16/2017* | 4.8 | 180 | 52 | 0.45 | 6.70 | 650 | 1,500 | < 0.003 | 0.0028 | 0.065 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.021 | < 0.0002 | 0.064 | < 0.379 | 0.012 | < 0.002 |
| | *5/2/2018* | 3.6 | 200 | 32 | 0.39 | 7.23 | 510 | 1,300 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *10/3/2018* | 4.9 | 150 | 55 | 0.48 | 7.07 | 430 | 1,200 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/29/2019* | 4.1 | 61 | 91 | 0.59 | 9.10 | 380 | 870 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *12/6/2019* | 4.9 | 170 | 31 | 0.41 | 6.95 | 440 | 1,200 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/22/2020* | 4.5 | 52 | 70 | 0.59 | 7.39 | 300 | 870 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *11/4/2020* | 5.0 | 130 | 29 | 0.38 | 7.06 | 410 | 1,100 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/24/2021* | 4.7 | 120 | 28 | 0.53 | 7.07 | 430 | 1,000 | < 0.003 | 0.0011 | 0.046 | ^1+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.015 | < 0.0002 | 0.063 | < 0.492 | 0.042 | < 0.002 |
| | *8/24/2021* | 4.6 | 33 | 45 | 0.74 | 9.42 | 410 | 580 | < 0.003 | 0.0054 | 0.028 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.091 | 1.230 | < 0.0025 | < 0.002 |
| | *11/23/2021* | 5.5 | 140 | 22 | 0.44 | 6.80 | 370 | 1,100 | < 0.003 | 0.0035 | 0.066 | ^1+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.017 | < 0.0002 | 0.066 | 0.784 | 0.012 | < 0.002 |
| | *2/24/2022* | 4.9 | 210 | 25 | 0.39 | 6.73 | 660 | 1,400 | < 0.003 | 0.0092 | 0.077 | < ^1+ 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 0.059 | < 0.415 | 0.048 | < 0.002 |
| | *6/16/2022* | 5.1 | 120 | 41 | 0.34 | 7.05 | 510 | 1,100 | < 0.003 | 0.0037 | 0.055 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.011 | < 0.0002 | 0.064 | < 0.471 | 0.008 | < 0.002 |
| | *8/25/2022* | 6.6 | 130 | 20 | 0.4 | 6.69 | 300 | 940 | < 0.003 | 0.0043 | 0.072 | < 0.001 | < ^1+ 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.016 | < 0.0002 | 0.061 | < 0.570 | 0.0056 | < 0.002 |
| | *11/15/2022* | 8.9 | 150 | 9.8 | 0.72 | 6.78 | 310 | 930 | < 0.003 | 0.032 | 0.099 | < ^+ 0.001 | 0.004 | 0.0083 | < 0.001 | < 0.0005 | 0.02 | < 0.0002 | 0.1 | < 0.569 | 0.089 | < 0.002 |
| MW-06 up-gradient | 11/10/2015 | 3.0 | 52 | 100 | 0.55 | 8.63 | 300 | 660 | < 0.003 | 0.0016 | 0.048 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.011 | < 0.0002 | 0.0670 | -0.383 | 0.0039 | < 0.002 |
| | 2/18/2016 | 2.5 | 74 | 150 | 0.47 | 8.58 | 280 | 650 | < 0.003 | 0.0014 | 0.068 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.015 | < 0.0002 | 0.0630 | 0.412 | < 0.0025 | < 0.002 |
| | 5/26/2016 | 2.7 | 86 | 92 | 0.44 | 7.79 | 350 | 800 | < 0.003 | 0.002 | 0.068 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.012 | < 0.0002 | 0.042 | < 0.422 | < 0.0025 | < 0.002 |
| | 8/11/2016 | 3.6 | 110 | 58 | 0.35 | 7.74 | 330 | 840 | < 0.003 | 0.0029 | 0.086 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.017 | < 0.0002 | 0.038 | < 0.339 | < 0.0025 | < 0.002 |
| | 10/26/2016 | 3.8 | 86 | 74 | 0.40 | 8.16 | 220 | 800 | < 0.003 | 0.003 | 0.074 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.013 | < 0.0002 | 0.043 | < 0.531 | < 0.0025 | < 0.002 |
| | 2/1/2017 | 3.4 | 70 | 83 | 0.41 | 7.88 | 260 | 700 | < 0.003 | 0.0043 | 0.068 | * < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.012 | ^ < 0.0002 | 0.05 | < 0.511 | 0.0035 | < 0.002 |
| | 5/11/2017 | 3.0 | 75 | 84 | 0.28 | 8.68 | 330 | 570 | < 0.003 | 0.002 | 0.054 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00054 | 0.011 | < 0.0002 | 0.054 | < 0.388 | < 0.0025 | < 0.002 |
| | 6/27/2017 | 3.1 | 65 | 74 | 0.38 | 8.15 | 330 | 710 | < 0.003 | 0.0014 | 0.069 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.012 | < 0.0002 | 0.046 | 0.408 | < 0.0025 | < 0.002 |
| | *9/7/2017* | 3.5 | 75 | 67 | 0.40 | 8.20 | 300 | 740 | < 0.003 | 0.0025 | 0.077 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.013 | < 0.0002 | 0.044 | 0.397 | < 0.0025 | < 0.002 |
| | *11/16/2017* | 3.9 | 88 | 54 | 0.39 | 7.59 | 280 | 810 | < 0.003 | 0.0028 | 0.077 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.017 | < 0.0002 | 0.038 | 0.491 | 0.012 | < 0.002 |
| | *5/3/2018* | 3.0 | 91 | 52 | 0.26 | 6.91 | *530* | 750 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *7/25/2018 R* | NA | NA | NA | NA | 7.47 | 280 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *10/3/2018* | 3.5 | 93 | 44 | 0.31 | 7.83 | 240 | 720 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/29/2019* | 4.3 | 120 | 38 | 0.21 | 7.51 | 350 | 1,000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *7/3/2019 R* | 3.2 | NA | NA | NA | 8.28 | NA | 740 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *12/6/2019* | 4.2 | 98 | 31 | 0.33 | 7.91 | 210 | 740 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/22/2020* | 3.4 | 98 | 56 | 0.31 | 7.47 | 180 | 710 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *11/3/2020* | 3.3 | 100 | 43 | 0.36 | 7.29 | 170 | 700 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/24/2021* | 2.6 | 99 | 46 | 0.33 | 7.65 | 160 | 610 | < 0.003 | 0.0025 | 0.08 | ^1+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.016 | < 0.0002 | 0.017 | 0.576 | < 0.0025 | < 0.002 |
| | *8/24/2021* | 2.9 | 100 | 100 | 0.35 | 7.09 | 170 | 370 | < 0.003 | 0.0029 | 0.093 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.021 | < 0.0002 | 0.018 | < 0.468 | < 0.0025 | < 0.002 |
| | *11/23/2021* | 2.6 | 85 | 43 | 0.37 | 7.48 | 150 | 720 | < 0.003 | 0.002 | 0.07 | ^1+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 0.017 | 1.02 | < 0.0025 | < 0.002 |
| | *2/22/2022* | 2.8 | 130 | 35 | 0.33 | 7.29 | 260 | 940 | < 0.003 | 0.0019 | 0.09 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.018 | < 0.0002 | 0.033 | 0.551 | 0.05 | < 0.002 |
| | *6/14/2022* | 2.5 | 110 | 22 | 0.35 | 7.06 | 210 | 610 | < 0.003 | 0.0018 | 0.082 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 0.018 | 1.22 | < 0.0025 | < 0.002 |
| | *8/25/2022* | 2.7 | 110 | 20 | 0.42 | 7.31 | 170 | 750 | < 0.003 | 0.0023 | 0.088 | < 0.001 | < ^1+ 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.018 | < 0.0002 | 0.021 | < 0.519 | < 0.0025 | < 0.002 |
| | *11/15/2022* | 3.2 | 110 | 19 | 0.47 | 7.41 | 160 | 600 | < 0.003 | 0.0017 | 0.083 | < ^+ 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.47 | 0.016 | < 0.0002 | 0.021 | 1.08 | < 0.0025 | < 0.002 |
| MW-09 down-gradient | 11/11/2015 | 1.9 | 56 | 190 | 0.55 | 9.12 | 460 | 750 | < 0.003 | 0.0047 | 0.027 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.14 | -0.2208 | < 0.0025 | < 0.002 |
| | 2/17/2016 | 1.8 | 47 | 160 | 0.55 | 9.10 | 250 | 600 | < 0.003 | 0.0051 | 0.027 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00065 | < 0.01 | < 0.0002 | 0.089 | < 0.373 | < 0.0025 | < 0.002 |
| | 5/24/2016 | 1.6 | 48 | 180 | 0.51 | 8.79 | 240 | 640 | < 0.003 | 0.0043 | 0.027 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00071 | < 0.01 | < 0.0002 | 0.079 | 0.508 | < 0.0025 | < 0.002 |
| | 8/9/2016 | 2.2 | 53 | 140 | 0.48 | 8.35 | 280 | 750 | < 0.003 | 0.0052 | 0.031 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.14 | 0.639 | < 0.0025 | < 0.002 |
| | 10/26/2016 | 2.2 | 33 | 130 | 0.81 | 9.16 | 230 | 660 | < 0.003 | 0.0069 | 0.019 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | < 0.01 | < 0.0002 | 0.11 | 0.608 | < 0.0025 | < 0.002 |
| | 1/31/2017 | 2.0 | 61 | 250 | 0.57 | 8.59 | 180 | 710 | < 0.003 | 0.0063 | 0.038 | * < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | 0.0014 | < 0.01 | ^ < 0.0002 | 0.09 | < 0.45 | < 0.0025 | < 0.002 |
| | 5/9/2017 | 1.8 | 66 | 340 | 0.38 | 8.58 | 250 | 900 | < 0.003 | 0.0052 | 0.038 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | 0.00054 | < 0.01 | < 0.0002 | 0.093 | < 0.361 | < 0.0025 | < 0.002 |
| | 6/27/2017 | 1.9 | 64 | 330 | 0.51 | 7.76 | 240 | 940 | < 0.003 | 0.0046 | 0.039 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | < 0.01 | < 0.0002 | 0.091 | 0.638 | < 0.0025 | < 0.002 |
| | *9/6/2017* | 1.8 | 59 | 310 | 0.51 | 8.98 | 240 | 890 | < 0.003 | 0.0047 | 0.038 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | < 0.01 | < 0.0002 | 0.1 | 0.454 | < 0.0025 | < 0.002 |
| | *11/14/2017* | 2.6 | 160 | 270 | 0.51 | 8.1 | 290 | 910 | < 0.003 | 0.0017 | 0.11 | < 0.001 | < 0.0005 | < 0.005 | < 0.0010 | < 0.0005 | 0.018 | < 0.0002 | 0.026 | < 0.372 | 0.0061 | < 0.002 |
| | *5/1/2018* | 1.7 | 49 | 200 | 0.52 | 7.81 | 430 | 820 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *7/25/2018 R* | NA | NA | NA | NA | NA | 320 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *10/2/2018* | 2.1 | 49 | 170 | 0.55 | 8.09 | 270 | 820 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/29/2019* | 1.5 | 48 | 280 | 0.29 | 8.90 | 150 | 750 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *12/6/2019* | 2.0 | 38 | 140 | 0.46 | 8.65 | 160 | 630 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/26/2020* | 1.3 | 55 | 320 | 0.32 | 8.66 | 140 | 720 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *11/3/2020* | 2.0 | 43 | 240 | 0.55 | 8.64 | 180 | 750 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/26/2021* | 1.6 | 67 | 360 | 0.39 | 8.74 | 180 | 900 | < 0.003 | 0.0044 | 0.054 | ^1+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.054 | 0.741 | < 0.0025 | < 0.002 |
| | *8/25/2021* | 1.9 | 60 | 360 | 0.43 | 9.06 | 210 | 800 | < 0.003 | 0.0065 | 0.049 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.067 | < 0.444 | < 0.0025 | < 0.002 |
| | *11/23/2021* | 1.1 | 30 | 290 | 0.47 | 8.73 | 210 | 900 | < 0.003 | 0.0046 | 0.024 | ^1+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.037 | 0.789 | < 0.0025 | < 0.002 |
| | *2/22/2022* | 1.5 | 49 | 250 | 0.4 | 8.65 | 160 | 900 | < 0.003 | 0.007 | 0.037 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.0065 | < 0.0002 | 0.051 | < 0.409 | < 0.0025 | < 0.002 |
| | *6/15/2022* | 1.9 | 43 | 230 | 0.48 | 8.35 | 180 | 730 | < 0.003 | 0.0071 | 0.036 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.057 | < 0.39 | < 0.0025 | < 0.002 |
| | *8/25/2022* | 2.1 | 38 | 210 | 0.58 | 8.68 | 190 | 770 | < 0.003 | 0.0089 | 0.034 | < 0.001 | < ^1+ 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.065 | 1.22 | < 0.0025 | < 0.002 |
| | *11/16/2022* | 2.3 | 37 | 210 | 0.79 | 8.82 | 160 | 690 | < 0.003 | 0.0094 | 0.036 | < ^+ 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00066 | < 0.01 | < 0.0002 | 0.067 | < 0.51 | < 0.0025 | < 0.002 |

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

*Italics Date* - First round of Detection Monitoring and resample after statistical background establishment.

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

NA - Not analyzed. No confirmation resample required.

R - Resample

V - Serial Dilution exceeds the control limits

^ - 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.

Table 1. Groundwater Analytical Data, Pond 2S and Pond 3S, Midwest Generation, LLC, Will County Generating Station, Romeoville, 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-10 down-gradient | 11/10/2015 | 3.9 | 140 | 140 | 0.77 | 7.34 | 310 | 980 | < 0.003 | 0.015 | 0.096 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.018 | < 0.0002 | 0.068 | 1.341 | < 0.0025 | < 0.002 |
| | 2/16/2016 | 3.6 | 150 | 240 | 0.79 | 7.29 | 290 | 950 | < 0.003 | 0.014 | 0.098 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.021 | < 0.0002 | 0.075 | 0.952 | < 0.0025 | < 0.002 |
| | 5/25/2016 | 3.6 | 120 | 140 | 0.83 | 7.26 | 260 | 1,000 | < 0.003 | 0.034 | 0.096 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00055 | 0.016 | < 0.0002 | 0.065 | 0.51 | < 0.0025 | < 0.002 |
| | 8/10/2016 | 4.3 | 150 | 120 | 0.78 | 7.22 | 230 | 970 | < 0.003 | 0.017 | 0.11 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.021 | < 0.0002 | 0.082 | 0.864 | < 0.0025 | < 0.002 |
| | 10/26/2016 | 3.0 | 160 | 74 | 0.52 | 7.30 | 220 | 1,000 | < 0.003 | 0.022 | 0.11 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.021 | < 0.0002 | 0.030 | 0.458 | < 0.0025 | < 0.002 |
| | 2/2/2017 | 3.7 | 180 | 81 | 0.54 | 7.16 | 160 | 930 | < 0.003 | 0.05 | 0.14 | * < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.0013 | 0.02 | ^ < 0.0002 | 0.031 | < 0.464 | < 0.0025 | < 0.002 |
| | 5/10/2017 | 3.0 | 150 | 100 | 0.44 | 7.83 | 340 | 860 | < 0.003 | 0.02 | 0.11 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.015 | < 0.0002 | 0.066 | 0.882 | < 0.0025 | < 0.002 |
| | 6/27/2017 | 2.8 | 130 | 110 | 0.67 | 7.49 | 250 | 930 | < 0.003 | 0.0072 | 0.096 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.017 | < 0.0002 | 0.080 | 0.953 | < 0.0025 | < 0.002 |
| | *9/7/2017* | 2.8 | 120 | 120 | 0.77 | 7.37 | 290 | 920 | < 0.003 | 0.0076 | 0.086 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | 0.00058 | 0.096 | 0.921 | < 0.0025 | < 0.002 |
| | *11/15/2017* | 4.1 | 140 | 120 | 0.77 | 7.10 | 270 | 1,000 | < 0.003 | 0.015 | 0.11 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.021 | < 0.0002 | 0.071 | 0.893 | < 0.0025 | < 0.002 |
| | *5/1/2018* | 3.2 | 150 | 130 | 0.65 | 7.31 | 280 | 990 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *10/3/2018* | 2.5 | 110 | 140 | 0.89 | 7.60 | 200 | 860 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/29/2019* | 2.8 | 100 | 140 | 0.82 | 7.53 | 260 | 860 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *12/5/2019* | 3.7 | 120 | 110 | 0.93 | 7.21 | 190 | 940 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/27/2020* | 2.3 | 100 | 170 | 0.90 | 7.29 | 280 | 850 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *11/3/2020* | 3.7 | 130 | 140 | 0.87 | 7.02 | 180 | 920 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/25/2021* | 3.0 | 160 | 130 | 0.62 | 7.16 | 160 | 910 | < 0.003 | 0.018 | 0.18 | ^1+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.0054 | 0.02 | < 0.0002 | 0.036 | < 1.14 | < 0.0025 | < 0.002 |
| | *8/26/2021* | 2.5 | 110 | 140 | 0.82 | 7.70 | 250 | 740 | < 0.003 | 0.009 | 0.085 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00073 | 0.017 | < 0.0002 | 0.12 | 1.48 | < 0.0025 | < 0.002 |
| | *11/23/2021* | 2.7 | 110 | 130 | 0.71 | 7.07 | 230 | 990 | < 0.003 | 0.012 | 0.091 | ^1+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.0011 | 0.013 | < 0.0002 | 0.048 | 2.22 | < 0.0025 | < 0.002 |
| | *2/24/2022* | 2.6 | 130 | 120 | 0.53 | 7.02 | 170 | 840 | < 0.003 | 0.0072 | 0.1 | < ^1+ 0.001 | < 0.0005 | < 0.005 | 0.0012 | 0.001 | 0.014 | < 0.0002 | 0.043 | 0.768 | < 0.0025 | < 0.002 |
| | *6/14/2022* | 2.9 | 100 | 140 | 0.86 | 6.99 | 280 | 790 | < 0.003 | 0.008 | 0.081 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.015 | < 0.0002 | 0.12 | 1.55 | < 0.0025 | < 0.002 |
| | *8/25/2022* | 2.6 | 130 | 140 | 0.99 | 7.47 | 280 | 910 | < 0.003 | 0.019 | 0.11 | < 0.001 | < ^1+ 0.0005 | 0.0053 | 0.001 | 0.0077 | 0.015 | < 0.0002 | 0.12 | 1.2 | < 0.0025 | < 0.002 |
| | *9/28/2022 (R)* | NA | NA | NA | NA | NA | NA | NA | NA | 0.0088 | NA | NA | NA | NA | NA | 0.00093 | NA | NA | NA | NA | NA | NA |
| | *11/16/2022* | 4.4 | 130 | 160 | 0.94 | 7.15 | 220 | 910 | < 0.003 | 0.015 | 0.1 | < ^+ 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.002 | 0.018 | < 0.0002 | 0.097 | 2.74 | < 0.0025 | < 0.002 |
| MW-11 down-gradient | 11/10/2015 | 2.6 | 120 | 89 | 0.61 | 7.60 | 180 | 620 | < 0.003 | 0.007 | 0.098 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00064 | < 0.01 | < 0.0002 | 0.0600 | 0.736 | < 0.0025 | < 0.002 |
| | 2/16/2016 | 3.0 | 100 | 88 | 0.68 | 7.47 | 170 | 640 | < 0.003 | 0.0059 | 0.11 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.012 | < 0.0002 | 0.078 | 1.14 | < 0.0025 | < 0.002 |
| | 5/25/2016 | 2.8 | 82 | 98 | 0.75 | 7.43 | 170 | 640 | < 0.003 | 0.0073 | 0.093 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.083 | 0.775 | < 0.0025 | < 0.002 |
| | 8/10/2016 | 3.1 | 96 | 86 | 0.72 | 7.57 | 150 | 660 | < 0.003 | 0.0072 | 0.12 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.010 | < 0.0002 | 0.087 | 0.807 | < 0.0025 | < 0.002 |
| | 10/26/2016 | 2.5 | 110 | 67 | 0.53 | 7.82 | 120 | 630 | < 0.003 | 0.0082 | 0.096 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00052 | < 0.01 | < 0.0002 | 0.043 | 0.51 | < 0.0025 | < 0.002 |
| | 2/1/2017 | 3.9 | 110 | 72 | 0.65 | 7.54 | 110 | 600 | < 0.003 | 0.011 | 0.15 | * < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.076 | 0.909 | < 0.0025 | < 0.002 |
| | 5/10/2017 | 3.1 | 95 | 84 | 0.46 | 8.37 | 170 | 590 | < 0.003 | 0.014 | 0.14 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.074 | 1.03 | < 0.0025 | < 0.002 |
| | 6/27/2017 | 2.8 | 87 | 90 | 0.59 | 7.57 | 150 | 680 | < 0.003 | 0.0058 | 0.11 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.069 | 0.692 | < 0.0025 | < 0.002 |
| | *9/7/2017* | 2.8 | 90 | 94 | 0.58 | 7.40 | 150 | *730* | < 0.003 | 0.0074 | 0.11 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.067 | 0.676 | < 0.0025 | < 0.002 |
| | *11/15/2017* | 2.9 | 96 | 100 | 0.65 | 7.41 | 160 | *750* | < 0.003 | 0.0082 | 0.15 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.075 | 1.04 | < 0.0025 | < 0.002 |
| | *5/3/2018* | 3.8 | 73 | 110 | 0.69 | 6.74 | 190 | 670 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *10/3/2018* | 3.1 | 78 | 110 | 0.66 | 7.65 | 120 | 680 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/29/2019* | 2.2 | 86 | 110 | 0.49 | 7.55 | 120 | 610 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *12/5/2019* | 2.5 | 100 | 80 | 0.55 | 7.26 | 91 | 600 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/26/2020* | 2.3 | 89 | 100 | 0.54 | 7.4 | 90 | 540 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *11/3/2020* | 4.3 | 85 | 140 | 0.72 | 7.17 | 68 | 710 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/25/2021* | 3.8 | 94 | 130 | 0.74 | 7.68 | 57 | 660 | < 0.003 | 0.0067 | 0.16 | ^1+< 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.077 | 1.29 | < 0.0025 | < 0.002 |
| | *8/26/2021* | 1.9 | 110 | 150 | 0.39 | 7.73 | 100 | 710 | < 0.003 | 0.0076 | 0.1 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.011 | < 0.0002 | 0.034 | 1.29 | < 0.0025 | < 0.002 |
| | *11/23/2021* | 2.0 | 130 | 150 | 0.48 | 6.94 | 94 | 810 | < 0.003 | 0.0085 | 0.11 | ^1+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.025 | 2.35 | < 0.0025 | < 0.002 |
| | *12/22/2021 R* | NA | NA | 150 | NA | 7.03 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *2/23/2022* | 1.8 | 130 | 150 | 0.38 | 6.94 | 91 | 760 | < 0.003 | 0.013 | 0.12 | < ^1+ 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.0006 | 0.011 | < 0.0002 | 0.031 | 1.65 | < 0.0025 | < 0.002 |
| | *6/13/2022* | 2.8 | 120 | 140 | 0.4 | 7.22 | 97 | 700 | < 0.003 | 0.0088 | 0.17 | < 0.001 | < 0.0005 | < 0.005 | 0.0022 | 0.0018 | 0.011 | < 0.0002 | 0.058 | 1.44 | < 0.0025 | < 0.002 |
| | *8/23/2022* | 2.5 | 110 | 140 | 0.53 | 6.94 | 160 | 740 | < 0.003 | 0.0082 | 0.12 | < 0.001 | < ^1+ 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.033 | 2.02 | < 0.0025 | < 0.002 |
| | *11/16/2022* | 3.8 | 120 | 130 | 0.71 | 7.34 | 66 | 700 | < 0.003 | 0.013 | 0.14 | < ^+ 0.001 | < 0.0005 | < 0.005 | 0.0015 | 0.0014 | 0.01 | < 0.0002 | 0.052 | 1.61 | < 0.0025 | < 0.002 |
| MW-12 down-gradient | 11/10/2015 | 2.3 | 150 | 160 | 0.59 | 7.44 | 290 | 1,000 | < 0.003 | 0.0016 | 0.11 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.012 | < 0.0002 | 0.034 | 0.8139 | < 0.0025 | < 0.002 |
| | 2/16/2016 | 1.8 | 130 | 140 | 0.52 | 7.38 | 220 | 850 | < 0.003 | 0.0013 | 0.084 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.015 | < 0.0002 | 0.031 | < 0.407 | < 0.0025 | < 0.002 |
| | 5/25/2016 | 1.9 | 130 | 150 | 0.54 | 7.23 | 250 | 890 | < 0.003 | 0.0013 | 0.12 | ^ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00063 | 0.014 | < 0.0002 | 0.03 | 0.41 | 0.0026 | < 0.002 |
| | 8/10/2016 | 2.4 | 170 | 140 | 0.49 | 7.20 | 280 | 1000 | < 0.003 | 0.0017 | 0.12 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.0006 | 0.017 | < 0.0002 | 0.04 | < 0.426 | 0.0077 | < 0.002 |
| | 10/26/2016 | 2.6 | 140 | 120 | 0.49 | 7.44 | 220 | 980 | < 0.003 | 0.0016 | 0.11 | < 0.001 | < 0.0005 | 0.025 | < 0.001 | < 0.0005 | 0.013 | < 0.0002 | 0.036 | < 0.664 | < 0.0025 | < 0.002 |
| | 2/1/2017 | 2.0 | 160 | 120 | 0.48 | 7.30 | 150 | 900 | < 0.003 | 0.0017 | 0.11 | * < 0.001 | < 0.0005 | < 0.005 | < 0.001 | 0.00065 | 0.013 | < 0.0002 | 0.023 | 0.949 | < 0.0025 | < 0.002 |
| | 5/10/2017 | 2.3 | 200 | 240 | 0.30 | 7.65 | 260 | 1,300 | < 0.003 | 0.0013 | 0.13 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.012 | < 0.0002 | 0.029 | < 0.464 | 0.017 | < 0.002 |
| | 6/27/2017 | 2.4 | 180 | 280 | 0.44 | 7.31 | 260 | 1,300 | < 0.003 | 0.0014 | 0.14 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.017 | < 0.0002 | 0.03 | 0.455 | 0.0032 | < 0.002 |
| | *9/6/2017* | 2.6 | 190 | 270 | 0.49 | 7.26 | 260 | 1,400 | < 0.003 | 0.0017 | 0.13 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 0.032 | < 0.317 | 0.0043 | < 0.002 |
| | *11/15/2017* | 1.7 | 55 | 200 | 0.47 | 6.90 | 250 | 1,200 | < 0.003 | 0.0054 | 0.034 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | < 0.01 | < 0.0002 | 0.11 | 0.434 | < 0.0025 | < 0.002 |
| | *5/3/2018* | 1.8 | 140 | 170 | 0.47 | 6.60 | 170 | 960 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *10/2/2018* | F1 2.2 | 150 | 160 | 0.49 | 7.30 | 170 | 1,100 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/29/2019* | 1.9 | 140 | 140 | 0.42 | 7.23 | 190 | 930 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *12/5/2019* | 2.1 | 140 | 71 | 0.53 | 7.02 | 110 | 820 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/22/2020* | 1.9 | 180 | 120 | 0.4 | 6.95 | 140 | 1,100 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *11/3/2020* | 2.2 | 160 | 190 | 0.52 | 7.27 | 160 | 1,000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | *5/25/2021* | 1.8 | 140 | 170 | 0.49 | 7.37 | 180 | 930 | < 0.003 | 0.0017 | 0.14 | ^1+ < 0.001 | < 0.0005 | < 0.005 | 0.001 | < 0.00085 | 0.014 | < 0.0002 | 0.029 | 0.529 | < 0.0025 | < 0.002 |
| | *8/26/2021* | 2.1 | 170 | 200 | 0.47 | 7.49 | 170 | 1000 | < 0.003 | 0.002 | 0.14 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.017 | < 0.0002 | 0.027 | 1.03 | < 0.0025 | < 0.002 |
| | *11/23/2021* | 2.3 | 180 | 210 | 0.44 | 7.01 | 180 | 1200 | < 0.003 | 0.002 | 0.15 | ^1+ < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.014 | < 0.0002 | 0.022 | 0.58 | 0.0055 | < 0.002 |
| | *2/24/2022* | 1.7 | 150 | 150 | 0.4 | 7.06 | 150 | 1000 | < 0.003 | 0.0025 | 0.27 | < ^1+ 0.001 | < 0.0005 | < 0.005 | 0.0011 | 0.0016 | 0.018 | < 0.0002 | 0.024 | < 1.62 | 0.0061 | < 0.002 |
| | *6/13/2022* | 1.9 | 160 | ^+ 210 | 0.45 | 7.03 | 170 | 1000 | < 0.003 | 0.0015 | 0.15 | < 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.012 | < 0.0002 | 0.024 | 0.957 | 0.0045 | < 0.002 |
| | *8/23/2022* | 1.9 | 150 | 170 | 0.37 | 6.62 | 160 | 1000 | < 0.003 | 0.0011 | 0.18 | < 0.001 | < ^1+ 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.013 | < 0.0002 | 0.015 | 0.709 | 0.0086 | < 0.002 |
| | *11/16/2022* | 2.3 | 160 | 180 | 0.97 | 7.34 | 180 | 1000 | < 0.003 | 0.0017 | 0.14 | < ^+ 0.001 | < 0.0005 | < 0.005 | < 0.001 | < 0.0005 | 0.015 | < 0.0002 | 0.029 | < 0.139 | < 0.0025 | < 0.002 |

Notes: All units are in mg/l except pH is in standard units and radium is in pCi/L
*Italics Date* - First round of Detection Monitoring and resample after statistical background establishment.
F1 - MS and/or MSD Recovery outside of limits.
NA - Not analyzed. No confirmation resample required.
R - Resample
V - Serial Dilution exceeds the control limits

^ - 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.

Table 2. Groundwater Turbidity - Ponds 2S and 3S, Midwest Generation, LLC, Will County Generating Station, Romeoville, IL.

| Well ID | Date | Turbidity (NTU) |
|---|---|---|
| MW-05 | 2/23/2021 | 0.63 |
| | 4/10/2021 | 1.28 |
| | 4/25/2021 | 2.41 |
| | 5/24/2021 | 3.78 |
| | 6/11/2021 | 2.4 |
| | 6/28/2021 | 2.89 |
| | 7/12/2021 | 3.93 |
| | 8/4/2021 | 1.35 |
| | 8/24/2021 | 3.5 |
| | 9/24/2021 | 3.59 |
| | 11/23/2021 | 4.45 |
| | 2/24/2022 | 0.37 |
| | 6/16/2022 | 1.76 |
| | 8/25/2022 | 2.99 |
| | 11/15/2022 | 38.9 |
| MW-06 | 2/23/2021 | 0.31 |
| | 4/10/2021 | 11.17 |
| | 4/25/2021 | 15.04 |
| | 5/24/2021 | 5.18 |
| | 6/11/2021 | 2.96 |
| | 6/29/2021 | 4.06 |
| | 7/12/2021 | 6.43 |
| | 8/4/2021 | 3.5 |
| | 8/24/2021 | 7.0 |
| | 9/24/2021 | 4.2 |
| | 11/23/2021 | 6.38 |
| | 2/22/2022 | 0.47 |
| | 6/14/2022 | 3.87 |
| | 8/25/2022 | 2.6 |
| | 11/16/2022 | 8.12 |
| MW-09 | 3/1/2021 | 0.86 |
| | 4/10/2021 | 6.91 |
| | 4/25/2021 | 2.08 |
| | 5/25/2021 | 14.12 |
| | 6/11/2021 | 2.39 |
| | 6/29/2021 | 2.97 |
| | 7/12/2021 | 3.94 |
| | 8/4/2021 | 0.0 |
| | 8/25/2021 | 19.9 |
| | 9/24/2021 | 3.67 |
| | 11/23/2021 | 19.07 |
| | 2/22/2022 | 0.59 |
| | 6/15/2022 | 113.77 |
| | 8/25/2022 | 1.93 |
| | 11/16/2022 | 11.73 |
| MW-10 | 2/25/2021 | 172.14 |
| | 4/10/2021 | 29.99 |
| | 4/25/2021 | 34.77 |
| | 5/25/2021 | 44.14 |
| | 6/11/2021 | 92.03 |
| | 6/29/2021 | 29.35 |
| | 7/12/2021 | 23.45 |
| | 8/4/2021 | 47.68 |
| | 8/26/2021 | 27.5 |
| | 9/24/2021 | 542 |
| | 11/23/2021 | 312.05 |
| | 2/24/2022 | 72.18 |
| | 6/14/2022 | 55.5 |
| | 8/25/2022 | 8.83 |
| | 11/16/2022 | 32.4 |
| MW-11 | 4/10/2021 | 269.25 |
| | 4/25/2021 | 60.28 |
| | 5/25/2021 | 9.56 |
| | 6/11/2021 | 77.09 |
| | 6/29/2021 | 7.43 |
| | 7/12/2021 | 39.12 |
| | 8/4/2021 | 9.53 |
| | 8/26/2021 | 11.4 |
| | 9/24/2021 | 9.68 |
| | 11/23/2021 | 1.85 |
| | 2/23/2022 | 162.43 |
| | 6/13/2022 | 27.05 |
| | 8/23/2022 | 10.9 |
| | 11/16/2022 | 60.3 |
| MW-12 | 4/10/2021 | 31.67 |
| | 4/25/2021 | 15.04 |
| | 5/25/2021 | 28.65 |
| | 6/11/2021 | 6.1 |
| | 6/29/2021 | 13.04 |
| | 7/12/2021 | 12.99 |
| | 8/4/2021 | 11.97 |
| | 8/26/2021 | 10.9 |
| | 9/24/2021 | 11.97 |
| | 11/23/2021 | 3.88 |
| | 2/24/2022 | 82.8 |
| | 6/13/2022 | 4.24 |
| | 8/23/2022 | 7.35 |
| | 11/16/2022 | 2.85 |

eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mitchel Dolan
KPRG and Associates, Inc.
414 Plaza Drive Suite 106
Westmont, Illinois 60559

Generated 12/20/2022 8:28:23 AM

## JOB DESCRIPTION

Will County CCR

## JOB NUMBER

500-225637-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

## Authorization

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12/20/2022 8:28:23 AM

Authorized for release by
Diana Mockler, Project Manager I
Diana.Mockler@et.eurofinsus.com
(219)252-7570

# Table of Contents

## Job ID: 500-225637-1

### Laboratory: Eurofins Chicago

**Narrative**

**Job Narrative**
**500-225637-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 11/17/2022 3:20 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 0.4º C, 0.6º C, 1.0º C, 1.4º C and 1.8º C.

**Metals**
Method 6020A: The low level continuing calibration verification (CCVL) associated with batch 500-689114 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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

# Detection Summary

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

Job ID: 500-225637-1

## Client Sample ID: MW-05 — Lab Sample ID: 500-225637-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.032 | | 0.0010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Barium | 0.099 | | 0.0025 | | mg/L | 1 | | 6020A | Total Recoverable |
| Boron | 8.9 | | 1.0 | | mg/L | 20 | | 6020A | Total Recoverable |
| Cadmium | 0.0040 | | 0.00050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Calcium | 150 | | 0.20 | | mg/L | 1 | | 6020A | Total Recoverable |
| Chromium | 0.0083 | | 0.0050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Lithium | 0.020 | | 0.010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Molybdenum | 0.10 | | 0.0050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Selenium | 0.089 | | 0.0025 | | mg/L | 1 | | 6020A | Total Recoverable |
| Fluoride | 0.72 | | 0.20 | | mg/L | 1 | | 300.0 | Total/NA |
| Total Dissolved Solids | 930 | | 10 | | mg/L | 1 | | SM 2540C | Total/NA |
| Chloride | 9.8 | | 2.0 | | mg/L | 1 | | SM 4500 Cl- E | Total/NA |
| Sulfate | 310 | | 50 | | mg/L | 10 | | SM 4500 SO4 E | Total/NA |

## Client Sample ID: MW-06 — Lab Sample ID: 500-225637-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0017 | | 0.0010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Barium | 0.083 | | 0.0025 | | mg/L | 1 | | 6020A | Total Recoverable |
| Boron | 3.2 | | 0.50 | | mg/L | 10 | | 6020A | Total Recoverable |
| Calcium | 110 | | 0.20 | | mg/L | 1 | | 6020A | Total Recoverable |
| Lithium | 0.016 | | 0.010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Molybdenum | 0.021 | | 0.0050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Fluoride | 0.47 | | 0.20 | | mg/L | 1 | | 300.0 | Total/NA |
| Total Dissolved Solids | 600 | | 10 | | mg/L | 1 | | SM 2540C | Total/NA |
| Chloride | 19 | | 2.0 | | mg/L | 1 | | SM 4500 Cl- E | Total/NA |
| Sulfate | 160 | | 50 | | mg/L | 10 | | SM 4500 SO4 E | Total/NA |

## Client Sample ID: MW-09 — Lab Sample ID: 500-225637-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0094 | | 0.0010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Barium | 0.036 | | 0.0025 | | mg/L | 1 | | 6020A | Total Recoverable |
| Boron | 2.3 | | 0.25 | | mg/L | 5 | | 6020A | Total Recoverable |
| Calcium | 37 | | 0.20 | | mg/L | 1 | | 6020A | Total Recoverable |
| Lead | 0.00066 | | 0.00050 | | mg/L | 1 | | 6020A | Total Recoverable |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: MW-09 (Continued) — Lab Sample ID: 500-225637-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Molybdenum | 0.067 | | 0.0050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Fluoride | 0.79 | | 0.20 | | mg/L | 1 | | 300.0 | Total/NA |
| Total Dissolved Solids | 690 | | 10 | | mg/L | 1 | | SM 2540C | Total/NA |
| Chloride | 210 | | 20 | | mg/L | 10 | | SM 4500 Cl- E | Total/NA |
| Sulfate | 160 | | 50 | | mg/L | 10 | | SM 4500 SO4 E | Total/NA |

## Client Sample ID: MW-10 — Lab Sample ID: 500-225637-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.015 | | 0.0010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Barium | 0.10 | | 0.0025 | | mg/L | 1 | | 6020A | Total Recoverable |
| Boron | 4.4 | | 0.50 | | mg/L | 10 | | 6020A | Total Recoverable |
| Calcium | 130 | | 0.20 | | mg/L | 1 | | 6020A | Total Recoverable |
| Lead | 0.0020 | | 0.00050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Lithium | 0.018 | | 0.010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Molybdenum | 0.097 | | 0.0050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Fluoride | 0.94 | | 0.20 | | mg/L | 1 | | 300.0 | Total/NA |
| Total Dissolved Solids | 910 | | 10 | | mg/L | 1 | | SM 2540C | Total/NA |
| Chloride | 160 | | 20 | | mg/L | 10 | | SM 4500 Cl- E | Total/NA |
| Sulfate | 220 | | 50 | | mg/L | 10 | | SM 4500 SO4 E | Total/NA |

## Client Sample ID: MW-11 — Lab Sample ID: 500-225637-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.013 | | 0.0010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Barium | 0.14 | | 0.0025 | | mg/L | 1 | | 6020A | Total Recoverable |
| Boron | 3.8 | | 0.50 | | mg/L | 10 | | 6020A | Total Recoverable |
| Calcium | 120 | | 0.20 | | mg/L | 1 | | 6020A | Total Recoverable |
| Cobalt | 0.0015 | | 0.0010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Lead | 0.0014 | | 0.00050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Lithium | 0.010 | | 0.010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Molybdenum | 0.052 | | 0.0050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Fluoride | 0.71 | | 0.20 | | mg/L | 1 | | 300.0 | Total/NA |
| Total Dissolved Solids | 700 | | 10 | | mg/L | 1 | | SM 2540C | Total/NA |
| Chloride | 130 | | 20 | | mg/L | 10 | | SM 4500 Cl- E | Total/NA |
| Sulfate | 66 | | 50 | | mg/L | 10 | | SM 4500 SO4 E | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

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

Job ID: 500-225637-1

## Client Sample ID: MW-12 — Lab Sample ID: 500-225637-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0017 | | 0.0010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Barium | 0.14 | | 0.0025 | | mg/L | 1 | | 6020A | Total Recoverable |
| Boron | 2.3 | | 0.25 | | mg/L | 5 | | 6020A | Total Recoverable |
| Calcium | 160 | | 0.20 | | mg/L | 1 | | 6020A | Total Recoverable |
| Lithium | 0.015 | | 0.010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Molybdenum | 0.029 | | 0.0050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Fluoride | 0.97 | | 0.20 | | mg/L | 1 | | 300.0 | Total/NA |
| Total Dissolved Solids | 1000 | | 10 | | mg/L | 1 | | SM 2540C | Total/NA |
| Chloride | 180 | | 20 | | mg/L | 10 | | SM 4500 Cl- E | Total/NA |
| Sulfate | 180 | | 50 | | mg/L | 10 | | SM 4500 SO4 E | Total/NA |

## Client Sample ID: 2S/3S Duplicate — Lab Sample ID: 500-225637-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 0.0017 | | 0.0010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Barium | 0.14 | | 0.0025 | | mg/L | 1 | | 6020A | Total Recoverable |
| Boron | 2.2 | | 0.25 | | mg/L | 5 | | 6020A | Total Recoverable |
| Calcium | 160 | | 0.20 | | mg/L | 1 | | 6020A | Total Recoverable |
| Lithium | 0.015 | | 0.010 | | mg/L | 1 | | 6020A | Total Recoverable |
| Molybdenum | 0.029 | | 0.0050 | | mg/L | 1 | | 6020A | Total Recoverable |
| Fluoride | 0.61 | | 0.20 | | mg/L | 1 | | 300.0 | Total/NA |
| Total Dissolved Solids | 990 | | 10 | | mg/L | 1 | | SM 2540C | Total/NA |
| Chloride | 180 | | 20 | | mg/L | 10 | | SM 4500 Cl- E | Total/NA |
| Sulfate | 190 | | 50 | | mg/L | 10 | | SM 4500 SO4 E | Total/NA |

This Detection Summary does not include radiochemical test results.

# Method Summary

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

Job ID: 500-225637-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 6020A | Metals (ICP/MS) | SW846 | EET CHI |
| 7470A | Mercury (CVAA) | SW846 | EET CHI |
| 300.0 | Anions, Ion Chromatography | MCAWW | EET CHI |
| SM 2540C | Solids, Total Dissolved (TDS) | SM | EET CHI |
| SM 4500 Cl- E | Chloride, Total | SM | EET CHI |
| SM 4500 SO4 E | Sulfate, Total | SM | EET CHI |
| 3005A | Preparation, Total Recoverable or Dissolved Metals | SW846 | EET CHI |
| 7470A | Preparation, Mercury | SW846 | EET CHI |

**Protocol References:**

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:**

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

# Sample Summary

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

Job ID: 500-225637-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 500-225637-1 | MW-05 | Water | 11/15/22 14:50 | 11/17/22 15:20 |
| 500-225637-2 | MW-06 | Water | 11/16/22 09:38 | 11/17/22 15:20 |
| 500-225637-3 | MW-09 | Water | 11/16/22 14:39 | 11/17/22 15:20 |
| 500-225637-4 | MW-10 | Water | 11/16/22 12:02 | 11/17/22 15:20 |
| 500-225637-5 | MW-11 | Water | 11/16/22 13:09 | 11/17/22 15:20 |
| 500-225637-6 | MW-12 | Water | 11/16/22 10:23 | 11/17/22 15:20 |
| 500-225637-7 | 2S/3S Duplicate | Water | 11/16/22 00:00 | 11/17/22 15:20 |

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

Job ID: 500-225637-1

## Client Sample ID: MW-05

**Date Collected: 11/15/22 14:50**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-1

**Matrix: Water**

### Method: SW846 6020A - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| **Arsenic** | **0.032** | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| **Barium** | **0.099** | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| Beryllium | <0.0010 | ^+ | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| **Boron** | **8.9** | | 1.0 | | mg/L | | 12/06/22 08:47 | 12/10/22 18:36 | 20 |
| **Cadmium** | **0.0040** | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| **Calcium** | **150** | | 0.20 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| **Chromium** | **0.0083** | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| **Lithium** | **0.020** | | 0.010 | | mg/L | | 12/06/22 08:47 | 12/09/22 21:25 | 1 |
| **Molybdenum** | **0.10** | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| **Selenium** | **0.089** | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/06/22 08:47 | 12/06/22 20:54 | 1 |

### Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/30/22 10:15 | 12/01/22 08:29 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Fluoride (MCAWW 300.0)** | **0.72** | | 0.20 | | mg/L | | | 12/09/22 20:06 | 1 |
| **Total Dissolved Solids (SM 2540C)** | **930** | | 10 | | mg/L | | | 11/18/22 04:16 | 1 |
| **Chloride (SM 4500 Cl- E)** | **9.8** | | 2.0 | | mg/L | | | 12/06/22 09:50 | 1 |
| **Sulfate (SM 4500 SO4 E)** | **310** | | 50 | | mg/L | | | 11/29/22 11:22 | 10 |

# Client Sample Results

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

Job ID: 500-225637-1

## Client Sample ID: MW-06

**Date Collected: 11/16/22 09:38**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-2

**Matrix: Water**

### Method: SW846 6020A - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| **Arsenic** | **0.0017** | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| **Barium** | **0.083** | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| Beryllium | <0.0010 | ^+ | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| **Boron** | **3.2** | | 0.50 | | mg/L | | 12/06/22 08:47 | 12/10/22 18:40 | 10 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| **Calcium** | **110** | | 0.20 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| **Lithium** | **0.016** | | 0.010 | | mg/L | | 12/06/22 08:47 | 12/09/22 21:29 | 1 |
| **Molybdenum** | **0.021** | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:04 | 1 |

### Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/30/22 10:15 | 12/01/22 08:41 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Fluoride (MCAWW 300.0)** | **0.47** | | 0.20 | | mg/L | | | 12/09/22 20:19 | 1 |
| **Total Dissolved Solids (SM 2540C)** | **600** | | 10 | | mg/L | | | 11/22/22 02:30 | 1 |
| **Chloride (SM 4500 Cl- E)** | **19** | | 2.0 | | mg/L | | | 12/06/22 09:50 | 1 |
| **Sulfate (SM 4500 SO4 E)** | **160** | | 50 | | mg/L | | | 11/29/22 11:22 | 10 |

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

Job ID: 500-225637-1

## Client Sample ID: MW-09

**Date Collected: 11/16/22 14:39**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-3

**Matrix: Water**

### Method: SW846 6020A - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| **Arsenic** | **0.0094** | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| **Barium** | **0.036** | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| Beryllium | <0.0010 | ^+ | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| **Boron** | **2.3** | | 0.25 | | mg/L | | 12/06/22 08:47 | 12/10/22 18:43 | 5 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| **Calcium** | **37** | | 0.20 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| **Lead** | **0.00066** | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 12/06/22 08:47 | 12/09/22 21:32 | 1 |
| **Molybdenum** | **0.067** | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:08 | 1 |

### Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/30/22 10:15 | 12/01/22 08:43 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Fluoride (MCAWW 300.0)** | **0.79** | | 0.20 | | mg/L | | | 12/09/22 20:31 | 1 |
| **Total Dissolved Solids (SM 2540C)** | **690** | | 10 | | mg/L | | | 11/22/22 02:37 | 1 |
| **Chloride (SM 4500 Cl- E)** | **210** | | 20 | | mg/L | | | 12/06/22 09:50 | 10 |
| **Sulfate (SM 4500 SO4 E)** | **160** | | 50 | | mg/L | | | 11/29/22 11:23 | 10 |

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

Job ID: 500-225637-1

## Client Sample ID: MW-10

**Date Collected: 11/16/22 12:02**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-4

**Matrix: Water**

### Method: SW846 6020A - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| **Arsenic** | **0.015** | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| **Barium** | **0.10** | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| Beryllium | <0.0010 | ^+ | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| **Boron** | **4.4** | | 0.50 | | mg/L | | 12/06/22 08:47 | 12/10/22 18:47 | 10 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| **Calcium** | **130** | | 0.20 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| **Lead** | **0.0020** | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| **Lithium** | **0.018** | | 0.010 | | mg/L | | 12/06/22 08:47 | 12/09/22 21:36 | 1 |
| **Molybdenum** | **0.097** | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:12 | 1 |

### Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/30/22 10:15 | 12/01/22 08:45 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Fluoride (MCAWW 300.0)** | **0.94** | | 0.20 | | mg/L | | | 12/09/22 20:44 | 1 |
| **Total Dissolved Solids (SM 2540C)** | **910** | | 10 | | mg/L | | | 11/22/22 02:43 | 1 |
| **Chloride (SM 4500 Cl- E)** | **160** | | 20 | | mg/L | | | 12/06/22 09:50 | 10 |
| **Sulfate (SM 4500 SO4 E)** | **220** | | 50 | | mg/L | | | 11/29/22 11:24 | 10 |

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

Job ID: 500-225637-1

## Client Sample ID: MW-11

**Date Collected: 11/16/22 13:09**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-5

**Matrix: Water**

### Method: SW846 6020A - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| **Arsenic** | **0.013** | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| **Barium** | **0.14** | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| Beryllium | <0.0010 | ^+ | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| **Boron** | **3.8** | | 0.50 | | mg/L | | 12/06/22 08:47 | 12/10/22 18:50 | 10 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| **Calcium** | **120** | | 0.20 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| **Cobalt** | **0.0015** | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| **Lead** | **0.0014** | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| **Lithium** | **0.010** | | 0.010 | | mg/L | | 12/06/22 08:47 | 12/09/22 21:39 | 1 |
| **Molybdenum** | **0.052** | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:15 | 1 |

### Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/30/22 10:15 | 12/01/22 08:48 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Fluoride (MCAWW 300.0)** | **0.71** | | 0.20 | | mg/L | | | 12/09/22 20:56 | 1 |
| **Total Dissolved Solids (SM 2540C)** | **700** | | 10 | | mg/L | | | 11/22/22 02:45 | 1 |
| **Chloride (SM 4500 Cl- E)** | **130** | | 20 | | mg/L | | | 12/06/22 09:51 | 10 |
| **Sulfate (SM 4500 SO4 E)** | **66** | | 50 | | mg/L | | | 11/29/22 11:24 | 10 |

# Client Sample Results

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

Job ID: 500-225637-1

## Client Sample ID: MW-12

**Date Collected: 11/16/22 10:23**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-6

**Matrix: Water**

### Method: SW846 6020A - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| **Arsenic** | **0.0017** | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| **Barium** | **0.14** | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| Beryllium | <0.0010 | ^+ | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| **Boron** | **2.3** | | 0.25 | | mg/L | | 12/06/22 08:47 | 12/10/22 18:54 | 5 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| **Calcium** | **160** | | 0.20 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| **Lithium** | **0.015** | | 0.010 | | mg/L | | 12/06/22 08:47 | 12/09/22 21:43 | 1 |
| **Molybdenum** | **0.029** | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:19 | 1 |

### Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/30/22 10:15 | 12/01/22 08:50 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Fluoride (MCAWW 300.0)** | **0.97** | | 0.20 | | mg/L | | | 12/14/22 19:16 | 1 |
| **Total Dissolved Solids (SM 2540C)** | **1000** | | 10 | | mg/L | | | 11/22/22 02:48 | 1 |
| **Chloride (SM 4500 Cl- E)** | **180** | | 20 | | mg/L | | | 12/06/22 09:51 | 10 |
| **Sulfate (SM 4500 SO4 E)** | **180** | | 50 | | mg/L | | | 11/29/22 11:24 | 10 |

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

Job ID: 500-225637-1

## Client Sample ID: 2S/3S Duplicate

**Date Collected: 11/16/22 00:00**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-7

**Matrix: Water**

### Method: SW846 6020A - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| **Arsenic** | **0.0017** | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| **Barium** | **0.14** | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| Beryllium | <0.0010 | ^+ | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| **Boron** | **2.2** | | 0.25 | | mg/L | | 12/06/22 08:47 | 12/10/22 18:57 | 5 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| **Calcium** | **160** | | 0.20 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| **Lithium** | **0.015** | | 0.010 | | mg/L | | 12/06/22 08:47 | 12/09/22 21:47 | 1 |
| **Molybdenum** | **0.029** | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/06/22 08:47 | 12/06/22 21:22 | 1 |

### Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/30/22 10:15 | 12/01/22 08:52 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Fluoride (MCAWW 300.0)** | **0.61** | | 0.20 | | mg/L | | | 12/09/22 22:00 | 1 |
| **Total Dissolved Solids (SM 2540C)** | **990** | | 10 | | mg/L | | | 11/22/22 02:50 | 1 |
| **Chloride (SM 4500 Cl- E)** | **180** | | 20 | | mg/L | | | 12/06/22 10:08 | 10 |
| **Sulfate (SM 4500 SO4 E)** | **190** | | 50 | | mg/L | | | 11/29/22 12:01 | 10 |

# Definitions/Glossary

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

Job ID: 500-225637-1

## Qualifiers

### Metals

| Qualifier | Qualifier Description |
|---|---|
| ^+ | Continuing Calibration Verification (CCV) is outside acceptance limits, high biased. |

### General Chemistry

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

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| 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: 687510

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total/NA | Water | 7470A | |
| 500-225637-2 | MW-06 | Total/NA | Water | 7470A | |
| 500-225637-3 | MW-09 | Total/NA | Water | 7470A | |
| 500-225637-4 | MW-10 | Total/NA | Water | 7470A | |
| 500-225637-5 | MW-11 | Total/NA | Water | 7470A | |
| 500-225637-6 | MW-12 | Total/NA | Water | 7470A | |
| 500-225637-7 | 2S/3S Duplicate | Total/NA | Water | 7470A | |
| MB 500-687510/12-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 500-687510/13-A | Lab Control Sample | Total/NA | Water | 7470A | |
| 500-225637-1 MS | MW-05 | Total/NA | Water | 7470A | |
| 500-225637-1 MSD | MW-05 | Total/NA | Water | 7470A | |
| 500-225637-1 DU | MW-05 | Total/NA | Water | 7470A | |

### Analysis Batch: 687783

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total/NA | Water | 7470A | 687510 |
| 500-225637-2 | MW-06 | Total/NA | Water | 7470A | 687510 |
| 500-225637-3 | MW-09 | Total/NA | Water | 7470A | 687510 |
| 500-225637-4 | MW-10 | Total/NA | Water | 7470A | 687510 |
| 500-225637-5 | MW-11 | Total/NA | Water | 7470A | 687510 |
| 500-225637-6 | MW-12 | Total/NA | Water | 7470A | 687510 |
| 500-225637-7 | 2S/3S Duplicate | Total/NA | Water | 7470A | 687510 |
| MB 500-687510/12-A | Method Blank | Total/NA | Water | 7470A | 687510 |
| LCS 500-687510/13-A | Lab Control Sample | Total/NA | Water | 7470A | 687510 |
| 500-225637-1 MS | MW-05 | Total/NA | Water | 7470A | 687510 |
| 500-225637-1 MSD | MW-05 | Total/NA | Water | 7470A | 687510 |
| 500-225637-1 DU | MW-05 | Total/NA | Water | 7470A | 687510 |

### Prep Batch: 688396

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total Recoverable | Water | 3005A | |
| 500-225637-2 | MW-06 | Total Recoverable | Water | 3005A | |
| 500-225637-3 | MW-09 | Total Recoverable | Water | 3005A | |
| 500-225637-4 | MW-10 | Total Recoverable | Water | 3005A | |
| 500-225637-5 | MW-11 | Total Recoverable | Water | 3005A | |
| 500-225637-6 | MW-12 | Total Recoverable | Water | 3005A | |
| 500-225637-7 | 2S/3S Duplicate | Total Recoverable | Water | 3005A | |
| MB 500-688396/1-A | Method Blank | Total Recoverable | Water | 3005A | |
| LCS 500-688396/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |

### Analysis Batch: 689114

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-2 | MW-06 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-3 | MW-09 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-4 | MW-10 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-5 | MW-11 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-6 | MW-12 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-7 | 2S/3S Duplicate | Total Recoverable | Water | 6020A | 688396 |
| MB 500-688396/1-A | Method Blank | Total Recoverable | Water | 6020A | 688396 |
| LCS 500-688396/2-A | Lab Control Sample | Total Recoverable | Water | 6020A | 688396 |

## Metals

### Analysis Batch: 689195

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-2 | MW-06 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-3 | MW-09 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-4 | MW-10 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-5 | MW-11 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-6 | MW-12 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-7 | 2S/3S Duplicate | Total Recoverable | Water | 6020A | 688396 |
| MB 500-688396/1-A | Method Blank | Total Recoverable | Water | 6020A | 688396 |
| LCS 500-688396/2-A | Lab Control Sample | Total Recoverable | Water | 6020A | 688396 |

### Analysis Batch: 689345

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-2 | MW-06 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-3 | MW-09 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-4 | MW-10 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-5 | MW-11 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-6 | MW-12 | Total Recoverable | Water | 6020A | 688396 |
| 500-225637-7 | 2S/3S Duplicate | Total Recoverable | Water | 6020A | 688396 |
| MB 500-688396/1-A | Method Blank | Total Recoverable | Water | 6020A | 688396 |
| LCS 500-688396/2-A | Lab Control Sample | Total Recoverable | Water | 6020A | 688396 |

## General Chemistry

### Analysis Batch: 685754

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total/NA | Water | SM 2540C | |
| MB 500-685754/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 500-685754/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |

### Analysis Batch: 686397

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-2 | MW-06 | Total/NA | Water | SM 2540C | |
| 500-225637-3 | MW-09 | Total/NA | Water | SM 2540C | |
| 500-225637-4 | MW-10 | Total/NA | Water | SM 2540C | |
| 500-225637-5 | MW-11 | Total/NA | Water | SM 2540C | |
| 500-225637-6 | MW-12 | Total/NA | Water | SM 2540C | |
| 500-225637-7 | 2S/3S Duplicate | Total/NA | Water | SM 2540C | |
| MB 500-686397/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 500-686397/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| 500-225637-2 MS | MW-06 | Total/NA | Water | SM 2540C | |
| 500-225637-2 DU | MW-06 | Total/NA | Water | SM 2540C | |
| 500-225637-3 DU | MW-09 | Total/NA | Water | SM 2540C | |

### Analysis Batch: 687313

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total/NA | Water | SM 4500 SO4 E | |
| 500-225637-2 | MW-06 | Total/NA | Water | SM 4500 SO4 E | |
| 500-225637-3 | MW-09 | Total/NA | Water | SM 4500 SO4 E | |
| 500-225637-4 | MW-10 | Total/NA | Water | SM 4500 SO4 E | |
| 500-225637-5 | MW-11 | Total/NA | Water | SM 4500 SO4 E | |

## General Chemistry (Continued)

### Analysis Batch: 687313 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-6 | MW-12 | Total/NA | Water | SM 4500 SO4 E | |
| 500-225637-7 | 2S/3S Duplicate | Total/NA | Water | SM 4500 SO4 E | |
| MB 500-687313/181 | Method Blank | Total/NA | Water | SM 4500 SO4 E | |
| MB 500-687313/217 | Method Blank | Total/NA | Water | SM 4500 SO4 E | |
| LCS 500-687313/182 | Lab Control Sample | Total/NA | Water | SM 4500 SO4 E | |
| LCS 500-687313/218 | Lab Control Sample | Total/NA | Water | SM 4500 SO4 E | |
| 500-225637-7 MS | 2S/3S Duplicate | Total/NA | Water | SM 4500 SO4 E | |
| 500-225637-7 MSD | 2S/3S Duplicate | Total/NA | Water | SM 4500 SO4 E | |

### Analysis Batch: 688458

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total/NA | Water | SM 4500 Cl- E | |
| 500-225637-2 | MW-06 | Total/NA | Water | SM 4500 Cl- E | |
| 500-225637-3 | MW-09 | Total/NA | Water | SM 4500 Cl- E | |
| 500-225637-4 | MW-10 | Total/NA | Water | SM 4500 Cl- E | |
| 500-225637-5 | MW-11 | Total/NA | Water | SM 4500 Cl- E | |
| 500-225637-6 | MW-12 | Total/NA | Water | SM 4500 Cl- E | |
| 500-225637-7 | 2S/3S Duplicate | Total/NA | Water | SM 4500 Cl- E | |
| MB 500-688458/48 | Method Blank | Total/NA | Water | SM 4500 Cl- E | |
| LCS 500-688458/49 | Lab Control Sample | Total/NA | Water | SM 4500 Cl- E | |

### Analysis Batch: 689188

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total/NA | Water | 300.0 | |
| 500-225637-2 | MW-06 | Total/NA | Water | 300.0 | |
| 500-225637-3 | MW-09 | Total/NA | Water | 300.0 | |
| 500-225637-4 | MW-10 | Total/NA | Water | 300.0 | |
| 500-225637-5 | MW-11 | Total/NA | Water | 300.0 | |
| 500-225637-7 | 2S/3S Duplicate | Total/NA | Water | 300.0 | |
| MB 500-689188/33 | Method Blank | Total/NA | Water | 300.0 | |
| LCS 500-689188/34 | Lab Control Sample | Total/NA | Water | 300.0 | |
| 500-225637-5 MS | MW-11 | Total/NA | Water | 300.0 | |
| 500-225637-5 MSD | MW-11 | Total/NA | Water | 300.0 | |
| 500-225637-7 MS | 2S/3S Duplicate | Total/NA | Water | 300.0 | |
| 500-225637-7 MSD | 2S/3S Duplicate | Total/NA | Water | 300.0 | |

### Analysis Batch: 689941

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-6 | MW-12 | Total/NA | Water | 300.0 | |
| MB 500-689941/11 | Method Blank | Total/NA | Water | 300.0 | |
| LCS 500-689941/12 | Lab Control Sample | Total/NA | Water | 300.0 | |

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

**Lab Sample ID: MB 500-688396/1-A**
**Matrix: Water**
**Analysis Batch: 689114**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 688396**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Arsenic | <0.0010 | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Barium | <0.0025 | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Beryllium | <0.0010 | ^+ | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Calcium | <0.20 | | 0.20 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Molybdenum | <0.0050 | | 0.0050 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 12/06/22 08:47 | 12/06/22 19:40 | 1 |

**Lab Sample ID: MB 500-688396/1-A**
**Matrix: Water**
**Analysis Batch: 689195**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 688396**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Lithium | <0.010 | | 0.010 | | mg/L | | 12/06/22 08:47 | 12/09/22 20:33 | 1 |

**Lab Sample ID: MB 500-688396/1-A**
**Matrix: Water**
**Analysis Batch: 689345**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 688396**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Boron | <0.050 | | 0.050 | | mg/L | | 12/06/22 08:47 | 12/10/22 17:45 | 1 |

**Lab Sample ID: LCS 500-688396/2-A**
**Matrix: Water**
**Analysis Batch: 689114**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 688396**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Antimony | 0.500 | 0.508 | | mg/L | | 102 | 80 - 120 |
| Arsenic | 0.100 | 0.0953 | | mg/L | | 95 | 80 - 120 |
| Barium | 2.00 | 2.06 | | mg/L | | 103 | 80 - 120 |
| Beryllium | 0.0500 | 0.0502 | ^+ | mg/L | | 100 | 80 - 120 |
| Cadmium | 0.0500 | 0.0493 | | mg/L | | 99 | 80 - 120 |
| Calcium | 10.0 | 10.0 | | mg/L | | 100 | 80 - 120 |
| Chromium | 0.200 | 0.207 | | mg/L | | 103 | 80 - 120 |
| Cobalt | 0.500 | 0.532 | | mg/L | | 106 | 80 - 120 |
| Lead | 0.100 | 0.109 | | mg/L | | 109 | 80 - 120 |
| Molybdenum | 1.00 | 0.959 | | mg/L | | 96 | 80 - 120 |
| Selenium | 0.100 | 0.0920 | | mg/L | | 92 | 80 - 120 |
| Thallium | 0.100 | 0.111 | | mg/L | | 111 | 80 - 120 |

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

**Lab Sample ID: LCS 500-688396/2-A**
**Matrix: Water**
**Analysis Batch: 689195**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 688396**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Lithium | 0.500 | 0.492 | | mg/L | | 98 | 80 - 120 |

**Lab Sample ID: LCS 500-688396/2-A**
**Matrix: Water**
**Analysis Batch: 689345**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 688396**

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

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-687510/12-A**
**Matrix: Water**
**Analysis Batch: 687783**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 687510**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/30/22 10:15 | 12/01/22 07:57 | 1 |

**Lab Sample ID: LCS 500-687510/13-A**
**Matrix: Water**
**Analysis Batch: 687783**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 687510**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 0.00198 | 0.00165 | | mg/L | | 83 | 80 - 120 |

**Lab Sample ID: 500-225637-1 MS**
**Matrix: Water**
**Analysis Batch: 687783**

**Client Sample ID: MW-05**
**Prep Type: Total/NA**
**Prep Batch: 687510**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00100 | 0.000998 | | mg/L | | 100 | 75 - 125 |

**Lab Sample ID: 500-225637-1 MSD**
**Matrix: Water**
**Analysis Batch: 687783**

**Client Sample ID: MW-05**
**Prep Type: Total/NA**
**Prep Batch: 687510**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.00020 | | 0.00100 | 0.00100 | | mg/L | | 100 | 75 - 125 | 0 | 20 |

**Lab Sample ID: 500-225637-1 DU**
**Matrix: Water**
**Analysis Batch: 687783**

**Client Sample ID: MW-05**
**Prep Type: Total/NA**
**Prep Batch: 687510**

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

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 500-689188/33**
**Matrix: Water**
**Analysis Batch: 689188**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Fluoride | <0.20 | | 0.20 | | mg/L | | | 12/09/22 17:47 | 1 |

**Lab Sample ID: LCS 500-689188/34**
**Matrix: Water**
**Analysis Batch: 689188**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | | | 1.00 | 1.10 | | mg/L | | 110 | 90 - 110 | | |

**Lab Sample ID: 500-225637-5 MS**
**Matrix: Water**
**Analysis Batch: 689188**

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

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 0.71 | | 0.600 | 1.27 | | mg/L | | 93 | 80 - 120 | | |

**Lab Sample ID: 500-225637-5 MSD**
**Matrix: Water**
**Analysis Batch: 689188**

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

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 0.71 | | 0.600 | 1.28 | | mg/L | | 94 | 80 - 120 | 1 | 20 |

**Lab Sample ID: 500-225637-7 MS**
**Matrix: Water**
**Analysis Batch: 689188**

**Client Sample ID: 2S/3S Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 0.61 | | 0.600 | 1.12 | | mg/L | | 85 | 80 - 120 | | |

**Lab Sample ID: 500-225637-7 MSD**
**Matrix: Water**
**Analysis Batch: 689188**

**Client Sample ID: 2S/3S Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 0.61 | | 0.600 | 1.12 | | mg/L | | 84 | 80 - 120 | 1 | 20 |

**Lab Sample ID: MB 500-689941/11**
**Matrix: Water**
**Analysis Batch: 689941**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Fluoride | <0.20 | | 0.20 | | mg/L | | | 12/14/22 15:53 | 1 |

**Lab Sample ID: LCS 500-689941/12**
**Matrix: Water**
**Analysis Batch: 689941**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | | | 1.00 | 1.05 | | mg/L | | 105 | 90 - 110 | | |

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

**Lab Sample ID: MB 500-685754/1**
**Matrix: Water**
**Analysis Batch: 685754**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | <10 | | 10 | | mg/L | | | 11/18/22 03:17 | 1 |

**Lab Sample ID: LCS 500-685754/2**
**Matrix: Water**
**Analysis Batch: 685754**

**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 | 244 | | mg/L | | 98 | 80 - 120 | | |

**Lab Sample ID: MB 500-686397/1**
**Matrix: Water**
**Analysis Batch: 686397**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | <10 | | 10 | | mg/L | | | 11/22/22 02:25 | 1 |

**Lab Sample ID: LCS 500-686397/2**
**Matrix: Water**
**Analysis Batch: 686397**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | | | 250 | 252 | | mg/L | | 101 | 80 - 120 | | |

**Lab Sample ID: 500-225637-2 MS**
**Matrix: Water**
**Analysis Batch: 686397**

**Client Sample ID: MW-06**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 600 | | 250 | 848 | | mg/L | | 98 | 75 - 125 | | |

**Lab Sample ID: 500-225637-2 DU**
**Matrix: Water**
**Analysis Batch: 686397**

**Client Sample ID: MW-06**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 600 | | | 578 | | mg/L | | | | 4 | 5 |

**Lab Sample ID: 500-225637-3 DU**
**Matrix: Water**
**Analysis Batch: 686397**

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

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 690 | | | 712 | | mg/L | | | | 4 | 5 |

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

**Lab Sample ID: MB 500-688458/48**
**Matrix: Water**
**Analysis Batch: 688458**

**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 | | | 12/06/22 09:48 | 1 |

**Lab Sample ID: LCS 500-688458/49**
**Matrix: Water**
**Analysis Batch: 688458**

**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 | 20.5 | | mg/L | | 103 | 85 - 115 | | |

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

**Lab Sample ID: MB 500-687313/181**
**Matrix: Water**
**Analysis Batch: 687313**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Sulfate | <5.0 | | 5.0 | | mg/L | | | 11/29/22 11:16 | 1 |

**Lab Sample ID: MB 500-687313/217**
**Matrix: Water**
**Analysis Batch: 687313**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Sulfate | <5.0 | | 5.0 | | mg/L | | | 11/29/22 11:44 | 1 |

**Lab Sample ID: LCS 500-687313/182**
**Matrix: Water**
**Analysis Batch: 687313**

**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 | 22.7 | | mg/L | | 114 | 88 - 123 | | |

**Lab Sample ID: LCS 500-687313/218**
**Matrix: Water**
**Analysis Batch: 687313**

**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 | 23.2 | | mg/L | | 116 | 88 - 123 | | |

**Lab Sample ID: 500-225637-7 MS**
**Matrix: Water**
**Analysis Batch: 687313**

**Client Sample ID: 2S/3S Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 190 | | 20.0 | 202 | 4 | mg/L | | 84 | 75 - 125 | | |

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

**Lab Sample ID: 500-225637-7 MSD**
**Matrix: Water**
**Analysis Batch: 687313**

**Client Sample ID: 2S/3S Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 190 | | 20.0 | 200 | 4 | mg/L | | 77 | 75 - 125 | 1 | 20 |

# Lab Chronicle

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

Job ID: 500-225637-1

## Client Sample ID: MW-05
**Date Collected: 11/15/22 14:50**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-1
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689114 | FXG | EET CHI | 12/06/22 20:54 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689195 | FXG | EET CHI | 12/09/22 21:25 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 20 | 689345 | FXG | EET CHI | 12/10/22 18:36 |
| Total/NA | Prep | 7470A | | | 687510 | MJG | EET CHI | 11/30/22 10:15 - 11/30/22 12:15 [1] |
| Total/NA | Analysis | 7470A | | 1 | 687783 | MJG | EET CHI | 12/01/22 08:29 |
| Total/NA | Analysis | 300.0 | | 1 | 689188 | RES | EET CHI | 12/09/22 20:06 |
| Total/NA | Analysis | SM 2540C | | 1 | 685754 | CLB | EET CHI | 11/18/22 04:16 |
| Total/NA | Analysis | SM 4500 Cl- E | | 1 | 688458 | LP | EET CHI | 12/06/22 09:50 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 687313 | LP | EET CHI | 11/29/22 11:22 |

## Client Sample ID: MW-06
**Date Collected: 11/16/22 09:38**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-2
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689114 | FXG | EET CHI | 12/06/22 21:04 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689195 | FXG | EET CHI | 12/09/22 21:29 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 10 | 689345 | FXG | EET CHI | 12/10/22 18:40 |
| Total/NA | Prep | 7470A | | | 687510 | MJG | EET CHI | 11/30/22 10:15 - 11/30/22 12:15 [1] |
| Total/NA | Analysis | 7470A | | 1 | 687783 | MJG | EET CHI | 12/01/22 08:41 |
| Total/NA | Analysis | 300.0 | | 1 | 689188 | RES | EET CHI | 12/09/22 20:19 |
| Total/NA | Analysis | SM 2540C | | 1 | 686397 | CLB | EET CHI | 11/22/22 02:30 |
| Total/NA | Analysis | SM 4500 Cl- E | | 1 | 688458 | LP | EET CHI | 12/06/22 09:50 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 687313 | LP | EET CHI | 11/29/22 11:22 |

## Client Sample ID: MW-09
**Date Collected: 11/16/22 14:39**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-3
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689114 | FXG | EET CHI | 12/06/22 21:08 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689195 | FXG | EET CHI | 12/09/22 21:32 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 5 | 689345 | FXG | EET CHI | 12/10/22 18:43 |
| Total/NA | Prep | 7470A | | | 687510 | MJG | EET CHI | 11/30/22 10:15 - 11/30/22 12:15 [1] |
| Total/NA | Analysis | 7470A | | 1 | 687783 | MJG | EET CHI | 12/01/22 08:43 |

# Lab Chronicle

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

Job ID: 500-225637-1

## Client Sample ID: MW-09

**Lab Sample ID: 500-225637-3**

**Date Collected: 11/16/22 14:39**

**Matrix: Water**

**Date Received: 11/17/22 15:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 1 | 689188 | RES | EET CHI | 12/09/22 20:31 |
| Total/NA | Analysis | SM 2540C | | 1 | 686397 | CLB | EET CHI | 11/22/22 02:37 |
| Total/NA | Analysis | SM 4500 Cl- E | | 10 | 688458 | LP | EET CHI | 12/06/22 09:50 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 687313 | LP | EET CHI | 11/29/22 11:23 |

## Client Sample ID: MW-10

**Lab Sample ID: 500-225637-4**

**Date Collected: 11/16/22 12:02**

**Matrix: Water**

**Date Received: 11/17/22 15:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689114 | FXG | EET CHI | 12/06/22 21:12 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689195 | FXG | EET CHI | 12/09/22 21:36 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 10 | 689345 | FXG | EET CHI | 12/10/22 18:47 |
| Total/NA | Prep | 7470A | | | 687510 | MJG | EET CHI | 11/30/22 10:15 - 11/30/22 12:15 [1] |
| Total/NA | Analysis | 7470A | | 1 | 687783 | MJG | EET CHI | 12/01/22 08:45 |
| Total/NA | Analysis | 300.0 | | 1 | 689188 | RES | EET CHI | 12/09/22 20:44 |
| Total/NA | Analysis | SM 2540C | | 1 | 686397 | CLB | EET CHI | 11/22/22 02:43 |
| Total/NA | Analysis | SM 4500 Cl- E | | 10 | 688458 | LP | EET CHI | 12/06/22 09:50 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 687313 | LP | EET CHI | 11/29/22 11:24 |

## Client Sample ID: MW-11

**Lab Sample ID: 500-225637-5**

**Date Collected: 11/16/22 13:09**

**Matrix: Water**

**Date Received: 11/17/22 15:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689114 | FXG | EET CHI | 12/06/22 21:15 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689195 | FXG | EET CHI | 12/09/22 21:39 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 10 | 689345 | FXG | EET CHI | 12/10/22 18:50 |
| Total/NA | Prep | 7470A | | | 687510 | MJG | EET CHI | 11/30/22 10:15 - 11/30/22 12:15 [1] |
| Total/NA | Analysis | 7470A | | 1 | 687783 | MJG | EET CHI | 12/01/22 08:48 |
| Total/NA | Analysis | 300.0 | | 1 | 689188 | RES | EET CHI | 12/09/22 20:56 |
| Total/NA | Analysis | SM 2540C | | 1 | 686397 | CLB | EET CHI | 11/22/22 02:45 |
| Total/NA | Analysis | SM 4500 Cl- E | | 10 | 688458 | LP | EET CHI | 12/06/22 09:51 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 687313 | LP | EET CHI | 11/29/22 11:24 |

# Lab Chronicle

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

Job ID: 500-225637-1

## Client Sample ID: MW-12

**Lab Sample ID: 500-225637-6**

**Date Collected: 11/16/22 10:23**

**Matrix: Water**

**Date Received: 11/17/22 15:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689114 | FXG | EET CHI | 12/06/22 21:19 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689195 | FXG | EET CHI | 12/09/22 21:43 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 5 | 689345 | FXG | EET CHI | 12/10/22 18:54 |
| Total/NA | Prep | 7470A | | | 687510 | MJG | EET CHI | 11/30/22 10:15 - 11/30/22 12:15 [1] |
| Total/NA | Analysis | 7470A | | 1 | 687783 | MJG | EET CHI | 12/01/22 08:50 |
| Total/NA | Analysis | 300.0 | | 1 | 689941 | RES | EET CHI | 12/14/22 19:16 |
| Total/NA | Analysis | SM 2540C | | 1 | 686397 | CLB | EET CHI | 11/22/22 02:48 |
| Total/NA | Analysis | SM 4500 Cl- E | | 10 | 688458 | LP | EET CHI | 12/06/22 09:51 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 687313 | LP | EET CHI | 11/29/22 11:24 |

## Client Sample ID: 2S/3S Duplicate

**Lab Sample ID: 500-225637-7**

**Date Collected: 11/16/22 00:00**

**Matrix: Water**

**Date Received: 11/17/22 15:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689114 | FXG | EET CHI | 12/06/22 21:22 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 689195 | FXG | EET CHI | 12/09/22 21:47 |
| Total Recoverable | Prep | 3005A | | | 688396 | BDE | EET CHI | 12/06/22 08:47 - 12/06/22 09:17 [1] |
| Total Recoverable | Analysis | 6020A | | 5 | 689345 | FXG | EET CHI | 12/10/22 18:57 |
| Total/NA | Prep | 7470A | | | 687510 | MJG | EET CHI | 11/30/22 10:15 - 11/30/22 12:15 [1] |
| Total/NA | Analysis | 7470A | | 1 | 687783 | MJG | EET CHI | 12/01/22 08:52 |
| Total/NA | Analysis | 300.0 | | 1 | 689188 | RES | EET CHI | 12/09/22 22:00 |
| Total/NA | Analysis | SM 2540C | | 1 | 686397 | CLB | EET CHI | 11/22/22 02:50 |
| Total/NA | Analysis | SM 4500 Cl- E | | 10 | 688458 | LP | EET CHI | 12/06/22 10:08 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 687313 | LP | EET CHI | 11/29/22 12:01 |

[1] Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

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

# Accreditation/Certification Summary

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

Job ID: 500-225637-1

## Laboratory: Eurofins Chicago

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

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Illinois | NELAP | IL00035 | 04-30-23 |

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

# Chain of Custody Record

eurofins

| Client Information | Sampler: IAN JOHN HOWIESON | Lab PM: Mockler Diana J | Carrier Tracking No(s): | COC No: 500 106660-45300 1 |
|---|---|---|---|---|
| Client Contact: Mitchel Dolan | Phone: 630-325-1300 | E Mail: Diana Mockler@et eurofinsus com | State of Origin | Page: Page 1 of 1 |
| Company: KPRG and Associates Inc | PWSID | | | Job #: 500-225637 |

| | | |
|---|---|---|
| Address: 414 Plaza Drive Suite 106 | Due Date Requested | |
| City: Westmont | TAT Requested (days) | |
| State Zip: IL 60559 | Compliance Project Δ Yes Δ No | |
| Phone | PO #: 4502081393 | |
| Email: mitcheld@kprginc com | WO # | |
| Project Name: Will County 2S/3S Event Desc Quarterly GW Monitoring | Project #: 50011609 | |
| Site: Illinois | SSOW#: | |

500-225637 COC

**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, Y Trizma, Z other (specify)
Other:

| | Sample Identification | Sample Date | Sample Time (AM CT) | 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) | 903.0 904.0 | 6010C, 6020A, 7470A | 2540C 4500_F_C SM4500_Cl_E SM4500_SO4_E | Total Number of containers | Special Instructions/Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Preservation Code | | | | D | D | N | | |
| 1 | MW-05 | 11-15-22 | 14:50 | G | Water | N | N | X | X | X | 5 | |
| 2 | MW-06 | 11-16-22 | 09:38 | G | Water | N | N | X | X | X | 5 | |
| 3 | MW-09 | 11-16-22 | 14:39 | G | Water | N | N | X | X | X | 5 | |
| 4 | MW 10 | 11-16-22 | 12:02 | G | Water | N | N | X | X | X | 5 | |
| 5 | MW 11 | 11-16-22 | 13:09 | G | Water | N | N | X | X | X | 5 | |
| 6 | MW-12 | 11-16-22 | 10:23 | G | Water | N | N | X | X | X | 5 | |
| 7 | 2S/3S Duplicate | 11-16-22 | — | G | Water | N | N | X | X | X | 5 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

| Empty Kit Relinquished by | Date | Time | Method of Shipment |
|---|---|---|---|
| | | | |

| | Date/Time | Company | | Date/Time | Company |
|---|---|---|---|---|---|
| Relinquished by: | 11-17-22 15:20 | | Received by: | 11-17-22 1520 | |
| Relinquished by | | | Received by | | |
| Relinquished by: | | | Received by: | | |

| Custody Seals Intact. Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks. |
|---|---|---|
| | | 1.9→1.4 2.8→1.8, 0.9→0.4, 1→0.6, 1.5→1.0 |

# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-225637-1

**Login Number: 225637**
**List Number: 1**
**Creator: Scott, Sherri L**

**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 | 1.4,1.8,0.4,0.6,1.0 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | 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 | |

eurofins | Environment Testing

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mitchel Dolan
KPRG and Associates, Inc.
414 Plaza Drive Suite 106
Westmont, Illinois 60559

Generated 12/22/2022 7:50:47 AM

## JOB DESCRIPTION

Will County CCR (RAD)

## JOB NUMBER

500-225637-2

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.



myEOL

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

## Authorization

Generated
12/22/2022 7:50:47 AM

Authorized for release by
Diana Mockler, Project Manager I
Diana.Mockler@et.eurofinsus.com
(219)252-7570

# Table of Contents

# Case Narrative

Client: KPRG and Associates, Inc.
Project/Site: Will County CCR (RAD)

Job ID: 500-225637-2

## Job ID: 500-225637-2

### Laboratory: Eurofins Chicago

**Narrative**

**Job Narrative**
**500-225637-2**

**Comments**
No additional comments.

**Receipt**
The samples were received on 11/17/2022 3:20 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 0.4º C, 0.6º C, 1.0º C, 1.4º C and 1.8º C.

**RAD**
Method 903.0: Radium-226 batch 591407
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.
MW-05 (500-225637-1), MW-06 (500-225637-2), MW-09 (500-225637-3), MW-10 (500-225637-4), MW-11 (500-225637-5), MW-12 (500-225637-6), 2S/3S Duplicate (500-225637-7), (LCS 160-591407/2-A), (MB 160-591407/1-A) and (500-225637-C-1-A DU)

Method 904.0: Radium-228 batch 591417
The detection goal was not met for the following sample(s). Sample was prepped at a reduced volume due to the presence of matrix interferences: MW-10 (500-225637-4). Analytical results are reported with the detection limit achieved.

Method 904.0: Radium-228 batch 591417
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.
MW-05 (500-225637-1), MW-06 (500-225637-2), MW-09 (500-225637-3), MW-10 (500-225637-4), MW-11 (500-225637-5), MW-12 (500-225637-6), 2S/3S Duplicate (500-225637-7), (LCS 160-591417/2-A), (MB 160-591417/1-A) and (500-225637-C-1-B DU)

Method PrecSep_0:

Method PrecSep-21:

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: Will County CCR (RAD)

Job ID: 500-225637-2

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 903.0 | Radium-226 (GFPC) | EPA | EET SL |
| 904.0 | Radium-228 (GFPC) | EPA | EET SL |
| Ra226_Ra228 | Combined Radium-226 and Radium-228 | TAL-STL | EET SL |
| PrecSep_0 | Preparation, Precipitate Separation | None | EET SL |
| PrecSep-21 | Preparation, Precipitate Separation (21-Day In-Growth) | None | EET SL |

**Protocol References:**

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

**Laboratory References:**

EET 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: Will County CCR (RAD)

Job ID: 500-225637-2

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 500-225637-1 | MW-05 | Water | 11/15/22 14:50 | 11/17/22 15:20 |
| 500-225637-2 | MW-06 | Water | 11/16/22 09:38 | 11/17/22 15:20 |
| 500-225637-3 | MW-09 | Water | 11/16/22 14:39 | 11/17/22 15:20 |
| 500-225637-4 | MW-10 | Water | 11/16/22 12:02 | 11/17/22 15:20 |
| 500-225637-5 | MW-11 | Water | 11/16/22 13:09 | 11/17/22 15:20 |
| 500-225637-6 | MW-12 | Water | 11/16/22 10:23 | 11/17/22 15:20 |
| 500-225637-7 | 2S/3S Duplicate | Water | 11/16/22 00:00 | 11/17/22 15:20 |

## Client Sample ID: MW-05

**Date Collected: 11/15/22 14:50**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-1

**Matrix: Water**

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.108 | U | 0.0930 | 0.0935 | 1.00 | 0.142 | pCi/L | 11/29/22 09:20 | 12/21/22 12:27 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *91.0* | | *40 - 110* | *11/29/22 09:20* | *12/21/22 12:27* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.371 | U | 0.356 | 0.357 | 1.00 | 0.569 | pCi/L | 11/29/22 09:44 | 12/15/22 12:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *91.0* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:02* | *1* |
| *Y Carrier* | *80.4* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:02* | *1* |

### Method: TAL-STL 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 | 0.479 | U | 0.368 | 0.369 | 5.00 | 0.569 | pCi/L | | 12/21/22 18:30 | 1 |

## Client Sample ID: MW-06

**Date Collected: 11/16/22 09:38**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-2

**Matrix: Water**

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.170 | | 0.0968 | 0.0979 | 1.00 | 0.125 | pCi/L | 11/29/22 09:20 | 12/21/22 12:27 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *91.5* | | *40 - 110* | *11/29/22 09:20* | *12/21/22 12:27* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.912 | | 0.390 | 0.399 | 1.00 | 0.504 | pCi/L | 11/29/22 09:44 | 12/15/22 12:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *91.5* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:02* | *1* |
| *Y Carrier* | *83.4* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:02* | *1* |

### Method: TAL-STL 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 | 1.08 | | 0.402 | 0.411 | 5.00 | 0.504 | pCi/L | | 12/21/22 18:30 | 1 |

# Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Will County CCR (RAD)

Job ID: 500-225637-2

## Client Sample ID: MW-09

**Date Collected: 11/16/22 14:39**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-3

**Matrix: Water**

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.0532 | U | 0.0841 | 0.0843 | 1.00 | 0.145 | pCi/L | 11/29/22 09:20 | 12/21/22 12:28 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.2* | | *40 - 110* | *11/29/22 09:20* | *12/21/22 12:28* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.152 | U | 0.292 | 0.292 | 1.00 | 0.510 | pCi/L | 11/29/22 09:44 | 12/15/22 12:02 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.2* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:02* | *1* |
| *Y Carrier* | *82.2* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:02* | *1* |

### Method: TAL-STL 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 | 0.205 | U | 0.304 | 0.304 | 5.00 | 0.510 | pCi/L | | 12/21/22 18:30 | 1 |

## Client Sample ID: MW-10

**Date Collected: 11/16/22 12:02**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-4

**Matrix: Water**

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.252 | | 0.166 | 0.167 | 1.00 | 0.227 | pCi/L | 11/29/22 09:20 | 12/21/22 12:28 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *61.7* | | *40 - 110* | *11/29/22 09:20* | *12/21/22 12:28* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 2.49 | G | 0.875 | 0.905 | 1.00 | 1.06 | pCi/L | 11/29/22 09:44 | 12/15/22 12:04 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *61.7* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:04* | *1* |
| *Y Carrier* | *81.9* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:04* | *1* |

### Method: TAL-STL 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 | | 0.891 | 0.920 | 5.00 | 1.06 | pCi/L | | 12/21/22 18:30 | 1 |

## Client Sample ID: MW-11

**Date Collected: 11/16/22 13:09**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-5

**Matrix: Water**

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.491 | | 0.187 | 0.192 | 1.00 | 0.209 | pCi/L | 11/29/22 09:20 | 12/21/22 12:29 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.6* | | *40 - 110* | *11/29/22 09:20* | *12/21/22 12:29* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.12 | | 0.663 | 0.671 | 1.00 | 0.983 | pCi/L | 11/29/22 09:44 | 12/15/22 12:04 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *81.6* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:04* | *1* |
| *Y Carrier* | *81.1* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:04* | *1* |

### Method: TAL-STL 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 | 1.61 | | 0.689 | 0.698 | 5.00 | 0.983 | pCi/L | | 12/21/22 18:30 | 1 |

## Client Sample ID: MW-12

**Date Collected: 11/16/22 10:23**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-6

**Matrix: Water**

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.0719 | U | 0.0848 | 0.0850 | 1.00 | 0.139 | pCi/L | 11/29/22 09:20 | 12/21/22 12:29 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *90.3* | | *40 - 110* | *11/29/22 09:20* | *12/21/22 12:29* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| **Radium-228** | **0.963** | | 0.425 | 0.434 | 1.00 | 0.569 | pCi/L | 11/29/22 09:44 | 12/15/22 12:04 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *90.3* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:04* | *1* |
| *Y Carrier* | *83.0* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:04* | *1* |

### Method: TAL-STL 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** | **1.03** | | 0.433 | 0.442 | 5.00 | 0.569 | pCi/L | | 12/21/22 18:30 | 1 |

Client: KPRG and Associates, Inc.
Project/Site: Will County CCR (RAD)

Job ID: 500-225637-2

## Client Sample ID: 2S/3S Duplicate

**Date Collected: 11/16/22 00:00**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-7

**Matrix: Water**

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

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.0114 | U | 0.0661 | 0.0661 | 1.00 | 0.130 | pCi/L | 11/29/22 09:20 | 12/21/22 12:29 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.5* | | *40 - 110* | *11/29/22 09:20* | *12/21/22 12:29* | *1* |

### Method: EPA 904.0 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.200 | U | 0.349 | 0.349 | 1.00 | 0.600 | pCi/L | 11/29/22 09:44 | 12/15/22 12:04 | 1 |

| *Carrier* | *%Yield* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *84.5* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:04* | *1* |
| *Y Carrier* | *82.6* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:04* | *1* |

### Method: TAL-STL 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 | 0.211 | U | 0.355 | 0.355 | 5.00 | 0.600 | pCi/L | | 12/21/22 18:30 | 1 |

# Definitions/Glossary

Client: KPRG and Associates, Inc.
Project/Site: Will County CCR (RAD)

Job ID: 500-225637-2

## Qualifiers

### Rad

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

## Glossary

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

## Rad

### Prep Batch: 591407

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total/NA | Water | PrecSep-21 | |
| 500-225637-2 | MW-06 | Total/NA | Water | PrecSep-21 | |
| 500-225637-3 | MW-09 | Total/NA | Water | PrecSep-21 | |
| 500-225637-4 | MW-10 | Total/NA | Water | PrecSep-21 | |
| 500-225637-5 | MW-11 | Total/NA | Water | PrecSep-21 | |
| 500-225637-6 | MW-12 | Total/NA | Water | PrecSep-21 | |
| 500-225637-7 | 2S/3S Duplicate | Total/NA | Water | PrecSep-21 | |
| MB 160-591407/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-591407/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| 500-225637-1 DU | MW-05 | Total/NA | Water | PrecSep-21 | |

### Prep Batch: 591417

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-225637-1 | MW-05 | Total/NA | Water | PrecSep_0 | |
| 500-225637-2 | MW-06 | Total/NA | Water | PrecSep_0 | |
| 500-225637-3 | MW-09 | Total/NA | Water | PrecSep_0 | |
| 500-225637-4 | MW-10 | Total/NA | Water | PrecSep_0 | |
| 500-225637-5 | MW-11 | Total/NA | Water | PrecSep_0 | |
| 500-225637-6 | MW-12 | Total/NA | Water | PrecSep_0 | |
| 500-225637-7 | 2S/3S Duplicate | Total/NA | Water | PrecSep_0 | |
| MB 160-591417/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-591417/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| 500-225637-1 DU | MW-05 | Total/NA | Water | PrecSep_0 | |

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

**Lab Sample ID: MB 160-591407/1-A**
**Matrix: Water**
**Analysis Batch: 594432**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 591407**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.03040 | U | 0.0706 | 0.0707 | 1.00 | 0.128 | pCi/L | 11/29/22 09:20 | 12/21/22 12:27 | 1 |

| *Carrier* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *97.1* | | *40 - 110* | *11/29/22 09:20* | *12/21/22 12:27* | *1* |

**Lab Sample ID: LCS 160-591407/2-A**
**Matrix: Water**
**Analysis Batch: 594432**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 591407**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | | | 11.3 | 10.44 | | 1.10 | 1.00 | 0.139 | pCi/L | 92 | 75 - 125 | | |

| *Carrier* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *96.4* | | *40 - 110* |

**Lab Sample ID: 500-225637-1 DU**
**Matrix: Water**
**Analysis Batch: 594432**

**Client Sample ID: MW-05**
**Prep Type: Total/NA**
**Prep Batch: 591407**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.108 | U | | 0.1483 | | 0.100 | 1.00 | 0.139 | pCi/L | | | 0.21 | 1 |

| *Carrier* | *DU %Yield* | *DU Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *87.4* | | *40 - 110* |

## Method: 904.0 - Radium-228 (GFPC)

**Lab Sample ID: MB 160-591417/1-A**
**Matrix: Water**
**Analysis Batch: 593777**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 591417**

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.3878 | U | 0.298 | 0.300 | 1.00 | 0.452 | pCi/L | 11/29/22 09:44 | 12/15/22 12:01 | 1 |

| *Carrier* | *MB %Yield* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Ba Carrier* | *97.1* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:01* | *1* |
| *Y Carrier* | *83.4* | | *40 - 110* | *11/29/22 09:44* | *12/15/22 12:01* | *1* |

## Method: 904.0 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: LCS 160-591417/2-A**
**Matrix: Water**
**Analysis Batch: 593777**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 591417**

| Analyte | | | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | | | 8.36 | 9.304 | | 1.27 | 1.00 | 0.509 | pCi/L | 111 | 75 - 125 | | |

| *Carrier* | *LCS %Yield* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *96.4* | | *40 - 110* |
| *Y Carrier* | *83.0* | | *40 - 110* |

**Lab Sample ID: 500-225637-1 DU**
**Matrix: Water**
**Analysis Batch: 593777**

**Client Sample ID: MW-05**
**Prep Type: Total/NA**
**Prep Batch: 591417**

| Analyte | Sample Result | Sample Qual | | DU Result | DU Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | | | RER | RER Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.371 | U | | 0.7200 | | 0.405 | 1.00 | 0.565 | pCi/L | | | 0.46 | 1 |

| *Carrier* | *DU %Yield* | *DU Qualifier* | *Limits* |
|---|---|---|---|
| *Ba Carrier* | *87.4* | | *40 - 110* |
| *Y Carrier* | *81.1* | | *40 - 110* |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Will County CCR (RAD)

Job ID: 500-225637-2

## Client Sample ID: MW-05
**Date Collected: 11/15/22 14:50**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-1
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 591407 | BMP | EET SL | 11/29/22 09:20 |
| Total/NA | Analysis | 903.0 | | 1 | 594432 | FLC | EET SL | 12/21/22 12:27 |
| Total/NA | Prep | PrecSep_0 | | | 591417 | BMP | EET SL | 11/29/22 09:44 |
| Total/NA | Analysis | 904.0 | | 1 | 593777 | FLC | EET SL | 12/15/22 12:02 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 594570 | CLP | EET SL | 12/21/22 18:30 |

## Client Sample ID: MW-06
**Date Collected: 11/16/22 09:38**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-2
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 591407 | BMP | EET SL | 11/29/22 09:20 |
| Total/NA | Analysis | 903.0 | | 1 | 594432 | FLC | EET SL | 12/21/22 12:27 |
| Total/NA | Prep | PrecSep_0 | | | 591417 | BMP | EET SL | 11/29/22 09:44 |
| Total/NA | Analysis | 904.0 | | 1 | 593777 | FLC | EET SL | 12/15/22 12:02 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 594570 | CLP | EET SL | 12/21/22 18:30 |

## Client Sample ID: MW-09
**Date Collected: 11/16/22 14:39**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-3
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 591407 | BMP | EET SL | 11/29/22 09:20 |
| Total/NA | Analysis | 903.0 | | 1 | 594432 | FLC | EET SL | 12/21/22 12:28 |
| Total/NA | Prep | PrecSep_0 | | | 591417 | BMP | EET SL | 11/29/22 09:44 |
| Total/NA | Analysis | 904.0 | | 1 | 593777 | FLC | EET SL | 12/15/22 12:02 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 594570 | CLP | EET SL | 12/21/22 18:30 |

## Client Sample ID: MW-10
**Date Collected: 11/16/22 12:02**
**Date Received: 11/17/22 15:20**

## Lab Sample ID: 500-225637-4
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 591407 | BMP | EET SL | 11/29/22 09:20 |
| Total/NA | Analysis | 903.0 | | 1 | 594432 | FLC | EET SL | 12/21/22 12:28 |
| Total/NA | Prep | PrecSep_0 | | | 591417 | BMP | EET SL | 11/29/22 09:44 |
| Total/NA | Analysis | 904.0 | | 1 | 593774 | FLC | EET SL | 12/15/22 12:04 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 594570 | CLP | EET SL | 12/21/22 18:30 |

# Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Will County CCR (RAD)

Job ID: 500-225637-2

## Client Sample ID: MW-11

**Lab Sample ID: 500-225637-5**

**Date Collected: 11/16/22 13:09**

**Matrix: Water**

**Date Received: 11/17/22 15:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 591407 | BMP | EET SL | 11/29/22 09:20 |
| Total/NA | Analysis | 903.0 | | 1 | 594432 | FLC | EET SL | 12/21/22 12:29 |
| Total/NA | Prep | PrecSep_0 | | | 591417 | BMP | EET SL | 11/29/22 09:44 |
| Total/NA | Analysis | 904.0 | | 1 | 593774 | FLC | EET SL | 12/15/22 12:04 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 594570 | CLP | EET SL | 12/21/22 18:30 |

## Client Sample ID: MW-12

**Lab Sample ID: 500-225637-6**

**Date Collected: 11/16/22 10:23**

**Matrix: Water**

**Date Received: 11/17/22 15:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 591407 | BMP | EET SL | 11/29/22 09:20 |
| Total/NA | Analysis | 903.0 | | 1 | 594432 | FLC | EET SL | 12/21/22 12:29 |
| Total/NA | Prep | PrecSep_0 | | | 591417 | BMP | EET SL | 11/29/22 09:44 |
| Total/NA | Analysis | 904.0 | | 1 | 593774 | FLC | EET SL | 12/15/22 12:04 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 594570 | CLP | EET SL | 12/21/22 18:30 |

## Client Sample ID: 2S/3S Duplicate

**Lab Sample ID: 500-225637-7**

**Date Collected: 11/16/22 00:00**

**Matrix: Water**

**Date Received: 11/17/22 15:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | PrecSep-21 | | | 591407 | BMP | EET SL | 11/29/22 09:20 |
| Total/NA | Analysis | 903.0 | | 1 | 594432 | FLC | EET SL | 12/21/22 12:29 |
| Total/NA | Prep | PrecSep_0 | | | 591417 | BMP | EET SL | 11/29/22 09:44 |
| Total/NA | Analysis | 904.0 | | 1 | 593774 | FLC | EET SL | 12/15/22 12:04 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 594570 | CLP | EET SL | 12/21/22 18:30 |

**Laboratory References:**

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

# Accreditation/Certification Summary

Client: KPRG and Associates, Inc.
Project/Site: Will County CCR (RAD)

Job ID: 500-225637-2

## Laboratory: Eurofins St. Louis

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

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Illinois | NELAP | 200023 | 11-30-23 |

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

# Chain of Custody Record

eurofins

| Client Information | Sampler: IAN JOHN HOWIESON | Lab PM: Mockler Diana J | Carrier Tracking No(s): | COC No: 500 106660-45300 1 |
|---|---|---|---|---|
| Client Contact: Mitchel Dolan | Phone: 630-325-1300 | E Mail: Diana Mockler@et eurofinsus com | State of Origin | Page: Page 1 of 1 |
| Company: KPRG and Associates Inc | PWSID | | | Job #: 500-225637 |
| Address: 414 Plaza Drive Suite 106 | Due Date Requested | | | |
| City: Westmont | TAT Requested (days) | | | |
| State Zip: IL 60559 | Compliance Project Δ Yes Δ No | | | |
| Phone | PO #: 4502081393 | | | |
| Email: mitcheld@kprginc com | WO # | | | |
| Project Name: Will County 2S/3S Event Desc Quarterly GW Monitoring | Project #: 50011609 | | | |
| Site: Illinois | SSOW#: | | | |

500-225637 COC

**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, Y Trizma, Z other (specify)

Other:

| | Sample Identification | Sample Date | AM CT Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid O=waste/o l, BT=Tissue A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 903.0 904.0 | 6010C, 6020A, 7470A | 2540C 4500_F_C SM4500_Cl_E SM4500_SO4_E | | | | | | | | | | Total Number of containers | Special Instructions/Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Preservation Code | | | | D | D | N | | | | | | | | | | | |
| 1 | MW-05 | 11-15-22 | 14:50 | G | Water | N | N | X | X | X | | | | | | | | | | 5 | |
| 2 | MW-06 | 11-16-22 | 09:38 | G | Water | N | N | X | X | X | | | | | | | | | | 5 | |
| 3 | MW-09 | 11-16-22 | 14:39 | G | Water | N | N | X | X | X | | | | | | | | | | 5 | |
| 4 | MW 10 | 11-16-22 | 12:02 | G | Water | N | N | X | X | X | | | | | | | | | | 5 | |
| 5 | MW 11 | 11-16-22 | 13:09 | G | Water | N | N | X | X | X | | | | | | | | | | 5 | |
| 6 | MW-12 | 11-16-22 | 10:23 | G | Water | N | N | X | X | X | | | | | | | | | | 5 | |
| 7 | 2S/3S Duplicate | 11-16-22 | — | G | Water | N | N | X | X | X | | | | | | | | | | 5 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

| Empty Kit Relinquished by | Date | Time | Method of Shipment |
|---|---|---|---|
| | | | |

| Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|
| | 11-17-22 15:20 | | | 11-17-22 1520 | |
| Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
| Relinquished by | Date/Time | Company | Received by | Date/Time | Company |

| Custody Seals Intact. Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks. |
|---|---|---|
| | | 1.9→1.4 2.8→1.8, 0.9→0.4, 1→0.6, 1.5→1.0 |

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

# Chain of Custody Record

eurofins | Environment Testing

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Mockler, Diana J | Carrier Tracking No(s): | COC No: 500-167757.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Diana.Mockler@et.eurofinsus.com | State of Origin: Illinois | Page: Page 1 of 1 |
| Company: TestAmerica Laboratories, Inc. | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-225637-2 |
| Address: 13715 Rider Trail North, , | Due Date Requested: 12/12/2022 | | | |
| City: Earth City | TAT Requested (days): | | | |
| State, Zip: MO, 63045 | | | | |
| Phone: 314-298-8566(Tel) 314-298-8757(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Will County CCR (RAD) | Project #: 50011609 | | | |
| Site: NRG Midwest Generation Will County | 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, Y - Trizma, 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 | Ra226/Ra228_GFPC | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| MW-05 (500-225637-1) | 11/15/22 | 14:50 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| MW-06 (500-225637-2) | 11/16/22 | 09:38 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| MW-09 (500-225637-3) | 11/16/22 | 14:39 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| MW-10 (500-225637-4) | 11/16/22 | 12:02 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| MW-11 (500-225637-5) | 11/16/22 | 13:09 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| MW-12 (500-225637-6) | 11/16/22 | 10:23 Central | | Water | | | X | X | X | 3 | Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume; |
| 2S/3S Duplicate (500-225637-7) | 11/16/22 | 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 Chicago 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 Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Chicago.

| 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 | Melissa Cabezas | 11/18/22 1600 | EEST | FED EX | | |
| 2 | Relinquished by: FED EX | Date/Time: | Company | Received by: | Date/Time: NOV 21 2022 0930 | Company EPORT |
| 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:

# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-225637-2

**Login Number: 225637**
**List Number: 1**
**Creator: Scott, Sherri L**

**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 | 1.4,1.8,0.4,0.6,1.0 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | 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: 500-225637-2

**Login Number: 225637**
**List Number: 2**
**Creator: Bohlmann, Jessica M**

**List Source: Eurofins St. Louis**
**List Creation: 11/21/22 01:47 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 | |

# Tracer/Carrier Summary

Client: KPRG and Associates, Inc.
Project/Site: Will County CCR (RAD)

Job ID: 500-225637-2

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

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) |
|---|---|---|
| | | Ba |
| Lab Sample ID | Client Sample ID | (40-110) |
| 500-225637-1 | MW-05 | 91.0 |
| 500-225637-1 DU | MW-05 | 87.4 |
| 500-225637-2 | MW-06 | 91.5 |
| 500-225637-3 | MW-09 | 84.2 |
| 500-225637-4 | MW-10 | 61.7 |
| 500-225637-5 | MW-11 | 81.6 |
| 500-225637-6 | MW-12 | 90.3 |
| 500-225637-7 | 2S/3S Duplicate | 84.5 |
| LCS 160-591407/2-A | Lab Control Sample | 96.4 |
| MB 160-591407/1-A | Method Blank | 97.1 |

**Tracer/Carrier Legend**

Ba = Ba Carrier

## Method: 904.0 - Radium-228 (GFPC)

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Yield (Acceptance Limits) | |
|---|---|---|---|
| | | Ba | Y |
| Lab Sample ID | Client Sample ID | (40-110) | (40-110) |
| 500-225637-1 | MW-05 | 91.0 | 80.4 |
| 500-225637-1 DU | MW-05 | 87.4 | 81.1 |
| 500-225637-2 | MW-06 | 91.5 | 83.4 |
| 500-225637-3 | MW-09 | 84.2 | 82.2 |
| 500-225637-4 | MW-10 | 61.7 | 81.9 |
| 500-225637-5 | MW-11 | 81.6 | 81.1 |
| 500-225637-6 | MW-12 | 90.3 | 83.0 |
| 500-225637-7 | 2S/3S Duplicate | 84.5 | 82.6 |
| LCS 160-591417/2-A | Lab Control Sample | 96.4 | 83.0 |
| MB 160-591417/1-A | Method Blank | 97.1 | 83.4 |

**Tracer/Carrier Legend**

Ba = Ba Carrier

Y = Y Carrier

| PROJECT NAME | NRG – WILL COUNTY STATION (12313.3) | | DATE | 11-15-22 |
|---|---|---|---|---|
| Sample Name | MW-05 | Start Time | 14:35 CT | |
| Condition of Well | GOOD | | | |
| Water Level | 10.69 | Total Depth | — | |
| Well Diameter | PVC – 2 inch | Volume in Well | — | |
| Method of Purge | Low-Flow | Purge Characteristics | SLIGHT TINT WITH ORANGE COLOR PARTICLES | |
| Volume Removed | 3QTS. | W L at Sample Time | 10.71 | |
| Method of Sample | Low-Flow | Sample Characteristics | SLIGHT ~~FLOWS~~ & TINT / ORANGE PARTICLES. | |
| Sample Analysis | CCR | Sample Time | 14:50 CT | |
| Water Quality Meter | YSI ProDss | | | |

| Time | Depth to Water (ft) | ph (SU) | Temp (°C) | Spec. Cond (mS/cm). | DO (mg/L) | ORP (mV) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|
| 14:38 | 10.70 | 6.88 | 13.7 | 1.084 | 4.35 | 57.0 | 26.5 |
| 14:41 | 10.69 | 6.82 | 13.6 | 1.084 | 3.45 | 51.7 | 45.3 |
| 14:44 | 10.70 | 6.80 | 13.3 | 1.074 | 2.60 | 48.5 | 39.5 |
| 14:47 | 10.72 | 6.79 | 13.5 | 1.079 | 2.20 | 47.8 | 37.8 |
| 14:50 | 10.72 | 6.78 | 13.4 | 1.074 | 2.07 | 51.2 | 38.9 |
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SAMPLING NOTES:

Sampler Name and Company: KPRG and Associates IAN JOHN HONIGSON

| PROJECT NAME | NRG – WILL COUNTY STATION (12313.3) | | DATE | 11-16-22 |
|---|---|---|---|---|
| Sample Name | MW-06 | Start Time | 09:26 CT | |
| Condition of Well | Good | | | |
| Water Level | 12.1 | Total Depth | — | |
| Well Diameter | PVC – 2 inch | Volume in Well | — | |
| Method of Purge | Low-Flow | Purge Characteristics | APPEARS CLEAR SLIGHT ODOR | |
| Volume Removed | 3 QTS | W L at Sample Time | 12.18 | |
| Method of Sample | Low-Flow | Sample Characteristics | APPEARS CLEAR SLIGHT ODOR | |
| Sample Analysis | CCR | Sample Time | 09:38 CT | |
| Water Quality Meter | YSI ProDss | | | |

| Time | Depth to Water (ft) | ph (SU) | Temp (°C) | Spec. Cond (mS/cm). | DO (mg/L) | ORP (mV) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|
| 09:29 | 12.20 | 7.37 | 14.6 | 0.833 | 1.42 | -100.8 | 13.76 |
| 09:32 | 12.20 | 7.40 | 14.2 | 0.823 | 1.04 | -108.9 | 10.37 |
| 09:35 | 12.24 | 7.40 | 14.0 | 0.821 | 0.96 | -111.3 | 9.02 |
| 09:38 | 12.19 | 7.41 | 13.8 | 0.821 | 0.92 | -113.9 | 8.12 |
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SAMPLING NOTES:

Sampler Name and Company: KPRG and Associates IAN JOHN HOWESON

| PROJECT NAME | NRG – WILL COUNTY STATION (12313.3) | | DATE | 11-16-22 |
|---|---|---|---|---|
| Sample Name | MW-09 | Start Time | 14:15 CT | |
| Condition of Well | GOOD | | | |
| Water Level | 12.21 | Total Depth | — | |
| Well Diameter | PVC – 2 inch | Volume in Well | — | |
| Method of Purge | Low-Flow | Purge Characteristics | APPEARS CLEAR SLIGHT ODOR | |
| Volume Removed | 4.5 QTS | W L at Sample Time | 12.33 | |
| Method of Sample | Low-Flow | Sample Characteristics | APPEARS CLEAR | |
| Sample Analysis | CCR INIS+ 2535 | Sample Time | 14:39 CT | |
| Water Quality Meter | YSI ProDss | | | |

| Time | Depth to Water (ft) | ph (SU) | Temp (°C) | Spec. Cond (mS/cm). | DO (mg/L) | ORP (mV) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|
| 14:18 | 12.28 | 7.87 | 12.3 | 1.016 | 5.29 | -144.0 | 5.76 |
| 14:21 | 12.29 | 7.75 | 11.3 | 0.991 | 5.72 | -147.7 | 7.45 |
| 14:24 | 12.26 | 8.34 | 10.1 | 0.959 | 5.30 | -161.3 | 10.23 |
| 14:27 | 12.29 | 8.84 | 9.0 | 0.907 | 2.15 | -167.6 | 12.89 |
| 14:30 | 12.32 | 8.84 | 11.6 | 0.974 | 1.63 | -164.1 | 12.27 |
| 14:33 | 12.34 | 8.83 | 11.9 | 0.986 | 1.62 | -159.7 | 12.76 |
| 14:36 | 12.37 | 8.82 | 12.7 | 1.005 | 1.52 | -155.2 | 11.75 |
| 14:39 | 12.41 | 8.82 | 12.6 | 1.003 | 1.50 | -151.8 | 11.73 |
| | | | | | | | |

SAMPLING NOTES:

Sampler Name and Company: KPRG and Associates IAN JOHN HONGSON

| PROJECT NAME | NRG – WILL COUNTY STATION (12313.3) | | DATE | 11-16-22 |
|---|---|---|---|---|
| Sample Name | MW-10 | Start Time | 11:47 CT | |
| Condition of Well | GOOD | | | |
| Water Level | 11.10 | Total Depth | — | |
| Well Diameter | PVC – 2 inch | Volume in Well | — | |
| Method of Purge | Low-Flow | Purge Characteristics | APPEARS CLEAR | |
| Volume Removed | 3 QTS. | W L at Sample Time | 11.18 | |
| Method of Sample | Low-Flow | Sample Characteristics | APPEARS CLEAR | |
| Sample Analysis | CCR | Sample Time | 12:02 CT | |
| Water Quality Meter | YSI ProDss | | | |

| Time | Depth to Water (ft) | ph (SU) | Temp (°C) | Spec. Cond (mS/cm). | DO (mg/L) | ORP (mV) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|
| 11:50 | 11.16 | 7.15 | 13.7 | 1.204 | 3.03 | -96.8 | 45.1 |
| 11:53 | 11.22 | 7.15 | 13.1 | 1.203 | 2.07 | -100.1 | 43.1 |
| 11:56 | 11.19 | 7.15 | 12.2 | 1.180 | 1.58 | -100.7 | 40.5 |
| 11:59 | 11.18 | 7.15 | 11.7 | 1.166 | 1.47 | -100.2 | 37.8 |
| 12:02 | 11.18 | 7.15 | 11.5 | 1.160 | 1.40 | -100.1 | 32.4 |
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SAMPLING NOTES:

Sampler Name and Company: KPRG and Associates IAN SCOTT HOWICKSON

| PROJECT NAME | NRG – WILL COUNTY STATION (12313.3) | | DATE | 11-16-22 |
|---|---|---|---|---|
| Sample Name | MW-11 | Start Time | 12:51 | |
| Condition of Well | GOOD | | | |
| Water Level | 10.86 | Total Depth | —— | |
| Well Diameter | PVC – 2 inch | Volume in Well | —— | |
| Method of Purge | Low-Flow | Purge Characteristics | CLOUDY MOD TURBIDITY | |
| Volume Removed | 3.5 QTS | W L at Sample Time | 11.04 | |
| Method of Sample | Low-Flow | Sample Characteristics | CLOUDY SLIGHT TURBIDITY | |
| Sample Analysis | CCR | Sample Time | 13:09 CT | |
| Water Quality Meter | YSI ProDss | | | |

| Time | Depth to Water (ft) | ph (SU) | Temp (°C) | Spec. Cond (mS/cm). | DO (mg/L) | ORP (mV) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|
| 12:54 | 10.94 | 7.33 | 12.7 | 1.009 | 3.45 | -111.3 | 89.9 |
| 12:57 | 10.98 | 7.37 | 12.7 | 0.996 | 1.83 | -125.4 | 76.4 |
| 13:00 | 11.02 | 7.36 | 12.6 | 0.994 | 1.45 | -127.1 | 69.5 |
| 13:03 | 11.04 | 7.35 | 12.5 | 0.996 | 1.22 | -128.9 | 66.4 |
| 13:06 | 11.05 | 7.35 | 12.8 | 0.999 | 1.09 | -130.8 | 58.8 |
| 13:09 | 11.04 | 7.34 | 12.9 | 1.002 | 1.04 | -131.2 | 60.3 |
| | | | | | | | |
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SAMPLING NOTES:

Sampler Name and Company: KPRG and Associates IAN SCOTT HOWIESON

| PROJECT NAME | NRG – WILL COUNTY STATION (12313.3) | | DATE | 11-16-22 |
|---|---|---|---|---|
| Sample Name | MW-12 | Start Time | 10:05 CT | |
| Condition of Well | GOOD | | | |
| Water Level | 10.7 | Total Depth | — | |
| Well Diameter | PVC – 2 inch | Volume in Well | — | |
| Method of Purge | Low-Flow | Purge Characteristics | APPEARS CLEAR SLIGHT ODOR | |
| Volume Removed | 4 QTS | W L at Sample Time | 10.74 | |
| Method of Sample | Low-Flow | Sample Characteristics | APPEARS CLEAR SLIGHT ODOR | |
| Sample Analysis | CCR + CCR DUPS | Sample Time | 10:23 CT | |
| Water Quality Meter | YSI ProDss | | | |

| Time | Depth to Water (ft) | ph (SU) | Temp (°C) | Spec. Cond (mS/cm). | DO (mg/L) | ORP (mV) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|
| 10:08 | 10.75 | 7.05 | 12.9 | 1.361 | 2.88 | -6.6 | 5.74 |
| 10:11 | 10.72 | 7.05 | 12.6 | 1.350 | 2.50 | -5.6 | 4.56 |
| 10:14 | 10.76 | 7.07 | 11.7 | 1.317 | 1.95 | 0.8 | 4.93 |
| 10:17 | 10.74 | 7.08 | 11.5 | 1.312 | 1.67 | 8.6 | 4.10 |
| 10:20 | 10.74 | 7.09 | 11.8 | 1.325 | 1.27 | 17.4 | 3.05 |
| 10:23 | 10.74 | 7.09 | 11.9 | 1.327 | 1.19 | 19.1 | 2.85 |
| | | | | | | | |
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SAMPLING NOTES:

Sampler Name and Company: KPRG and Associates IAN JOHN HOWICSON