



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

| Sample # | Location | Date Collected | Date Analyzed | Conc. (ppb) |
|----------|-------------------------------------|----------------|---------------|-------------|
| AB48073 | Summit Lake - State Park | 8/3/2021 | 8/4/2021 | < 0.30 |
| AB48074 | Potawatomi Inn's Beach | 8/2/2021 | 8/4/2021 | < 0.30 |
| AB48075 | Chain O'Lakes SP | 8/2/2021 | 8/4/2021 | < 0.30 |
| AB48076 | Potato Creek State Park | 8/2/2021 | 8/4/2021 | < 0.30 |
| AB48077 | Lost Bridge West SRA | 8/3/2021 | 8/4/2021 | 1.89 |
| AB48078 | Mississinewa Lake Miami SRA | 8/3/2021 | 8/4/2021 | < 0.30 |
| AB48079 | Chain O'Lakes (Field Dup) | 8/3/2021 | 8/4/2021 | < 0.30 |
| AB48080 | Field Blank | 8/2/2021 | 8/4/2021 | < 0.30 |
| AB48128 | Patoka SRA Beach | 8/2/2021 | 8/4/2021 | < 0.30 |
| AB48129 | Ft. Ben Harrison SP Dog Lake - East | 8/3/2021 | 8/4/2021 | < 0.30 |

Test Information

Request: 8/4/2021 5:50:50 PM
Date: 8/4/2021

| Name/ID | Assay | Absorbance | Concentration | Interpretation | Note | Reference | Lot# |
|----------------|----------------------|---------------------------|--------------------|--------------------------------|------|-----------|---------|
| MCT Std 0 | MICROCYSTINS ADDA 54 | 1.524 Abs | 0.000 µg/L | R ² =0.99870, 101.1 | | | 20J4209 |
| MCT Std 0 | MICROCYSTINS ADDA 54 | 1.489 Abs [1.5065] {1.6 C | 0.010 µg/L [0.005] | R ² =0.99870, 98.80 | | | 20J4209 |
| MCT Std 1 | MICROCYSTINS ADDA 54 | 1.264 Abs | 0.130 µg/L | R ² =0.99870, 83.87 | | | 20J4209 |
| MCT Std 1 | MICROCYSTINS ADDA 54 | 1.238 Abs [1.2510] {1.5 C | 0.146 µg/L [0.138] | R ² =0.99870, 82.15 | | | 20J4209 |
| MCT Std 2 | MICROCYSTINS ADDA 54 | 0.936 Abs | 0.425 µg/L | R ² =0.99870, 62.11 | | | 20J4209 |
| MCT Std 2 | MICROCYSTINS ADDA 54 | 0.923 Abs [0.9295] {1.0 C | 0.442 µg/L [0.433] | R ² =0.99870, 61.24 | | | 20J4209 |
| MCT Std 3 | MICROCYSTINS ADDA 54 | 0.672 Abs | 0.952 µg/L | R ² =0.99870, 44.55 | | | 20J4209 |
| MCT Std 3 | MICROCYSTINS ADDA 54 | 0.669 Abs [0.6705] {0.3 C | 0.962 µg/L [0.957] | R ² =0.99870, 44.35 | | | 20J4209 |
| MCT Std 4 | MICROCYSTINS ADDA 54 | 0.485 Abs | 1.904 µg/L | R ² =0.99870, 32.18 | | | 20J4209 |
| MCT Std 4 | MICROCYSTINS ADDA 54 | 0.475 Abs [0.4800] {1.5 C | 1.991 µg/L [1.947] | R ² =0.99870, 31.52 | | | 20J4209 |
| MCT Std 5 | MICROCYSTINS ADDA 54 | 0.322 Abs | > 5.000 µg/L | 21.367 %Abs | | | 20J4209 |
| MCT Std 5 | MICROCYSTINS ADDA 54 | 0.313 Abs [0.3175] {2.0 C | > 5.000 µg/L | 20.770 %Abs | | | 20J4209 |
| MCT 546 LRB 1 | MICROCYSTINS ADDA 54 | 1.469 Abs | 0.019 µg/L | 97.478 %Abs | | | 20J4209 |
| MCT 546 LRB 1 | MICROCYSTINS ADDA 54 | 1.415 Abs [1.4420] {2.6 C | 0.045 µg/L [0.032] | 93.895 %Abs [95.6 | | | 20J4209 |
| MCT 546 Low-CV | MICROCYSTINS ADDA 54 | 0.990 Abs | 0.360 µg/L | 65.693 %Abs | | | 20J4209 |
| MCT 546 Low-CV | MICROCYSTINS ADDA 54 | 0.990 Abs [0.9900] {0.0 C | 0.360 µg/L [0.360] | 65.693 %Abs [65.6 | | | 20J4209 |
| MCT 546 LFB 1 | MICROCYSTINS ADDA 54 | 0.834 Abs | 0.578 µg/L | 55.342 %Abs | | | 20J4209 |
| MCT 546 LFB 1 | MICROCYSTINS ADDA 54 | 0.791 Abs [0.8125] {3.7 C | 0.657 µg/L [0.618] | 52.488 %Abs [53.9 | | | 20J4209 |

Note

Signature

David Jordan

David Jordan 8/4/2021

Test Information

Request: 8/4/2021 7:08:20 PM
Date: 8/4/2021

| Name/ID | Assay | Absorbance | Concentration | Interpretation | Note | Reference | Lot# |
|------------|----------------------|---------------------------|--------------------|-------------------|------|---------------|---------|
| QCS | MICROCYSTINS ADDA 54 | 0.859 Abs | 0.536 µg/L | 57.001 %Abs | | 0.300 - 5.000 | 20J4209 |
| QCS | MICROCYSTINS ADDA 54 | 0.823 Abs [0.8410] {3.0 C | 0.597 µg/L [0.567] | 54.612 %Abs [55.8 | | 0.300 - 5.000 | 20J4209 |
| AB48073 | MICROCYSTINS ADDA 54 | 1.406 Abs | 0.050 µg/L | Low, 93.298 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48073 | MICROCYSTINS ADDA 54 | 1.365 Abs [1.3855] {2.1 C | 0.071 µg/L [0.061] | Low, 90.577 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48074 | MICROCYSTINS ADDA 54 | 1.259 Abs | 0.133 µg/L | Low, 83.543 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48074 | MICROCYSTINS ADDA 54 | 1.251 Abs [1.2550] {0.5 C | 0.138 µg/L [0.135] | Low, 83.013 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48074MS | MICROCYSTINS ADDA 54 | 0.746 Abs | 0.754 µg/L | 49.502 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48074MS | MICROCYSTINS ADDA 54 | 0.744 Abs [0.7450] {0.2 C | 0.759 µg/L [0.757] | 49.370 %Abs [49.4 | | 0.300 - 5.000 | 20J4209 |
| AB48074MSD | MICROCYSTINS ADDA 54 | 0.745 Abs | 0.756 µg/L | 49.436 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48074MSD | MICROCYSTINS ADDA 54 | 0.706 Abs [0.7255] {3.8 C | 0.854 µg/L [0.805] | 46.848 %Abs [48.1 | | 0.300 - 5.000 | 20J4209 |
| AB48075 | MICROCYSTINS ADDA 54 | 1.231 Abs | 0.151 µg/L | Low, 81.685 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48075 | MICROCYSTINS ADDA 54 | 1.191 Abs [1.2110] {2.3 C | 0.179 µg/L [0.165] | Low, 79.031 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48076 | MICROCYSTINS ADDA 54 | 1.358 Abs | 0.075 µg/L | Low, 90.113 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48076 | MICROCYSTINS ADDA 54 | 1.330 Abs [1.3440] {1.5 C | 0.090 µg/L [0.083] | Low, 88.255 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48077 | MICROCYSTINS ADDA 54 | 0.486 Abs | 1.896 µg/L | 32.250 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48077 | MICROCYSTINS ADDA 54 | 0.487 Abs [0.4865] {0.1 C | 1.888 µg/L [1.892] | 32.316 %Abs [32.2 | | 0.300 - 5.000 | 20J4209 |
| AB48078 | MICROCYSTINS ADDA 54 | 1.288 Abs | 0.115 µg/L | Low, 85.468 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48078 | MICROCYSTINS ADDA 54 | 1.239 Abs [1.2635] {2.7 C | 0.146 µg/L [0.131] | Low, 82.216 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48079 | MICROCYSTINS ADDA 54 | 1.259 Abs | 0.133 µg/L | Low, 83.543 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48079 | MICROCYSTINS ADDA 54 | 1.233 Abs [1.2460] {1.5 C | 0.150 µg/L [0.141] | Low, 81.818 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48080 | MICROCYSTINS ADDA 54 | 1.487 Abs | 0.011 µg/L | Low, 98.673 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48080 | MICROCYSTINS ADDA 54 | 1.483 Abs [1.4850] {0.2 C | 0.013 µg/L [0.012] | Low, 98.407 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48128 | MICROCYSTINS ADDA 54 | 1.471 Abs | 0.018 µg/L | Low, 97.611 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48128 | MICROCYSTINS ADDA 54 | 1.465 Abs [1.4680] {0.3 C | 0.021 µg/L [0.019] | Low, 97.213 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48129 | MICROCYSTINS ADDA 54 | 1.464 Abs | 0.022 µg/L | Low, 97.147 %Abs | | 0.300 - 5.000 | 20J4209 |
| AB48129 | MICROCYSTINS ADDA 54 | 1.428 Abs [1.4460] {1.8 C | 0.039 µg/L [0.031] | Low, 94.758 %Abs | | 0.300 - 5.000 | 20J4209 |
| LFB 2 | MICROCYSTINS ADDA 54 | 0.798 Abs | 0.644 µg/L | 52.953 %Abs | | 0.300 - 5.000 | 20J4209 |
| LFB 2 | MICROCYSTINS ADDA 54 | 0.767 Abs [0.7825] {2.8 C | 0.707 µg/L [0.676] | 50.896 %Abs [51.9 | | 0.300 - 5.000 | 20J4209 |
| LRB 2 | MICROCYSTINS ADDA 54 | 1.462 Abs | 0.023 µg/L | Low, 97.014 %Abs | | 0.300 - 5.000 | 20J4209 |
| LRB 2 | MICROCYSTINS ADDA 54 | 1.446 Abs [1.4540] {0.8 C | 0.030 µg/L [0.026] | Low, 95.952 %Abs | | 0.300 - 5.000 | 20J4209 |

Note

Signature 

David Jordan 8/4/2021

Assay Information

Assay Name: MICROCYSTINS ADDA 546_

Version: 2

Temperature: Room Temperature

Last Modified By: Security disabled

Units: µg/L

Assay Description:

Assay Substances:

Controls:

MCT 546 LRB 1

MCT 546 Low-CV

MCT 546 LFB 1

Standards:

MCT Std 0, Concentration = 0.000, Minimum number to use: 2

MCT Std 1, Concentration = 0.150, Minimum number to use: 2

MCT Std 2, Concentration = 0.400, Minimum number to use: 2

MCT Std 3, Concentration = 1.000, Minimum number to use: 2

MCT Std 4, Concentration = 2.000, Minimum number to use: 2

MCT Std 5, Concentration = 5.000, Minimum number to use: 2

Curve valid interval: 1 days 0 hours

Axis Mode: Y = Abs, X = Log(Conc)

Assay Mode: 4-Parameter Logistic Weight by:None

Well Type: Flat bottom

Last Modified On: 9/30/2020 10:02:13 AM

Normal: 0.300 - 5.000

of decimals: 3

Kit Lot Number: 20J4209

Assay Calibration

Current Calibration Status: "

"

| Name | Absorbance | Concentration | Interpretation | Position | |
|----------------------------|-----------------------------|-------------------------------|---------------------------------------|---------------|--|
| 8/4/2021 5:50:50 PM | | | | | |
| MCT Std 0 | 1.524 Abs | 0.000 µg/L | R ² =0.99870, 101.128 %Abs | RK1:23->A01@2 | |
| MCT Std 0 | 1.489 Abs [1.5065] {1.6 CV} | 0.010 µg/L [0.005] {141.4 CV} | R ² =0.99870, 98.806 %Abs | RK1:23->B01@2 | |
| MCT Std 1 | 1.264 Abs | 0.130 µg/L | R ² =0.99870, 83.875 %Abs | RK1:24->C01@2 | |
| MCT Std 1 | 1.238 Abs [1.2510] {1.5 CV} | 0.146 µg/L [0.138] {8.2 CV} | R ² =0.99870, 82.150 %Abs | RK1:24->D01@2 | |
| MCT Std 2 | 0.936 Abs | 0.425 µg/L | R ² =0.99870, 62.110 %Abs | RK1:25->E01@2 | |
| MCT Std 2 | 0.923 Abs [0.9295] {1.0 CV} | 0.442 µg/L [0.433] {2.8 CV} | R ² =0.99870, 61.248 %Abs | RK1:25->F01@3 | |
| MCT Std 3 | 0.672 Abs | 0.952 µg/L | R ² =0.99870, 44.592 %Abs | RK1:26->G01@3 | |
| MCT Std 3 | 0.669 Abs [0.6705] {0.3 CV} | 0.962 µg/L [0.957] {0.7 CV} | R ² =0.99870, 44.393 %Abs | RK1:26->H01@3 | |
| MCT Std 4 | 0.485 Abs | 1.904 µg/L | R ² =0.99870, 32.183 %Abs | RK1:27->A02@2 | |
| MCT Std 4 | 0.475 Abs [0.4800] {1.5 CV} | 1.991 µg/L [1.947] {3.2 CV} | R ² =0.99870, 31.520 %Abs | RK1:27->B02@2 | |
| MCT Std 5 | 0.322 Abs | > 5.000 µg/L | 21.367 %Abs | RK1:28->C02@2 | |
| MCT Std 5 | 0.313 Abs [0.3175] {2.0 CV} | > 5.000 µg/L | 20.770 %Abs | RK1:28->D02@2 | |
| ***** | | | | | |
| 8/4/2021 5:50:50 PM | | | | | |
| MCT 546 LRB 1 | 1.469 Abs | 0.019 µg/L | 97.478 %Abs | RK1:29->E02@2 | |
| MCT 546 LRB 1 | 1.415 Abs [1.4420] {2.6 CV} | 0.045 µg/L [0.032] {57.5 CV} | 93.895 %Abs [95.687 %Abs] | RK1:29->F02@3 | |
| MCT 546 Low-CV | 0.990 Abs | 0.360 µg/L | 65.693 %Abs | RK1:30->G02@3 | |
| MCT 546 Low-CV | 0.990 Abs [0.9900] {0.0 CV} | 0.360 µg/L [0.360] {0.0 CV} | 65.693 %Abs [65.693 %Abs] | RK1:30->H02@3 | |
| MCT 546 LFB 1 | 0.834 Abs | 0.578 µg/L | 55.342 %Abs | RK1:31->A03@2 | |
| MCT 546 LFB 1 | 0.791 Abs [0.8125] {3.7 CV} | 0.657 µg/L [0.618] {9.0 CV} | 52.488 %Abs [53.915 %Abs] | RK1:31->B03@2 | |
| ***** | | | | | |
| Statistic | | | | | |
| MCT Std 0 [MEAN] | 1.5065 | 0.0050 | | | |
| MCT Std 0 [SD] | 0.0247 | 0.0071 | | | |
| MCT Std 0 [%CV] | 1.6428 | 141.4214 | | | |
| MCT Std 1 [MEAN] | 1.2510 | 0.1380 | | | |
| MCT Std 1 [SD] | 0.0184 | 0.0113 | | | |
| MCT Std 1 [%CV] | 1.4696 | 8.1983 | | | |
| MCT Std 1 [%DIFF] | | -8.0000 | | | |
| MCT Std 2 [MEAN] | 0.9295 | 0.4335 | | | |
| MCT Std 2 [SD] | 0.0092 | 0.0120 | | | |
| MCT Std 2 [%CV] | 0.9890 | 2.7730 | | | |
| MCT Std 2 [%DIFF] | | 8.3750 | | | |
| MCT Std 3 [MEAN] | 0.6705 | 0.9570 | | | |
| MCT Std 3 [SD] | 0.0021 | 0.0071 | | | |
| MCT Std 3 [%CV] | 0.3164 | 0.7389 | | | |
| MCT Std 3 [%DIFF] | | -4.3000 | | | |
| MCT Std 4 [MEAN] | 0.4800 | 1.9475 | | | |

| Name | Absorbance | Concentration | Interpretation | Position |
|-----------------------|------------|---------------|----------------|----------|
| MCT Std 4 [SD] | 0.0071 | 0.0615 | | |
| MCT Std 4 [%CV] | 1.4731 | 3.1588 | | |
| MCT Std 4 [%DIFF] | | -2.6250 | | |
| MCT Std 5 [MEAN] | 0.3175 | | | |
| MCT Std 5 [SD] | 0.0064 | | | |
| MCT Std 5 [%CV] | 2.0044 | | | |
| MCT 546 LRB 1 [MEAN] | 1.4420 | 0.0320 | | |
| MCT 546 LRB 1 [SD] | 0.0382 | 0.0184 | | |
| MCT 546 LRB 1 [%CV] | 2.6480 | 57.4524 | | |
| MCT 546 Low-CV [MEAN] | 0.9900 | 0.3600 | | |
| MCT 546 Low-CV [SD] | 0.0000 | 0.0000 | | |
| MCT 546 Low-CV [%CV] | 0.0000 | 0.0000 | | |
| MCT 546 LFB 1 [MEAN] | 0.8125 | 0.6175 | | |
| MCT 546 LFB 1 [SD] | 0.0304 | 0.0559 | | |
| MCT 546 LFB 1 [%CV] | 3.7422 | 9.0464 | | |

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5112
 B = 1.0210
 C = 0.54053
 D = 0.20132
 R2 coef = 0.99870
 50% = 0.737

