



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB43631	Summit Lake - State Park	8/3/2020	8/5/2020	< 0.30
AB43632	Kunkel Beach @ Ouabache SP	8/3/2020	8/5/2020	< 0.30
AB43633	Pokagon State Park	8/3/2020	8/5/2020	< 0.30
AB43634	Potawatomi Inn's Beach	8/3/2020	8/5/2020	< 0.30
AB43635	Chain O'Lakes SP	8/3/2020	8/5/2020	< 0.30
AB43636	Potato Creek State Park	8/3/2020	8/5/2020	< 0.30
AB43637	Lost Bridge West SRA	8/3/2020	8/5/2020	< 0.30
AB43638	Mississinewa Lake Miami SRA	8/3/2020	8/5/2020	< 0.30
AB43639	Chain O'Lakes SP (Field Duplicate)	8/3/2020	8/5/2020	< 0.30
AB43640	Field Blank	8/3/2020	8/5/2020	< 0.30
AB43641	Ft. Harrison SP Dog Lake	8/5/2020	8/5/2020	< 0.30

Test Report (by Request)

Test Information

 Request: 8/5/2020 5:51:42 PM
 Date: 8/5/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
MCT Std 0	MICROCYSTINS ADDA 546	1.393 Abs	0.013 µg/L	R ² =0.99563, 99.146		19L2093
MCT Std 0	MICROCYSTINS ADDA 546	1.416 Abs [1.4045] {1.2 CV}	0.000 µg/L [0.007] {1}	R ² =0.99563, 100.78		19L2093
MCT Std 1	MICROCYSTINS ADDA 546	1.221 Abs	0.121 µg/L	R ² =0.99563, 86.904		19L2093
MCT Std 1	MICROCYSTINS ADDA 546	1.181 Abs [1.2010] {2.4 CV}	0.149 µg/L [0.135] {1}	R ² =0.99563, 84.057		19L2093
MCT Std 2	MICROCYSTINS ADDA 546	0.903 Abs	0.416 µg/L	R ² =0.99563, 64.270		19L2093
MCT Std 2	MICROCYSTINS ADDA 546	0.891 Abs [0.8970] {0.9 CV}	0.432 µg/L [0.424] {2}	R ² =0.99563, 63.416		19L2093
MCT Std 3	MICROCYSTINS ADDA 546	0.623 Abs	1.018 µg/L	R ² =0.99563, 44.342		19L2093
MCT Std 3	MICROCYSTINS ADDA 546	0.594 Abs [0.6085] {3.4 CV}	1.130 µg/L [1.074] {7}	R ² =0.99563, 42.278		19L2093
MCT Std 4	MICROCYSTINS ADDA 546	0.513 Abs	1.565 µg/L	R ² =0.99563, 36.512		19L2093
MCT Std 4	MICROCYSTINS ADDA 546	0.503 Abs [0.5080] {1.4 CV}	1.636 µg/L [1.601] {3}	R ² =0.99563, 35.801		19L2093
MCT Std 5	MICROCYSTINS ADDA 546	0.316 Abs	> 5.000 µg/L	22.491 %Abs		19L2093
MCT Std 5	MICROCYSTINS ADDA 546	0.309 Abs [0.3125] {1.6 CV}	> 5.000 µg/L	21.993 %Abs		19L2093
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.312 Abs	0.063 µg/L	93.381 %Abs		19L2093
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.303 Abs [1.3075] {0.5 CV}	0.068 µg/L [0.066] {5}	92.740 %Abs [93.06]		19L2093
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.990 Abs	0.314 µg/L	70.463 %Abs		19L2093
MCT 546 Low-CV	MICROCYSTINS ADDA 546	1.014 Abs [1.0020] {1.7 CV}	0.290 µg/L [0.302] {5}	72.171 %Abs [71.31]		19L2093
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.873 Abs	0.457 µg/L	62.135 %Abs		19L2093
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.867 Abs [0.8700] {0.5 CV}	0.465 µg/L [0.461] {1}	61.708 %Abs [61.92]		19L2093

Note

Signature

Charles Hostetter 8/7/2020

Test Report (by Request)

Test Information

 Request: 8/5/2020 8:06:47 PM
 Date: 8/5/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
AB43631	MICROCYSTINS ADDA 546	1.241 Abs	0.108 µg/L	LOW, 88.327 %ABS	0.300 - 5.000	19L2093
AB43631	MICROCYSTINS ADDA 546	1.224 Abs [1.2325] {1.0 CV}	0.119 µg/L [0.113] {6}	LOW, 87.117 %ABS	0.300 - 5.000	19L2093
AB43632	MICROCYSTINS ADDA 546	1.224 Abs	0.119 µg/L	LOW, 87.117 %ABS	0.300 - 5.000	19L2093
AB43632	MICROCYSTINS ADDA 546	1.175 Abs [1.1995] {2.9 CV}	0.154 µg/L [0.137] {1}	LOW, 83.630 %ABS	0.300 - 5.000	19L2093
AB43633	MICROCYSTINS ADDA 546	1.258 Abs	0.097 µg/L	LOW, 89.537 %ABS	0.300 - 5.000	19L2093
AB43633	MICROCYSTINS ADDA 546	1.203 Abs [1.2305] {3.2 CV}	0.134 µg/L [0.116] {2}	LOW, 85.623 %ABS	0.300 - 5.000	19L2093
AB43634	MICROCYSTINS ADDA 546	1.318 Abs	0.059 µg/L	LOW, 93.808 %ABS	0.300 - 5.000	19L2093
AB43634	MICROCYSTINS ADDA 546	1.328 Abs [1.3230] {0.5 CV}	0.053 µg/L [0.056] {7}	LOW, 94.520 %ABS	0.300 - 5.000	19L2093
AB43635	MICROCYSTINS ADDA 546	1.285 Abs	0.079 µg/L	LOW, 91.459 %ABS	0.300 - 5.000	19L2093
AB43635	MICROCYSTINS ADDA 546	1.303 Abs [1.2940] {1.0 CV}	0.068 µg/L [0.074] {1}	LOW, 92.740 %ABS	0.300 - 5.000	19L2093
AB43635MS	MICROCYSTINS ADDA 546	0.789 Abs	0.592 µg/L	56.157 %Abs	0.300 - 5.000	19L2093
AB43635MS	MICROCYSTINS ADDA 546	0.775 Abs [0.7820] {1.3 CV}	0.618 µg/L [0.605] {3}	55.160 %Abs [55.658]	0.300 - 5.000	19L2093
AB43635MSD	MICROCYSTINS ADDA 546	0.792 Abs	0.587 µg/L	56.370 %Abs	0.300 - 5.000	19L2093
AB43635MSD	MICROCYSTINS ADDA 546	0.755 Abs [0.7735] {3.4 CV}	0.658 µg/L [0.623] {8}	53.737 %Abs [55.053]	0.300 - 5.000	19L2093
AB43636	MICROCYSTINS ADDA 546	1.306 Abs	0.066 µg/L	LOW, 92.954 %ABS	0.300 - 5.000	19L2093
AB43636	MICROCYSTINS ADDA 546	1.273 Abs [1.2895] {1.8 CV}	0.087 µg/L [0.076] {1}	LOW, 90.605 %ABS	0.300 - 5.000	19L2093
AB43637	MICROCYSTINS ADDA 546	1.043 Abs	0.262 µg/L	LOW, 74.235 %ABS	0.300 - 5.000	19L2093
AB43637	MICROCYSTINS ADDA 546	1.084 Abs [1.0635] {2.7 CV}	0.225 µg/L [0.243] {1}	LOW, 77.153 %ABS	0.300 - 5.000	19L2093
AB43638	MICROCYSTINS ADDA 546	1.249 Abs	0.103 µg/L	LOW, 88.897 %ABS	0.300 - 5.000	19L2093
AB43638	MICROCYSTINS ADDA 546	1.217 Abs [1.2330] {1.8 CV}	0.124 µg/L [0.113] {1}	LOW, 86.619 %ABS	0.300 - 5.000	19L2093
AB43639	MICROCYSTINS ADDA 546	1.285 Abs	0.079 µg/L	LOW, 91.459 %ABS	0.300 - 5.000	19L2093
AB43639	MICROCYSTINS ADDA 546	1.218 Abs [1.2515] {3.8 CV}	0.123 µg/L [0.101] {3}	LOW, 86.690 %ABS	0.300 - 5.000	19L2093
AB43640	MICROCYSTINS ADDA 546	1.408 Abs	0.003 µg/L	LOW, 100.214 %ABS	0.300 - 5.000	19L2093
AB43640	MICROCYSTINS ADDA 546	1.367 Abs [1.3875] {2.1 CV}	0.029 µg/L [0.016] {1}	LOW, 97.295 %ABS	0.300 - 5.000	19L2093
AB43641	MICROCYSTINS ADDA 546	1.341 Abs	0.045 µg/L	LOW, 95.445 %ABS	0.300 - 5.000	19L2093
AB43641	MICROCYSTINS ADDA 546	1.298 Abs [1.3195] {2.3 CV}	0.071 µg/L [0.058] {3}	LOW, 92.384 %ABS	0.300 - 5.000	19L2093
LFB 2	MICROCYSTINS ADDA 546	0.936 Abs	0.375 µg/L	66.619 %Abs	0.300 - 5.000	19L2093
LFB 2	MICROCYSTINS ADDA 546	0.893 Abs [0.9145] {3.3 CV}	0.429 µg/L [0.402] {9}	63.559 %Abs [65.085]	0.300 - 5.000	19L2093
LRB 2	MICROCYSTINS ADDA 546	1.371 Abs	0.027 µg/L	LOW, 97.580 %ABS	0.300 - 5.000	19L2093
LRB 2	MICROCYSTINS ADDA 546	1.339 Abs [1.3550] {1.7 CV}	0.046 µg/L [0.036] {3}	LOW, 95.302 %ABS	0.300 - 5.000	19L2093

Note

Signature

Assay Information

Assay Name: MICROCYSTINS ADDA 546
 Version: 2
 Temperature: Room Temperature
 Last Modified By: Security disabled
 Units: µg/L
 Assay Description:
 Assay Substances:

Assay Mode: 4-Parameter Logistic Weight by:None
 Well Type: Flat bottom
 Last Modified On: 8/13/2019 2:01:59 PM
 Normal: 0.300 - 5.000
 # of decimals: 3
 Kit Lot Number: 19L2093

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 Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
8/5/2020 5:51:42 PM				
MCT Std 0	1.393 Abs		R ² =0.99563, 99.146 %Abs	RK1:23->A01@2
MCT Std 0	1.416 Abs [1.4045] {1.2 CV}		R ² =0.99563, 100.783 %Abs	RK1:23->B01@2
MCT Std 1	1.221 Abs		R ² =0.99563, 86.904 %Abs	RK1:24->C01@2
MCT Std 1	1.181 Abs [1.2010] {2.4 CV}		R ² =0.99563, 84.057 %Abs	RK1:24->D01@2
MCT Std 2	0.903 Abs		R ² =0.99563, 64.270 %Abs	RK1:25->E01@2
MCT Std 2	0.891 Abs [0.8970] {0.9 CV}		R ² =0.99563, 63.416 %Abs	RK1:25->F01@3
MCT Std 3	0.623 Abs		R ² =0.99563, 44.342 %Abs	RK1:26->G01@3
MCT Std 3	0.594 Abs [0.6085] {3.4 CV}		R ² =0.99563, 42.278 %Abs	RK1:26->H01@3
MCT Std 4	0.513 Abs		R ² =0.99563, 36.512 %Abs	RK1:27->A02@2
MCT Std 4	0.503 Abs [0.5080] {1.4 CV}		R ² =0.99563, 35.801 %Abs	RK1:27->B02@2
MCT Std 5	0.316 Abs		22.491 %Abs	RK1:28->C02@2
MCT Std 5	0.309 Abs [0.3125] {1.6 CV}		21.993 %Abs	RK1:28->D02@2

8/5/2020 5:51:42 PM				
MCT 546 LRB 1	1.312 Abs		93.381 %Abs	RK1:29->E02@2
MCT 546 LRB 1	1.303 Abs [1.3075] {0.5 CV}		92.740 %Abs [93.061 %Abs]	RK1:29->F02@3
MCT 546 Low-CV	0.990 Abs		70.463 %Abs	RK1:30->G02@3
MCT 546 Low-CV	1.014 Abs [1.0020] {1.7 CV}		72.171 %Abs [71.317 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	0.873 Abs		62.135 %Abs	RK1:31->A03@2
MCT 546 LFB 1	0.867 Abs [0.8700] {0.5 CV}		61.708 %Abs [61.922 %Abs]	RK1:31->B03@2

Statistic				
MCT Std 0 [MEAN]	1.4045			
MCT Std 0 [SD]	0.0163			
MCT Std 0 [%CV]	1.1580			
MCT Std 1 [MEAN]	1.2010			
MCT Std 1 [SD]	0.0283			
MCT Std 1 [%CV]	2.3551			
MCT Std 1 [%DIFF]				
MCT Std 2 [MEAN]	0.8970			
MCT Std 2 [SD]	0.0085			
MCT Std 2 [%CV]	0.9460			
MCT Std 2 [%DIFF]				
MCT Std 3 [MEAN]	0.6085			
MCT Std 3 [SD]	0.0205			
MCT Std 3 [%CV]	3.3699			
MCT Std 3 [%DIFF]				
MCT Std 4 [MEAN]	0.5080			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0071			
MCT Std 4 [%CV]	1.3919			
MCT Std 4 [%DIFF]				
MCT Std 5 [MEAN]	0.3125			
MCT Std 5 [SD]	0.0049			
MCT Std 5 [%CV]	1.5839			
MCT 546 LRB 1 [MEAN]	1.3075			
MCT 546 LRB 1 [SD]	0.0064			
MCT 546 LRB 1 [%CV]	0.4867			
MCT 546 Low-CV [MEAN]	1.0020			
MCT 546 Low-CV [SD]	0.0170			
MCT 546 Low-CV [%CV]	1.6937			
MCT 546 LFB 1 [MEAN]	0.8700			
MCT 546 LFB 1 [SD]	0.0042			
MCT 546 LFB 1 [%CV]	0.4877			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.4118
 B = 1.1171
 C = 0.51977
 D = 0.25055
 R2 coef = 0.99563
 50% = 0.778

