



Microcystin ADDA ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB43405	Summit Lake - State Park	7/6/2020	7/9/2020	<0.30
AB43406	Kunkel Beach @ Ouabache State Park	7/6/2020	7/9/2020	<0.30
AB43407	Pokagon State Park	7/6/2020	7/9/2020	<0.30
AB43408	Potawatomi Inn's Beach	7/6/2020	7/9/2020	<0.30
AB43409	Chain O'Lakes SP	7/6/2020	7/9/2020	<0.30
AB43410	Potato Creek State Park	7/7/2020	7/9/2020	<0.30
AB43411	Lost Bridge West SRA	7/7/2020	7/9/2020	4.13
AB43412	Mississinewa Lake Miami SRA	7/7/2020	7/9/2020	<0.30
AB43413	Field Blank	7/6/2020	7/9/2020	<0.30
AB43414	Kunkel Beach @ Ouabache State Park (Field Duplicate)	7/6/2020	7/9/2020	<0.30

Test Report (by Request)

Test Information

Request: 7/9/2020 12:54:19 PM
 Date: 7/9/2020 - 7/9/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
MCT Std 0	MICROCYSTINS ADDA 546	1.026 Abs	0.000 µg/L	R^2=0.99881, 101.98		19G0246
MCT Std 0	MICROCYSTINS ADDA 546	0.985 Abs [1.0055] {2.9 CV}	0.029 µg/L [0.014] {1}	R^2=0.99881, 97.913		19G0246
MCT Std 1	MICROCYSTINS ADDA 546	0.906 Abs	0.124 µg/L	R^2=0.99881, 90.060		19G0246
MCT Std 1	MICROCYSTINS ADDA 546	0.891 Abs [0.8985] {1.2 CV}	0.143 µg/L [0.134] {1}	R^2=0.99881, 88.569		19G0246
MCT Std 2	MICROCYSTINS ADDA 546	0.732 Abs	0.404 µg/L	R^2=0.99881, 72.763		19G0246
MCT Std 2	MICROCYSTINS ADDA 546	0.711 Abs [0.7215] {2.1 CV}	0.449 µg/L [0.427] {7}	R^2=0.99881, 70.676		19G0246
MCT Std 3	MICROCYSTINS ADDA 546	0.534 Abs	1.029 µg/L	R^2=0.99881, 53.082		19G0246
MCT Std 3	MICROCYSTINS ADDA 546	0.541 Abs [0.5375] {0.9 CV}	0.996 µg/L [1.013] {2}	R^2=0.99881, 53.777		19G0246
MCT Std 4	MICROCYSTINS ADDA 546	0.420 Abs	1.850 µg/L	R^2=0.99881, 41.750		19G0246
MCT Std 4	MICROCYSTINS ADDA 546	0.416 Abs [0.4180] {0.7 CV}	1.893 µg/L [1.872] {1}	R^2=0.99881, 41.352		19G0246
MCT Std 5	MICROCYSTINS ADDA 546	0.288 Abs	> 5.000 µg/L	28.628 %Abs		19G0246
MCT Std 5	MICROCYSTINS ADDA 546	0.283 Abs [0.2855] {1.2 CV}	> 5.000 µg/L	28.131 %Abs		19G0246
MCT 546 LRB 1	MICROCYSTINS ADDA 546	0.941 Abs	0.080 µg/L	93.539 %Abs		19G0246
MCT 546 LRB 1	MICROCYSTINS ADDA 546	0.921 Abs [0.9310] {1.5 CV}	0.105 µg/L [0.093] {1}	91.551 %Abs [92.545]		19G0246
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.796 Abs	0.284 µg/L	79.125 %Abs		19G0246
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.826 Abs [0.8110] {2.6 CV}	0.236 µg/L [0.260] {1}	82.107 %Abs [80.616]		19G0246
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.699 Abs	0.476 µg/L	69.483 %Abs		19G0246
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.694 Abs [0.6965] {0.5 CV}	0.488 µg/L [0.482] {1}	68.986 %Abs [69.235]		19G0246

Note

Signature

Charles Hostetter 7/9/2020

* A - Abs > 3; IA - Initial Abs; DA - Delta Abs; SD - SD of Abs; LR - Linear Range; [...] - Mean result of duplicate tests

* Generated by software version (6.4.1.1073/1085/1.00/0.95) 7/9/2020 1:30:47 PM

Test Information

 Request: 7/9/2020 1:29:15 PM
 Date: 7/9/2020 - 7/9/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
QCS 546	MICROCYSTINS ADDA 546	0.667 Abs	0.555 µg/L	66.302 %Abs	0.300 - 5.000	19G0246
QCS 546	MICROCYSTINS ADDA 546	0.661 Abs [0.6640] {0.6 CV}	0.571 µg/L [0.563] {2.8 CV}	65.706 %Abs [66.004]	0.300 - 5.000	19G0246
AB43405	MICROCYSTINS ADDA 546	0.890 Abs	0.144 µg/L	LOW, 88.469 %ABS	0.300 - 5.000	19G0246
AB43405	MICROCYSTINS ADDA 546	0.855 Abs [0.8725] {2.8 CV}	0.193 µg/L [0.169] {2.8 CV}		0.300 - 5.000	19G0246
AB43405MS	MICROCYSTINS ADDA 546	0.631 Abs	0.656 µg/L	62.724 %Abs	0.300 - 5.000	19G0246
AB43405MS	MICROCYSTINS ADDA 546	0.625 Abs [0.6280] {0.7 CV}	0.675 µg/L [0.666] {2.8 CV}	62.127 %Abs [62.425]	0.300 - 5.000	19G0246
AB43405MSD	MICROCYSTINS ADDA 546	0.658 Abs	0.579 µg/L	65.408 %Abs	0.300 - 5.000	19G0246
AB43405MSD	MICROCYSTINS ADDA 546	0.659 Abs [0.6585] {0.1 CV}	0.576 µg/L [0.577] {0.1 CV}	65.507 %Abs [65.457]	0.300 - 5.000	19G0246
AB43406	MICROCYSTINS ADDA 546	0.848 Abs	0.203 µg/L	LOW, 84.294 %ABS	0.300 - 5.000	19G0246
AB43406	MICROCYSTINS ADDA 546	0.850 Abs [0.8490] {0.2 CV}	0.200 µg/L [0.201] {1.3 CV}		0.300 - 5.000	19G0246
AB43407	MICROCYSTINS ADDA 546	0.936 Abs	0.086 µg/L	LOW, 93.042 %ABS	0.300 - 5.000	19G0246
AB43407	MICROCYSTINS ADDA 546	0.942 Abs [0.9390] {0.5 CV}	0.079 µg/L [0.083] {6.1 CV}		0.300 - 5.000	19G0246
AB43408	MICROCYSTINS ADDA 546	0.973 Abs	0.043 µg/L	LOW, 96.720 %ABS	0.300 - 5.000	19G0246
AB43408	MICROCYSTINS ADDA 546	1.007 Abs [0.9900] {2.4 CV}	0.004 µg/L [0.024] {1.3 CV}		0.300 - 5.000	19G0246
AB43409	MICROCYSTINS ADDA 546	0.985 Abs	0.029 µg/L	LOW, 97.913 %ABS	0.300 - 5.000	19G0246
AB43409	MICROCYSTINS ADDA 546	0.967 Abs [0.9760] {1.3 CV}	0.050 µg/L [0.039] {3.4 CV}		0.300 - 5.000	19G0246
AB43410	MICROCYSTINS ADDA 546	0.946 Abs	0.075 µg/L	LOW, 94.036 %ABS	0.300 - 5.000	19G0246
AB43410	MICROCYSTINS ADDA 546	0.946 Abs [0.9460] {0.0 CV}	0.075 µg/L [0.075] {0.0 CV}		0.300 - 5.000	19G0246
AB43411	MICROCYSTINS ADDA 546	0.310 Abs	4.092 µg/L	30.815 %Abs	0.300 - 5.000	19G0246
AB43411	MICROCYSTINS ADDA 546	0.308 Abs [0.3090] {0.5 CV}	4.172 µg/L [4.132] {1.3 CV}	30.616 %Abs [30.716]	0.300 - 5.000	19G0246
AB43412	MICROCYSTINS ADDA 546	0.876 Abs	0.163 µg/L	LOW, 87.078 %ABS	0.300 - 5.000	19G0246
AB43412	MICROCYSTINS ADDA 546	0.882 Abs [0.8790] {0.5 CV}	0.155 µg/L [0.159] {3.4 CV}		0.300 - 5.000	19G0246
AB43413	MICROCYSTINS ADDA 546	1.045 Abs	0.000 µg/L	LOW, 103.877 %ABS	0.300 - 5.000	19G0246
AB43413	MICROCYSTINS ADDA 546	1.021 Abs [1.0330] {1.6 CV}	0.000 µg/L [0.000]		0.300 - 5.000	19G0246
AB43414	MICROCYSTINS ADDA 546	0.901 Abs	0.130 µg/L	LOW, 89.563 %ABS	0.300 - 5.000	19G0246
AB43414	MICROCYSTINS ADDA 546	0.902 Abs [0.9015] {0.1 CV}	0.129 µg/L [0.130] {0.1 CV}		0.300 - 5.000	19G0246
LFB 2	MICROCYSTINS ADDA 546	0.688 Abs	0.502 µg/L	68.390 %Abs	0.300 - 5.000	19G0246
LFB 2	MICROCYSTINS ADDA 546	0.704 Abs [0.6960] {1.6 CV}	0.465 µg/L [0.484] {6.1 CV}	69.980 %Abs [69.185]	0.300 - 5.000	19G0246
LRB 2	MICROCYSTINS ADDA 546	0.970 Abs	0.047 µg/L	LOW, 96.421 %ABS	0.300 - 5.000	19G0246
LRB 2	MICROCYSTINS ADDA 546	1.018 Abs [0.9940] {3.4 CV}	0.000 µg/L [0.023] {1.3 CV}		0.300 - 5.000	19G0246

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: 19G0246

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
7/9/2020 12:54:19 PM				
MCT Std 0	1.026 Abs		R ² =0.99881, 101.988 %Abs	RK1:23->A01@2
MCT Std 0	0.985 Abs [1.0055] {2.9 CV}		R ² =0.99881, 97.913 %Abs	RK1:23->B01@2
MCT Std 1	0.906 Abs		R ² =0.99881, 90.060 %Abs	RK1:24->C01@2
MCT Std 1	0.891 Abs [0.8985] {1.2 CV}		R ² =0.99881, 88.569 %Abs	RK1:24->D01@2
MCT Std 2	0.732 Abs		R ² =0.99881, 72.763 %Abs	RK1:25->E01@2
MCT Std 2	0.711 Abs [0.7215] {2.1 CV}		R ² =0.99881, 70.676 %Abs	RK1:25->F01@3
MCT Std 3	0.534 Abs		R ² =0.99881, 53.082 %Abs	RK1:26->G01@3
MCT Std 3	0.541 Abs [0.5375] {0.9 CV}		R ² =0.99881, 53.777 %Abs	RK1:26->H01@3
MCT Std 4	0.420 Abs		R ² =0.99881, 41.750 %Abs	RK1:27->A02@2
MCT Std 4	0.416 Abs [0.4180] {0.7 CV}		R ² =0.99881, 41.352 %Abs	RK1:27->B02@2
MCT Std 5	0.288 Abs		28.628 %Abs	RK1:28->C02@2
MCT Std 5	0.283 Abs [0.2855] {1.2 CV}		28.131 %Abs	RK1:28->D02@2

7/9/2020 12:54:19 PM				
MCT 546 LRB 1	0.941 Abs		93.539 %Abs	RK1:29->E02@2
MCT 546 LRB 1	0.921 Abs [0.9310] {1.5 CV}		91.551 %Abs [92.545 %Abs]	RK1:29->F02@3
MCT 546 Low-CV	0.796 Abs		79.125 %Abs	RK1:30->G02@3
MCT 546 Low-CV	0.826 Abs [0.8110] {2.6 CV}		82.107 %Abs [80.616 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	0.699 Abs		69.483 %Abs	RK1:31->A03@2
MCT 546 LFB 1	0.694 Abs [0.6965] {0.5 CV}		68.986 %Abs [69.235 %Abs]	RK1:31->B03@2

Statistic				
MCT Std 0 [MEAN]	1.0055			
MCT Std 0 [SD]	0.0290			
MCT Std 0 [%CV]	2.8833			
MCT Std 1 [MEAN]	0.8985			
MCT Std 1 [SD]	0.0106			
MCT Std 1 [%CV]	1.1805			
MCT Std 1 [%DIFF]				
MCT Std 2 [MEAN]	0.7215			
MCT Std 2 [SD]	0.0148			
MCT Std 2 [%CV]	2.0581			
MCT Std 2 [%DIFF]				
MCT Std 3 [MEAN]	0.5375			
MCT Std 3 [SD]	0.0049			
MCT Std 3 [%CV]	0.9209			
MCT Std 3 [%DIFF]				
MCT Std 4 [MEAN]	0.4180			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0028			
MCT Std 4 [%CV]	0.6767			
MCT Std 4 [%DIFF]				
MCT Std 5 [MEAN]	0.2855			
MCT Std 5 [SD]	0.0035			
MCT Std 5 [%CV]	1.2384			
MCT 546 LRB 1 [MEAN]	0.9310			
MCT 546 LRB 1 [SD]	0.0141			
MCT 546 LRB 1 [%CV]	1.5190			
MCT 546 Low-CV [MEAN]	0.8110			
MCT 546 Low-CV [SD]	0.0212			
MCT 546 Low-CV [%CV]	2.6157			
MCT 546 LFB 1 [MEAN]	0.6965			
MCT 546 LFB 1 [SD]	0.0035			
MCT 546 LFB 1 [%CV]	0.5076			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.0099
 B = 1.0686
 C = 0.74608
 D = 0.19646
 R2 coef = 0.99881
 50% = 1.195

